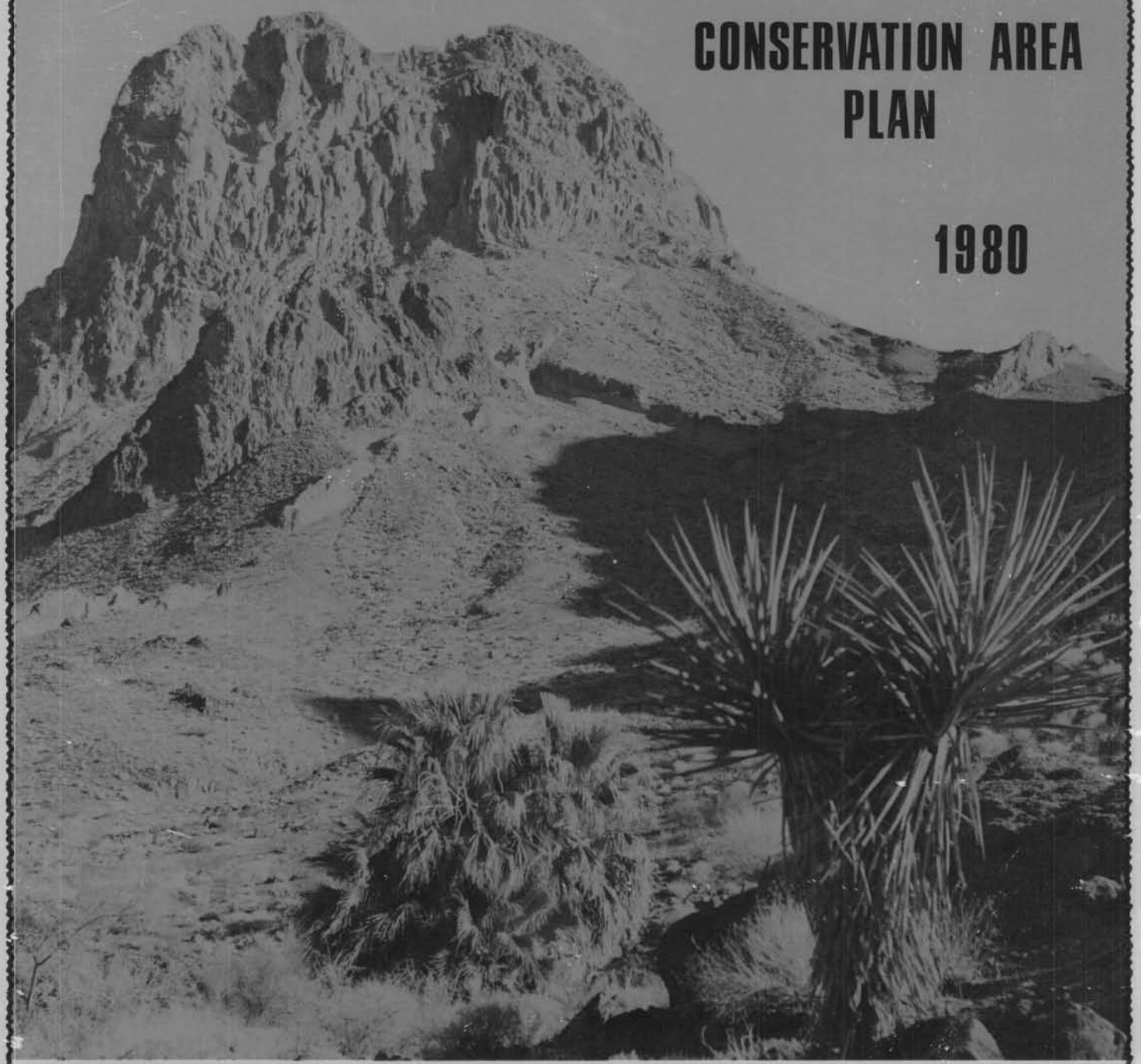
the California Desert

CONSERVATION AREA PLAN

1980



DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Dick Crowe

U.S. Department of the Interior
Bureau of Land Management
Desert District
Riverside, California

the California Desert

CONSERVATION AREA PLAN

1980

IN REPLY REFER TO

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
STATE OFFICE
Federal Office Building
2800 Cottage Way
Sacramento, California 95825

This book belongs to Dick Crowe

Dear Reader:

Thank you. You and many other interested citizens like you have made this California Desert Conservation Area Plan. It was conceived of your interests and concerns, born into law through your elected representatives, molded by your direct personal involvement, matured and refined through public conflict, interaction, and compromise, and completed as a result of your review, comment, and advice.

It is a good plan. You have reason to be proud.

Perhaps, as individuals, we may say, "This is not exactly the plan I would like," but together we can say, "This is a plan we can agree on, it is fair, and it is possible." This is the most important part of all, because this Plan is only a beginning. A plan is a piece of paper—what counts is what happens on the ground.

The California Desert Plan encompasses a tremendous area and many different resources and uses. The decisions in the Plan are major and important, but they are only general guides to site-specific actions. The job ahead of us now involves three tasks:

—Site-specific plans, such as grazing allotment management plans or vehicle route designation;
—On-the-ground actions, such as granting mineral leases, developing water sources for wildlife, building fences for livestock pastures or for protecting petroglyphs; and
—Keeping people informed of and involved in putting the Plan to work on the ground, and in changing the Plan to meet future needs.

The overriding concern expressed by all of you during Plan development was, "Will it be implemented? Can BLM do what the Plan says it will do?"

That is up to you.

The CDCA Plan, in response to public concern and Congressional mandate, provides a way for responsible citizens to share in the use and enjoyment of desert resources that belong to all the people of the United States. It is a statement of management guidance designed to be useful today and it contains an amendment process so that it is adaptable to tomorrow. It will be effective if responsible citizens make it work. It will require the commitment of time, energy, money, and understanding from you, from all of us, if it is to become a reality on the ground.

I do not know if that will happen, but I do know that the only way it can be done is with the full involvement of all the people: State and county agencies, businesses, user groups, and concerned individuals, all working together to do the job.

Managing the public lands in the California Desert in a spirit of service, productivity, and concern for the public interest is the foundation upon which the implementation of the Desert Plan is based. To do this, the dedicated professional men and women of the Bureau of Land Management are committed to work for you and with you, the owners of the public lands in the California Desert Conservation Area.

Sincerely,

James B. Ruch
California State Director
Bureau of Land Management

TABLE OF CONTENTS

Page

INTRODUCTION—THE CALIFORNIA DESERT CONSERVATION AREA IN PERSPECTIVE 3

PART I—THE CALIFORNIA DESERT CONSERVATION AREA PLAN 9
Chapter 1—General Guidelines 11
Chapter 2—Multiple-Use Classes 13
Multiple-Use Class Guidelines 15
Chapter 3—Plan Elements 21
Cultural Resource Element 22
Native American Element 26
Wildlife Element 30
Vegetation Element 41
Wilderness Element 53
Wild Horse and Burro Element 59
Livestock Grazing Element 67
Recreation Element 82
Motorized-Vehicle Access Element 87
Geology, Energy and Mineral Resources Element 95
Energy Production and Utility Corridors Element 115
Land-Tenure Adjustment Element 120
Chapter 4—Areas of Critical Environmental Concern and Special Areas 123
Areas of Critical Environmental Concern 123
Special Areas 127
PART II—IMPLEMENTATION OF THE PLAN 131
Chapter 5—Implementation Process 133
CDCA Advisory Committee Recommendations 133
Intergovernmental Coordination 135
Chapter 6—Support Requirements 137
Chapter 7—Plan Amendment Process 143
Chapter 8—Budgetary Requirements 147

CONCLUSIONS 155

ADDENDA 157
Addendum A—Development of the CDCA Plan 159
Addendum B—Interim Management 165
Index 169

INTRODUCTION

the California Desert

CONSERVATION AREA PLAN

IN PERSPECTIVE

Introduction

Although a land which is now desert was the cradle of civilization, Man generally considers these arid regions bleak and lifeless and seeks greener places to live. The Spanish explorer De Anza, traveling across the southern part of what is now California, named the region of his ordeal, "The Land of the Dead." Scores of grim tales of death and bare survival characterize the history of the California Desert. Yet, even as the sprawling Los Angeles and San Diego metropolitan areas loom on its western edge, there are growing numbers of people who find behind the region's forbidding aspect a delightful and surprising diversity of natural forms and processes. Many have come to feel an affection for the Desert which is, in the words of one writer, "born of a face perceived, but never fully seen."

Within the area we know as the California Desert, scientists recognize three deserts: the Mojave, the Sonoran, and a small portion of the Great Basin. Subtropical high pressure belts, the "rainshadow" effect of the coastal mountain ranges, and other topographical features create the conditions by which some geographers define a desert: an area in which evaporation and transpiration exceed the mean annual precipitation.

The California deserts were cooler and moister places in the past. Prior to the end of the last Ice Age, Joshua trees, pinyon pines, sagebrush, and junipers extended across broader expanses than they do today. A subsequent drying trend caused these plant communities to retreat to higher elevations, leaving small enclaves of white fir forests on mountaintops and species like the creosote bush to dominate the lowlands. This trend toward increasing dryness is evident in rainfall records kept since the last century. Today, parts of the Sonora Desert receive less water than any other place in the United States.

In addition to aridity, extreme temperatures are a trait of the Desert. The lack of insulating humidity causes wide fluctuations in daily seasonal temperatures varying from 14°F at Deep Springs Valley in January to nearly 117°F at Death Valley in July.

This harsh climate imposes several constraints on natural processes. Desert soils, formed during the humid past, are now often protected against erosional forces only by natural soil crusts, called "desert pavement," and what little stability that the sparse desert vegetative cover provides. Any surface disturbance of these features leaves the thin desert soil exposed to severe climatic factors.

In the older deserts of the world, wind and water have scoured features of the landscape into flat, low-relief surfaces. In the California Desert, a variety of landforms, including valleys, bajadas, pediments, alluvial fans, rough-hewn mountain ranges, washes, sand dunes, and dry lakebeds, testify to its relative youth as a desert. These landforms mix with varying soil conditions and climatic variations to form a number of ecosystems, in which desert plant and animal life face formidable challenges from both the human and natural environment in their fight for survival.

Desert organisms face a tough task to maintain water balance. Most plants are annuals which avoid the problem of aridity by remaining in the form of seeds until rains bring them to life. During their short span of growth, they present the stunning displays of wildflowers which are well-known in some parts of the California Desert.

Desert perennials often use novel physiological and anatomical adaptations to endure this hostile environment. Some plants have "dual" root systems, with wide lateral roots to catch surface water and deep "tap" roots to search out underground moisture. Short-rooted succulents store water in their stems and ration it during dry spells. Plants like the drought-deciduous ocotillo shed their leaves entirely during these periods to reduce water loss through evaporation. Some agave and yucca plants are able to reduce water losses by taking in carbon dioxide needed for photosynthesis at night.

Some desert animals also display these special structural adaptations. The desert tortoise is able to store water in sacs under its shell. Some desert arthropods can take water directly from the air when the relative humidity is over 80 pecent. More often, however, the desert animal's adaptation is behavioral; it limits activity to the cool-

ness of night, dawn, or dusk. Much desert activity occurs around seeps, springs, and other surface-water sources which, although rare, are extremely important to the carefully balanced natural ecosystems.

An understanding of the relationship between natural processes and landscape cannot be complete without a recognition of the human presence. Man is not an alien in the environment. His structures and activities change and become a part of the system. It is inevitable that, as population and economic activity expand, the natural setting and associated life forms will change. In the California Desert a pattern of human uses has evolved from a multitude of single-purpose ventures which reflect western history and serve present needs.

The earliest inhabitants of the California Desert wrought changes in the land which are still visible in many areas. These Native Americans, prior to European contact in the mid-16th century, hunted and foraged for food, set down permanent and seasonal village sites, mined and quarried for common and exotic stones, flood-irrigated land for agriculture, and traded goods through an elaborate network of foot trails. Their awe and respect for natural features and processes formed the basis for religious practices. The native system of foot trails was of great value to the Spanish, who saw the Desert as little more than a daunting obstacle over which they had to travel between their settlements in Mexico and coastal California. After acquisition of the area by the United States in the mid-19th century, land-use intensity continually increased.

Initial forays through the area were made by explorers, soldiers, and Mormon settlers. Then came a growing stream of emigrants bound for coastal California, protected by military forts and supplied by outposts along the route. Washington treaty makers and railroad surveyors arrived next, and some remained in the region. In 1856, one government surveyor staunchly defended his activities in the region against the cries of those who claimed the place was "not worth a red cent." Fanning out from the trail outposts, miners began creating colorful desert settlements that went through boom-bust cycles until the end of the century. By 1868, with the subduing of the native population, most of the major modern California Desert land uses had become entrenched in some form: livestock grazing, mining, military bases, major transportation arteries, and the growth of permanent settlements. Railroad facilities and mining operations, mainly those for precious metals but also for the celebrated borax trade, had substantial, although often ephemeral, impacts. Ranchers grazed their livestock across a wide expanse of the Desert, at one time almost its entire western portion.

After the turn of the century the dominance of these activities was challenged when the construction of a canal from the Colorado River transformed "The Land of the Dead" into the lush Imperial Valley, now one of the most productive agricultural spots in the world. Anticipating its destiny, the City of Los Angeles brought water across more than 200 miles of the Desert from the Owens Valley, presaging a number of large water projects.

Between two world wars, the freewheeling days of the prospector waned as corporate entities developed large operations. The reign of the railroads reached a national and local zenith and then faltered as roads were laid across the Desert. Highway settlements and resorts sprang up to serve automobile travelers, many of whom had been inspired by authors who had described the Desert as a beautiful, delicate place. Foremost among these authors was John C. Van Dyke, who wrote in the preface to his 1901 book, *The Desert*: "The desert has gone a-begging for a word of praise these many years. It has never had a sacred poet; it has in me only a lover."

By the 1930s, this new sentiment had evolved into legislation creating the Desert's three large parks: Anza-Borrego State Park and Joshua Tree and Death Valley National Monuments. More water projects, notably the Colorado River Aqueduct, brought pumping stations and other support facilities, and the first appearance of long, high-voltage power transmission lines. After an absence of many years, the military was lured back to the California Desert sun, clear air, and sparsely settled landscape because of the country's new interest in flying.

As they did elsewhere in the Nation, military concerns dramatically usurped all other activities in the California Desert during World War II. The desert lands, however, experienced perhaps more impacts from military operations than anywhere else in the country. Preparing for North African tank warfare, General Patton's troops ranged across vast expanses of the landscape. The Army Air Corps and the Navy withdrew large tracts of land for training and the testing of a rapidly evolving weapons technology.

The formation of the modern California Desert character began immediately following the war. In 1946, livestock grazing became more regulated under the stewardship of the newly formed Bureau of Land Management. The Bureau also administered such disposal policies as the Small Tract Act of 1938, which allowed private individuals to secure five-acre tracts for a very small fee. Attracted by this opportunity, other land deals, and the boon of such new technology as air conditioning, refugees from coastal California's urban problems spilled over into the western fringes of the Desert. Residential developments ranged from the closely spaced suburbia of Palm Springs to "jackrabbit homesteads," shacks measuring 20 feet on each side and dispersed sparsely across hundreds of square miles. The war's legacy of jeeps and air-cooled engines allowed visitors to penetrate even the most remote regions of the Desert, while cheap gas and improved roads made auto touring increasingly popular. Mineral operations increased in size, but not generally in number.

Today, the physical manifestations of these human pressures have become evident across the entire desert

landscape: over 100 communities, ranging in type from one-person mining settlements to resorts; large industrial mining operations and thousands of speculative digs; canal-fed agricultural valleys; nine military bases and testing grounds; 11 electrical power generating plants; 3,500 miles of high-capacity power transmission lines; 12,000 miles of oil and gas pipelines; over 100 communication sites on ridges and mountaintops; 15,000 miles of paved and maintained roads; and thousands more miles of roads and ways cut solely by motorized vehicles.

NEED FOR THE DESERT PLAN

As described above, there are enormous basic conflicts in the California Desert Conservation Area (CDCA) between a natural environment that is both sensitive and complex, and the human social demands on that environment, that are equally sensitive and complex.

Over time, as demands have increased, these conflicts have also increased until, today, all competing uses cannot be fully accommodated. Resolutions must be reached and tradeoffs must be developed. (A brief description of these major issues and conflicts appears in the addendum to this document, "Development of the California Desert Plan.") The public must assume its share of the responsibility for the public lands in the CDCA, and BLM must be accountable to the public for its management of those lands.

The 25-million-acre CDCA contains over 12 million acres of public lands, an important factor in the use and protection of the CDCA. As a first step toward a mechanism for resolution of conflicts, Congress enacted the Federal Land Policy and Management Act of 1976 (FLPMA) which directed BLM to inventory CDCA resources and to prepare a comprehensive land-use management plan for the area. The 12 million acres of public lands administered by BLM are half of the CDCA. Preparation of a plan to resolve conflicts recognized by the public and the Congress must also take into account the effect that BLM management on public lands could have on the rest of the lands in the CDCA.

Section 601 of FLPMA requires that BLM develop a plan to ". . . provide for the immediate and future protection and administration of the public lands in the California Desert within the framework of a program of multiple use and sustained yield, and the maintenance of environmental quality." Section 103 of FLPMA defines the terms "multiple use" and "sustained yield" as follows:

> The term "multiple use" means the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output.
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> ***
>
> The term "sustained yield" means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use.

So multiple use, sustained yield, and the overall maintenance of environmental quality are the context for CDCA management, and all other public-land management laws must be viewed within this context, including the following:

- —U.S. Mining Laws
- —Taylor Grazing Act of 1934
- —Wilderness Act of 1964
- —Historic Preservation Act of 1966
- —U.S. Mineral Leasing Laws
- —Mining and Minerals Policy Act of 1970
- —Wild and Free-Roaming Horse and Burro Act of 1971
- —Endangered Species Act of 1973
- —Sikes Act of 1974
- —Public Rangeland Improvement Act of 1978
- —Executive Orders 11644 and 11989 (Off-Road Vehicle Management, issued 1972 and 1977, respectively)

Congress has said the first step is the preparation of a comprehensive long-range plan for management, use, development, and protection of the public lands in the CDCA.

CONCEPTS OF THE PLAN

In 1976 Congress passed the Federal Land Policy and Management Act (FLPMA)—a law to direct the management of the public lands of the United States. In that law a special section, Section 601, was included to give direction about a special place—the California Desert Conservation Area (CDCA). In that section Congress required the preparation of this comprehensive long-range Plan for the CDCA. It is the purpose of this Plan to establish guidance for the management of the public lands of the California Desert by the Bureau of Land Management (BLM) in clear accordance with the intent of the Congress and the people of the United States, as expressed in the law. To understand the Plan, the reader should be thoroughly familiar with FLPMA, particularly Section 601.

GOAL OF THE PLAN

The goal of the Plan is to provide for the use of the

public lands and resources of the California Desert Conservation Area, including economic, educational, scientific, and recreational uses, in a manner which enhances wherever possible—and which does not diminish, on balance—the environmental, cultural, and aesthetic values of the Desert and its future productivity.

This goal is to be achieved in the Plan through the direction given for management actions and resolution of conflicts. Direction is stated first on a geographic basis in the guidelines for each of the four *multiple-use classes*. Within those guidelines further refinement of direction is expressed in the goals for each Plan *element*. Direction is also expressed in certain site-specific Plan decisions such as Areas of Critical Environmental Concern (ACECs).

The Plan's goal, and its implementation, are based upon the following findings, principles, and concepts. They have been developed within the mandate of the law and public policy reflecting public comment and the advice of the California Desert Advisory Committee.

RESOURCE BASIS

The Plan uses, as its basis for meeting the needs of the country for social and economic goods, services, and values, the best available information about resources of the Desert, in particular its soil, vegetation, water, air, and minerals—the basic and finite things upon which all life depends. Maintenance of the productive potential of these resources on a global scale will determine the future of mankind, thus this must be the heart and foundation of any land-use plan.

The CDCA embraces some 25 million acres of which half is public land administered by the Bureau of Land Management. Since it is plainly impractical to try to learn all there is to know about such a vast and diverse area before completing a Plan, or to try to stop and make the world wait until we do know, the Plan carries a major commitment to monitor the effects of decision and to guide future adjustments of those decisions in concert with an ever-increasing body of knowledge.

UNIQUE SETTING

The Plan recognizes the special fragility of desert lands and the kinds of stress that human impacts place on arid ecosystems. This does not mean that California Desert lands and resources cannot be used—far from it—but the use must sometimes take place in special ways. This is particularly important because of the unique location of the CDCA next to one of the largest metropolitan populations in the United States. It is this above everything else that makes the CDCA a special place requiring a special plan.

The unique setting of the CDCA means that the Plan must include creative ideas and new ways of solving old problems. In fact, the most pervasive management issue in the CDCA—how vehicle access to its millions of acres can be managed to prevent degradation of the resources without destroying the sense of freedom and solitude cherished by most desert users—has to be addressed creatively in the Plan. To be effective, this approach must be understood and implemented by the people who use the Desert, and enforced fairly and without equivocation by the Bureau of Land Management.

MANAGEMENT PRINCIPLES

The management principles contained in the law (FLPMA)—*multiple use, sustained yield*, and *the maintenance of environmental quality*—are not simple guides. Resolution of conflicts in the California Desert Plan requires innovative management approaches for everything from wilderness and wildlife to grazing and mineral development. These approaches include:

—Seeking simplicity for management direction and public understanding, avoiding complication and confusion in detail which would make the Plan incomprehensible and unworkable.

—Development of decision-making processes using appropriate guidelines and criteria which provide for public review and understanding. These processes are designed to help in allowing for the use of desert lands and resources while preventing their undue degradation or impairment.

—Responding to national priority needs for resource use and development, both today and in the future, including such paramount priorities as energy development and transmission, without compromising the basic desert resources of soils, air, water, and vegetation, or public values such as wildlife, cultural resources, or magnificent desert scenery. This means, in the face of unknowns, erring on the side of conservation in order not to risk today what we cannot replace tomorrow.

—Recognizing that the natural patterns of the California Desert, its geological and biological systems, are the basis for planning, and that human use patterns, from freeways to fence lines, define its boundaries. Only in this way can the public resources be understood and protected in a Plan that can be publicly comprehended, accepted, and followed.

PLANNING FOR THE FUTURE

The function of this Plan, like any plan, is to help share the shaping of an unknown future. In keeping with our habit of describing things by putting labels on them and classifying even time itself into neat divisions, the Plan will take for its framework the next 20 years—the remainder of the century—but many of the decisions of the Plan also consider the effect of our actions over a much longer period of time.

The Plan recognizes that the public lands of the California Desert belong to all the people of the United

States, that these lands are not isolated but are spread out among or are adjacent to lands managed by other agencies of Federal, State, and local government, military installations, Indian reservations, and private lands; and that public-land management decisions must relate to State and local laws as well as to Federal laws. The Plan is based on a "good neighbor" concept and will treat considerately the needs and concerns of other landowners and jurisdictions in the Desert.

Congress established the CDCA and FLPMA within a broader context of laws governing the public lands and providing for both use and protection of a variety of public resources. Thus, the Plan requires the protection of endangered and threatened species of plants and wildlife and cultural resources, as well as providing for the development of mineral resources and for livestock grazing and other consumptive uses, all directed by law.

Interrelationships between sometimes conflicting legal mandates add to the complexity of public-land management. Here also, the Plan proposes that creative solutions to conflicts be sought. The public review and input which has been inherent in the planning process must continue with adoption of the Plan as site-specific decisions implementing the Plan, and new proposals, are being made.

SHARED RESPONSIBILITY

The Plan recognizes that government by bureaucracy in a democratic society must be limited, and that the responsibility for wise management of the Desert's resources must be shared by all citizens. The Federal dollars expended in management are investments needed to protect our capital in public-land resources and to insure that these resources are available and productive for those who come after us. The money spent and the service provided by dedicated public employees must be matched by a commitment from the people. Thus, the Plan requires programs of information, education, and volunteer services as components of its implementation.

In order to complete and carry out the Plan, the Bureau of Land Management has, under its California State Office, established a California Desert District which is responsible for maintaining and implementing the Plan and carrying out the management of the public lands within the CDCA. The Plan includes an analysis of and a commitment to a level of implementation appropriate to the public resources and management needs of the Desert.

INTENT OF THE PLAN

Based upon these principles and concepts, the intent of the CDCA Plan is to ensure as nearly as humanly possible that the recognition brought by Congress and the people into law—that the California Desert is not a wasteland but a precious public resource—is effectively guaranteed in its management, that the uses of today do not preclude the users of tomorrow, and that we preserve and develop these assets wisely with full regard for their social and environmental as well as economic values.

PART I

the California Desert

PLAN

CHAPTER 1

General Guidelines

GENERAL GUIDELINES

Development of the Plan is responsive to the legislative mandate in Section 601 of FLPMA:

> The Secretary of the Interior . . . shall prepare and implement a comprehensive, long-range plan for the management, use, development, and protection of the public lands within the California Desert Conservation Area. Such plan shall take into account the principles of multiple use and development, including, but not limited to, maintenance of environmental quality, rights-of-way, and mineral development. Such plan shall be completed and implementation thereof initiated on or before September 30, 1980.

The plan provides general, regional guidance for management of the CDCA over at least a 20-year time period. This general plan is at the top of a hierarchy and it provides the framework for subsequent plans for specific resources and uses, and for development of site-specific programs or project actions, and it is responsive to specific land-use requests.

Therefore, as a comprehensive long-range plan and in response to the legislative mandate, the Desert Plan contains certain significant characteristics:

(1) It is regional in scope in that it considers the social and economic factors and land resources in a broad spectrum.

(2) It is multiple use and sustained yield in nature in that it considers all uses.

(3) It provides broad guidance for land-use management, to assist managers in developing subsequent site-specific plans.

(4) It is the product of public involvement and participation in the entire decision-making process in that it reflects the desires and needs expressed by the public(s).

(5) It is effective in considering issues and in resolving conflicts in that it surfaces all issues and, through an analytical process, resolves conflicts.

(6) It is an evolving process which permits analysis of actions and impacts on a broad basis and provides a framework for ongoing analysis of specific subsequent plans, programs, actions, and impacts.

This Plan has established certain basic guidelines which are applicable to all of the multiple-use classes and which will be followed throughout the public lands of the CDCA. The decisions in this Plan apply only to public lands administered by the BLM. No rights of eminent domain may be exercised by the Secretary of the Interior except where necessary to gain access to public lands. The multiple-use class guidelines and all other components of this Plan are subject to appropriate laws and regulations of the Federal, State, and local governments.

VALID EXISTING RIGHTS

All official action taken under this Plan shall be subject to valid existing rights as provided for in Sections 601, 603, and 701 of the Federal Land Policy and Management Act of 1976.

ACCESS ACROSS PUBLIC LANDS

The need for access across public lands to permit utilization of State and privately owned lands and to permit authorized developments on public lands, including mining claims, is recognized. The routes of travel and construction standards are subject to such BLM control as is required to prevent unnecessary or undue degradation of the public lands and their resources or to afford environmental protection.

ENVIRONMENTAL ASSESSMENTS AND IMPACT STATEMENTS

For some uses permits must be obtained which require the preparation of an environmental assessment or an environmental impact statement. The provisions for these requirements can be found in Departmental procedures (516 DM 1–6) and related BLM guidance or ascertained at the appropriate BLM permitting office.

Environmental analysis is required for any action to implement this Plan. The analysis will supplement and not repeat the environmental analysis already accomplished as part of the Plan development process. If the impact is not significant, the analysis will be documented as an environmental assessment and a "Finding of No Significant Impact" issued. If the impact is significant, it will be documented as an environmental impact statement.

PERMITS AND AUTHORIZATIONS

Laws and regulations governing the issuance of permits and/or authorizations for uses of the public lands can be found in Titles 30, 36, and 43 of *Code of Federal Regulations*, or determined at any BLM office.

AUTHORIZED OFFICER

For purposes of this Plan and its implementation, "authorized officer" means the California State Director of the Bureau of Land Management, or the California Desert District Manager, or any other BLM official so delegated in accordance with Bureau Order 701 and amendments thereto.

EDUCATION AND RESEARCH

Research activities conducted on public lands in the CDCA will require the approval of the authorized officer. Whenever required, all permits, authorizations, and/or licenses will be issued at the discretion of the authorized officer.

HEALTH, SAFETY, AND GENERAL WELFARE

Temporary or emergency-related uses of the public lands in the CDCA for the purposes of protecting the health, safety, and general welfare of the public will be allowed at the discretion of the authorized officer. These uses may include, but are not limited to, repairs and maintenance of public utility and communication facilities; public roads and highways, including minor realignments for safety purposes; search and rescue operations; fire prevention and/or suppression; law enforcement activities; and any other related activity of a temporary, emergency, or urgent nature.

CHAPTER 2

Multiple-Use Classes

All of the public lands in the CDCA under BLM management, except for a few small and scattered parcels (approximately 300,000 acres), have been designated geographically into four multiple-use classes. The classification was based on the sensitivity of resources and kinds of uses for each geographic area. A map depicting the use classification assigned to each location (Map 1) can be found in the back cover pocket of this document.

Four multiple-use classes are used in the Plan. Each describes a different type and level or degree of use which is permitted within that particular geographic area.

As Map 1 ("CDCA Plan") inserted in the back cover pocket of this document shows, these classes are assigned to the 12.1 million acres of BLM-administered public lands in the following proportions:

Class	Acreage (000)	% Total of BLM Lands
C	2,099	17.3
L	5,883	48.5
M	3,336	27.5
I	499	4.1
Unclassified	314	2.6
TOTAL	12,131	100.0

The multiple-use class guidelines (Table 1, below) describe land-use and resource-management guidelines for 19 land uses and resources as they apply to each class.

MULTIPLE-USE CLASS C

Class C has two purposes. First, it shows those areas which are being "preliminarily recommended" as suitable for wilderness designation by Congress. This process is fully explained in the Wilderness Element in this Plan.

Second, it will be used in the future to show those areas formally designated as wilderness by Congress.

The Class C guidelines (Table 1) are different from the guidelines for other classes. They summarize the kinds of management likely to be used in these areas in the CDCA when and if they are formally designated wilderness by Congress.

These guidelines will be considered in the public process of preparing the final Wilderness Study Reports. But the final management decisions depend on Congressional direction in the legislation which makes the formal designation.

MULTIPLE-USE CLASS L

Multiple-Use Class L (Limited Use) protects sensitive, natural, scenic, ecological, and cultural resource values. Public lands designated as Class L are managed to provide for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished.

MULTIPLE-USE CLASS M

Multiple-Use Class M (Moderate Use) is based upon a controlled balance between higher intensity use and protection of public lands. This class provides for a wide variety of present and future uses such as mining, livestock grazing, recreation, energy, and utility development. Class M management is also designed to conserve desert resources and to mitigate damage to those resources which permitted uses may cause.

MULTIPLE-USE CLASS I

Multiple-Use Class I is an "Intensive Use" class. Its purpose is to provide for concentrated use of lands and resources to meet human needs. Reasonable protection will be provided for sensitive natural and cultural values. Mitigation of impacts on resources and rehabilitation of impacted areas will occur insofar as possible.

UNCLASSIFIED LANDS

Scattered and isolated parcels of public land in the CDCA which have not been placed within multiple-use classes are unclassified land. These parcels will be managed on a case-by-case basis, as explained in the Land-Tenure Adjustment Element.

INTERIM MANAGEMENT OF LANDS UNDER WILDERNESS REVIEW

Wilderness Study Areas may occur in any multiple-use class. Until these areas are or are not legislated into the National Wilderness Preservation System, overall management of all of these areas will be conducted according to the U.S. Department of the Interior's *Interim Management Policy and Guidelines for Lands Under Wilderness Review* (December 12, 1979) or in accordance with the multiple-use class into which the individual area falls, whichever management policy is more restrictive. Management of Wilderness Study Areas is fully explained in the Wilderness Element.

MULTIPLE-USE CLASS GUIDELINES

The class designations govern the type and degree of land-use actions allowed within the areas defined by class boundaries. All land-use actions and resource-management activities on public lands within a multiple-use class delineation must meet the guidelines (Table 1, below) given for that class. The guidelines are arranged according to the following list:

1. Agriculture
2. Air Quality
3. Water Quality
4. Cultural and Paleontological Resources
5. Native American Values
6. Electrical Generation Facilities
7. Transmission Facilities
8. Communication Sites
9. Fire Management
10. Vegetation
11. Land-Tenure Adjustment
12. Livestock Grazing
13. Mineral Exploration and Development
14. Motorized-Vehicle Access/Transportation
15. Recreation
16. Waste Disposal
17. Wildlife Species and Habitat
18. Wetland/Riparian Areas
19. Wild Horses and Burros

Table 1
MULTIPLE-USE CLASS GUIDELINES

	MULTIPLE-USE CLASS C Controlled Use (Wilderness Management) (Note: Class C identifies areas "preliminarily recommended" for wilderness designation by Congress. These guidelines summarize the kinds of management likely to be used in these areas after formal designation of wilderness by Congress.)	MULTIPLE-USE CLASS L Limited Use	MULTIPLE-USE CLASS M Moderate Use	MULTIPLE-USE CLASS I Intensive Use
1. AGRICULTURE	Agricultural uses (excluding livestock grazing) are not allowed.		Agricultural uses may be allowed on suitable land classified for these purposes. Prospective leases for potential desert crops, e.g., jojoba, guayule or others, may be allowed only after NEPA requirements are met.	
2. AIR QUALITY	These areas will be managed to protect their air quality and visibility in accordance with Class II objectives of Part C of the Clean Air Act Amendments unless otherwise designated another class by the State of California (see 42 USC 7474, and the final regulations, if and when promulgated) as a result of recommendations developed by any BLM air-quality management plan.			
3. WATER QUALITY	These areas will be managed to maintain and enhance both surface- and ground-water resources.	Areas designated in these classes will be managed to minimize degradation of the water resources. Best management practices, developed by the Bureau during the planning process outlined in the Clean Water Act, Section 208, and subsequently, will be used to avoid degradation and to comply with Executive Order 12088.		Areas designated in this class will be managed to minimize degradation of water resources. Best management practices, developed by the Bureau during the planning process outlined in the Clean Water Act, Section 208, and subsequently, will be used to keep impacts on water quality minimal and to comply with Executive Order 12088.
4. CULTURAL AND PALEONTOLOGICAL RESOURCES	Archaeological and paleontological values will be preserved and protected. Procedures described in 36 CFR 800 will be observed where applicable. A Memorandum of Agreement has been signed by the BLM, the California State Historic Preservation Officer, and for cultural resources the President's Advisory Council on Historic Preservation to protect cultural resource values.			
5. NATIVE AMERICAN VALUES	Native American cultural and religious values will be preserved where relevant and protected where applicable. Native American group(s) shall be consulted. Memorandums of Agreement and Understanding have been signed between BLM and the Native American Heritage Commission pertaining to Native American concerns and cultural resources.			
6. ELECTRICAL GENERATION FACILITIES	Electrical generation plants are not allowed.	Electrical generation plants may be allowed (See wind/solar/geothermal, below.)	All types of electrical generation plants may be allowed in accordance with State, Federal, and local laws.	
		Existing facilities may be maintained and upgraded or improved in accordance with special-use permits or by amendments to rights-of-way.		
—Nuclear and Fossil Fuel Powerplants	Not allowed.		May be allowed in accordance with Federal, State, and local laws.	
—Wind/Solar Powerplants	Not allowed.	May be allowed after NEPA requirements are met.		
—Geothermal Powerplants	Not allowed.	May be allowed pursuant to licenses issued under 43 CFR Section 3250, et. seq. An EIS will be required.	May be allowed pursuant to licenses issued under 43 CFR Section 3250, et. seq. NEPA requirements will be met.	

Table 1.—*Multiple-Use Class Guidelines*—Continued

	MULTIPLE-USE CLASS C Controlled Use (Wilderness Management)	MULTIPLE-USE CLASS L Limited Use	MULTIPLE-USE CLASS M Moderate Use	MULTIPLE-USE CLASS I Intensive Use
7. TRANSMISSION FACILITIES	New transmission facilities for electricity, gas, water, and telecommunications are not allowed and new licenses or rights-of-way for these purposes will not be granted, except as provided for in the Wilderness Act of 1964—16 USC 1133(d)(4) or as may be specified by Congress.	New gas, electric, and water transmission and trans-desert telecommunications facilities may be allowed only within designated corridors (see Energy Production and Utility Corridors Element). NEPA requirements will be met.		
	Existing facilities may be maintained subject to Wilderness Management Plan.	Existing facilities within designated corridors may be maintained and upgraded or improved in accordance with existing right-of-way grants or by amendments to right-of-way grants. Existing facilities outside designated corridors may only be maintained but not upgraded or improved.		
—Distribution Facilities	New licenses or rights-of-way for distribution facilities to serve private properties will not be granted. Existing facilities may be maintained or improved but not expanded.	Existing facilities may be maintained and upgraded or improved in accordance with existing right-of-way grants.		
		New distribution systems may be allowed and will be placed underground where feasible except where this would have a more detrimental effect on the environment than surface alignment. In addition, new distribution facilities shall be placed within existing rights-of-way where they are reasonably available.	New distribution facilities may be allowed and shall be placed within existing rights-of-way where they are reasonably available. NEPA requirements will be met.	
8. COMMUNICATION SITES	New communication sites are not allowed unless required for protection of wilderness values or visitors.	New communication sites may be allowed in designated areas (see map in Utility Element). EA required.	New sites may be allowed. NEPA requirements will be met.	
	Maintenance and operation of existing sites and facilities may be allowed subject to Wilderness Management Plan.	Existing facilities may be maintained and utilized in accordance with right-of-way grants and applicable regulations.		
9. FIRE MANAGEMENT	Fire suppression measures will be taken in accordance with specific wilderness fire management plans to be followed by the authorized officer, and may include use of motorized vehicles, aircraft, and fire retardant chemicals.	Fire suppression measures will be taken in accordance with specific fire management plans subject to such conditions as the authorized officer deems necessary, such as use of motorized vehicles, aircraft, and fire retardant chemicals.		
10. VEGETATION —Harvesting (Native Plant)	Removal of vegetation, non-commercial, may be allowed by permit only after an EA or EIS is prepared and after development of necessary stipulations.	Removal of vegetation, commercial or non-commercial, may be allowed by permit only after NEPA requirements are met and after development of necessary stipulations.		
—Harvesting by Mechanical Equipment	Not Allowed.	Harvesting by mechanical equipment may be allowed by permit only.		
—Rare, Threatened, and Endangered Species, State and Federal	All state and federally listed species will be fully protected. Actions which may jeopardize the continued existence of federally listed species will require consultation with the U.S. Fish and Wildlife Service.			
—Sensitive Plant Species (including candidates for listing by FWS; FWS Species of Concern; species on List 2, CNPS, 1980)	Identified sensitive species will be given protection in management decisions consistent with wilderness values and BLM policies.	Identified species will be given protection in management decisions consistent with BLM policies.		

Vegetation (cont.) —Unusual Plant Assemblages (UPAs)	Identified UPAs will be given protection in management decisions consistent with wilderness values and BLM policies.	Identified UPAs will be considered when conducting all site-specific environmental impact analyses to minimize impact. See also Wetland/Riparian Areas guidelines.	
—Vegetation Manipulation			
1. Mechanical Control	Mechanical control will not be allowed.		Mechanical control may be allowed, but only after consideration of possible impacts.
2. Chemical Control	Aerial broadcast application of chemical controls will not be allowed.		
	Spot application will not be allowed.	Noxious weed eradication may be allowed after site-specific planning. Types and uses of pesticides, in particular herbicides, must conform to Federal, State, and local regulations (see Vegetation Element).	Spot applications will be allowed after site-specific planning. Types and uses of pesticides, in particular herbicides, must conform to Federal, State, and local regulations (see Vegetation Element).
3. Exclosures	Exclosures will not be allowed.	Exclosures may be allowed.	
4. Prescribed Burning	Prescribed burning will not be allowed.	Prescribed burning may be allowed after development of a site-specific management plan.	
11. LAND-TENURE ADJUSTMENT	Lands will be acquired, disposed of, or exchanged in accordance with FLPMA and other applicable Federal laws and regulations, to assure more efficient management of the public lands and to reduce conflicts with other public and private landowners to provide more consistency and logic in desert-wide land-use patterns.		
12. LIVESTOCK GRAZING	Grazing will be allowed subject to limitations to preserve wilderness characteristics and the protection of sensitive resources, except that existing grazing will only be subject to the protection of sensitive resources.	Grazing will be allowed subject to the protection of sensitive resources.	
	Major support facilities, such as permanent corrals, loading chutes, and significant water developments, will not be allowed except for existing facilities pursuant to valid existing leases, licenses, and permits. Maintenance of such facilities will be controlled to prevent unnecessary or undue degradation of wilderness values.	Support facilities such as corrals, loading chutes, water developments, and other facilities, permanent or temporary, may be allowed consistent with protection of sensitive resources.	Support facilities such as corrals, loading chutes, water developments, and other facilities, permanent or temporary, will be allowed.
	Manipulation of vegetation by chemical or mechanical means will not be allowed.	Manipulation of vegetation by chemical or mechanical means will not be allowed, except for site-specific needs. (See Vegetation Element.)	Manipulation of vegetation by chemical or mechanical means may be allowed and may be designed, developed, and managed for intensive livestock use.

Table 1.—*Multiple-Use Class Guidelines*—Continued

	MULTIPLE-USE CLASS C Controlled Use (Wilderness Management)	MULTIPLE-USE CLASS L Limited Use	MULTIPLE-USE CLASS M Moderate Use	MULTIPLE-USE CLASS I Intensive Use
13. MINERAL EXPLORATION AND DEVELOPMENT	These guidelines summarize the kinds of management likely to be used after formal designation of wilderness by Congress. Congressional enactment of wilderness will prescribe mining rules and possible cutoff dates for mineral entry. The information below indicates the possible restrictions after enactment. The following summarizes possible significant provisions of the Wilderness Act as it applies to mineral exploration and development after Congress officially designates the areas as wilderness. (For more detailed information, see the G-E-M Element or the Wilderness Act of Sept. 3, 1964). Minerals Prospecting and Exploration: Prospecting and exploration for the purpose of gathering information about mineral resources is allowed, provided such activity is carried on in a manner compatible with the preservation of the wilderness environment. Mineral Development: All designated wilderness areas may be withdrawn from mineral entry at sometime subsequent to Congressional designation. Following withdrawal, *no new mining claims* may be located, and no new permits, leases, or material sales contracts may be issued subject to deadlines established by Congress. Valid existing mining operations may continue pursuant to submission and approval of operational plans which will prevent unnecessary or undue degradation of wilderness qualities.	*Leasable Minerals* Except as provided in Appendix 5.4, 516 DM 6, NEPA Procedures titled "Categorical Exclusions," prior to issuing any mineral leases, an environmental assessment will be prepared on the proposed mineral leasing action. As this class is an area of significant public concern, 60 days' public comment will be provided on the EA. An EIS will be prepared if the proposal would significantly impact the quality of the human environment and this should be expected in areas of especially sensitive surface resources. Mitigation measures as appropriate, subject to technical, ecological, wildlife, vegetation, and cultural values. Prior to any operations upon mineral leases, the operator shall submit the appropriate notices or applications to BLM or the U.S. Geological Survey (USGS), as appropriate, as specified in 43 CFR 3100, 3200, 3500. All applications submitted to the USGS shall be treated under existing joint BLM/USGS procedures (i.e., S.O. 2948) and other applicable regulations. Reclamation requirements are contained within these procedures. *Locatable Minerals* Location of mining claims is nondiscretionary. Operations on mining claims are subject to the 43 CFR 3809 Regulations and applicable State and local law. In most instances, plans of operation shall be required and treated as specified in the above regulation. An EA shall be prepared on the proposed plans of operations. As this class is a sensitive area of public concern, a 60-day public review period shall be held on all mining and reclamation plans filed in this class. BLM will review plans of operations for potential impacts on sensitive resources identified on lands in this class. Mitigation, subject to technical and economic feasibility, will be required.	*Leasable Minerals* Except as provided in Appendix 5.4, 516 DM 6, NEPA Procedures titled "Categorical Exclusions," prior to issuing any mineral leases, an EA will be prepared on the proposed leasing action. Mitigation measures will be required to protect sensitive scenic, ecological, wildlife, vegetative, and cultural values. Prior to any operations upon mineral leases, the operator shall submit the appropriate notices or applications to BLM or the U.S. Geological Survey (USGS), as appropriate, as specified in 43 CFR 3100, 3200, 3500. All applications submitted to the USGS shall be treated under existing joint BLM/USGS procedures (i.e., S.O. 2948) and other applicable regulations. Reclamation requirements are contained within these procedures. *Locatable Minerals* Location of mining claims is nondiscretionary. Operations on mining claims are subject to the 43 CFR 3809 Regulations and applicable State and local law. In most instances, plans of operations shall be required and treated as specified in the above regulation. NEPA requirements will be met. BLM will review plans of operations for potential impacts on sensitive resources identified on lands in this class. Mitigation, subject to technical and economic feasibility, will be required.

		Saleable Minerals Except as provided in Appendix 5.4, 516 DM 6, NEPA procedures titled "Categorical Exclusions," for new sites less than 5 acres in size, an EA shall be required for all material sales locations, including sand and gravel. For new sites greater than 5 acres, or in sites less than 5 acres where the EA indicates a significant level of adverse impacts, an EIS shall be required.	*Saleable Minerals* Except as provided in Appendix 5.4, 516 DM 6, NEPA Procedures titled "Categorical Exclusions," new material sales locations, including sand and gravel sites, will require an EA.	
		Continued use of existing areas of sand and gravel extractions is allowed subject to BLM permits, as specified in 43 CFR 3600.		
14. MOTORIZED-VEHICLE ACCESS/ TRANSPORTATION	Motorized-vehicle use is generally not allowed unless provided for in individual wilderness legislation and management plans or if necessary to serve valid existing rights, and for emergency use for public safety, or protection of wilderness values.	New roads and ways may be developed under right-of-way grants or pursuant to regulations or approved plans of operation. Motorized-vehicle use is allowed on "approved" routes of travel. This means that "existing" routes of travel are closed unless specifically designated "open."	Motorized-vehicle use will be allowed on "existing" routes of travel unless designated closed by the authorized officer. New routes may be allowed upon approval of the authorized officer.	Same as Class M. In addition, the vehicle open areas are available for unrestricted vehicle access (see Recreation Element).
		Vehicle use on some major dunes and dry lakebeds may be allowed (see Motorized-Vehicle Access Element).		
		Periodic or seasonal closure of routes of travel may be required.		
	Compliance with Executive Orders 11644 and 11989 as applied to motorized-vehicle access will be assured.			
—Railroads	No new railroads and trams will be allowed. Existing railroads and trams may be operated and maintained subject to nonimpairment of wilderness values.	Railroads and trams may be allowed to serve authorized uses if no other viable alternative is possible.	Railroads and trams may be allowed.	
—Aircraft	Aircraft facilities are not allowed.	Temporary landing strips may be allowed by permit.	Airports and landing strips may be allowed by lease subject to conformance with county or regional airport plans and FAA and DOD approval.	
15. RECREATION	This class is suitable for nonmechanical types of recreational experience which generally involve low to very low user densities. Recreational opportunities provided include, but are not limited to, the following characteristic activities: —backpacking —primitive, unimproved site camping —hiking —horseback riding —rockhounding	This class is suitable for recreation which generally involves low to-moderate user densities. Recreation opportunities include those permitted in Class C plus: –land-sailing on dry lakes –non-competitive vehicle touring and events only on "approved" routes of travel All organized vehicle events, competitive or not, require a permit specifying the conditions of use;	This class is suitable for a wide range of recreation activities which may involve moderate to high user densities. Recreational opportunities include those permitted in Class L. Competitive motorized-vehicle events are limited to "existing" routes of travel and must be approved by the authorized officer. Pit, start, and finish areas must be designated by the authorized officer. All competitive events and organized events having 50 or more vehicles require permits.	This class is suitable for recreation activities which generally involve high user densities. A wide array of recreational opportunities will be found in this class. Off-road-vehicle play will be allowed where approved in open areas. Uses permitted are the same as Class M; in addition, motorized-vehicle play is allowed in areas designated "open." All aspects of competitive events will be permitted ex-

Table 1.—*Multiple-Use Class Guidelines*—Continued

	MULTIPLE-USE CLASS C Controlled Use (Wilderness Management)	MULTIPLE-USE CLASS L Limited Use	MULTIPLE-USE CLASS M Moderate Use	MULTIPLE-USE CLASS I Intensive Use
Recreation (cont.)	—nature study and observation —photography and painting —rockclimbing —spelunking —hunting	these conditions will include, but are not limited to: –approved routes –no pitting, start, finish, or spectator areas.		cept where specific mitigations are stipulated by the authorized officer..
	Permanent or temporary facilities for resource protection and public health and safety may be allowed at the discretion of authorized officer or in accordance with approved Wilderness Management Plans.	Permanent or temporary facilities for resource protection and public health and safety are allowed.		
	Trails are open for non-vehicular use and new trails for non-motorized access may be allowed.			
16. WASTE DISPOSAL	Waste disposal sites will not be allowed in this class.	Hazardous waste disposal sites will not be allowed. New non-hazardous waste disposal sites will not be allowed.	Public lands managed by BLM may not be used for hazardous waste disposal. Where locations suitable for such disposal are found on BLM-managed lands, consideration will be given to transfer of such sites to other ownership for this use. Non-hazardous waste disposal sites may be allowed.	
17. WILDLIFE SPECIES AND HABITAT Rare, Threatened, and Endangered Species (both State and Federal)	All State and federally listed species and their critical habitat will be fully protected. Actions which may affect or jeopardize the continued existence of federally listed species will require formal consultation with the U.S. Fish and Wildlife Service in accordance with Section 7 of the Endangered Species Act.			
—Sensitive Species	Identified sensitive species will be given protection in management decisions consistent with wilderness values and BLM policies.	Identified species will be given protection in management decisions consistent with BLM policies.		
—Predator and Pest Control	Predator and pest control will not be allowed except to alleviate public health hazards or to protect endangered species.	Control of depredating wildlife and pests will be allowed in accordance with existing State and Federal laws.		
—Habitat Manipulation	Projects to improve wildlife habitat may be allowed subject to environmental assessment.		Same as Classes C and L, except that chemical and mechanical vegetation manipulation may be allowed.	
—Reintroduction or Introduction of Established Exotic Species	Reintroduction of native species is allowed.	Reintroduction or introduction of native species or established exotic species is allowed.		
18. WETLAND/RIPARIAN AREAS	Wetland/riparian areas will be considered in all proposed land-use actions. Steps will be taken to provide that these unique characteristics and ecological requirements are managed in accordance with Executive Order 11990, Protection of Wetlands (42 CFR 26951), legislative and Secretarial direction, and BLM Manual 6740, "Wetland-Riparian Area Protection and Management" (10/1/79), as outlined in the Vegetation Element.			
19. WILD HORSES AND BURROS	Populations of wild and free-roaming horses and burros will be maintained in accordance with the Wild and Free-Roaming Horse and Burro Act of 1971 but will be subject to controls to protect sensitive resources as provided for in management plans for wilderness areas. (See Wild Horse and Burro Element.)	Populations of wild and free-roaming horses and burros will be maintained in healthy, stable herds, in accordance with the Wild and Free-Roaming Horse and Burro Act of 1971 but will be subject to controls to protect sensitive resources. (See Wild Horse and Burro Element.)		

CHAPTER 3

Plan Elements

As described in the previous section, multiple-use class designations and resource management guidelines for those designations were developed as the primary component in designing the Plan. The second component is the Plan element. The element provides more specific application of the multiple-use class guidelines for a specific resource or activity about which the public has expressed significant concern.

After a geographic area has been assigned a multiple-use class designation, a number of types and levels of use consistent with the guidelines may be allowed within that area. However, uses may conflict and such conflicts, as the major issues of this Plan, are addressed in 12 Plan elements:

Cultural Resources
Native American Values
Wildlife
Vegetation
Wilderness
Wild Horses and Burros
Livestock Grazing
Recreation
Motorized-Vehicle Access
Geology-Energy-Minerals
Energy Production and Utility Corridors
Land Tenure Adjustment

Each of the Plan elements provides a desert-wide perspective of the planning decisions for one major resource or issue of public concern. Each element also provides more specific application, or interpretation, of multiple-use class guidelines for a given resource and its associated activities.

Within each multiple-use class designation residual conflicts will occur naturally, although they are most limited in Class C—the "Controlled Use" class—with its dedication to wilderness characteristics and values. The conflicts increase, however, in a Class L—"Limited Use"—designation, where judgment is called for in allowing consumptive uses only up to the point that sensitive natural and cultural values might be degraded. Class M—the "Moderate Use" class—calls for subsequent tradeoffs between a number of acceptable uses. Even Class I—"Intensive Use"—designed to permit intensive and single uses, is still open to negotiation between those uses.

Many uses in a given area will be mutually exclusive and require selective decisions to be made for that area. The resolution of these conflicts and tradeoffs between and within varying uses are fundamental to multiple-use management. The task of the Plan element, therefore, is to identify existing or possible conflicts and to assist the manager in resolution.

In reality, the Plan element has a more difficult job in multiple-use land management than simply summing up the effect of multiple-use class allocations. It must try to resolve residual conflicts under broader guidelines or set up procedures for resolving conflicts as they are identified in implementation of the Plan.

The Plan itself must provide general, regional guidance for management of the public lands in the CDCA for at least a 20-year period. The Plan provides a management framework for subsequent plans and actions for specific resources and uses, for subsequent development of site-specific programs or projects, and for response to future specific land-use requests.

Each of the Plan element sections has been subdivided into three areas of interest and responsibility: goals for that element, actions planned for that element under this Plan, and implementation of the Plan as it would affect that element. In addition, many of the Plan element sections are accompanied by tables or maps which quantify or locate areas of specific concern to that element.

CULTURAL RESOURCE ELEMENT

Prehistoric and historic remains within the California Desert are being depleted at a rate which approaches 1 percent per year. Significant losses of paleontological values also are apparent. These remains represent a national treasure with importance to the public, scientists, Native Americans, and others. Preservation and protection or proper data recovery is essential.

The outline for this element is as follows:

GOALS
ACTIONS PLANNED
- **RECOGNITION**
- **PRESERVATION—PROTECTION**
- **MONITORING**
- **INVENTORY**
- **MITIGATION**
- **RESEARCH**
- **REVIEW—COORDINATION**

IMPLEMENTATION

GOALS

The general goals of the Cultural Resource Element are to:

(1) Conduct inventory to the fullest extent possible to broaden the archaeological and paleontological knowledge of the California Desert and to further the achievement of the following goals;

(2) Protect and preserve to the greatest extent possible representative samples of the full array of the CDCA's cultural and paleontological resources for the benefit of scientific and socio-cultural use by present and future generations;

(3) Ensure that cultural and paleontological resources are given full consideration in land-use planning and management decisions;

(4) Manage cultural and paleontological resources so that their scientific and socio-cultural values are maintained and enhanced;

(5) Ensure that the Bureau's activities avoid inadvertent damage to cultural and paleontological resources; and

(6) Achieve proper data recovery where adverse impacts cannot be avoided.

ACTIONS PLANNED

Because cultural and paleontological resources are susceptible to unintentional damage and destruction by activities such as mining and vehicle use, as well as by intentional vandalism and looting, their protection is difficult to secure. Disclosure of the locations of sensitive cultural resources before protective measures are undertaken increases the risk of damage and destruction. Therefore, only designated cultural resource ACECs are shown on the maps in the Desert Plan.

Paleontological resources, including both vertebrate and invertebrate fossils, represent a sensitive, nonrenewable resource subject to a wide range of potential impacts. Paleontological resources within the CDCA will be managed to maximize their protection, systematic and scientific material recovery, and the development of educational and interpretative programs.

Nearly 500 sensitive/significant cultural resource areas (locations varying in size from 0.5 square mile to 94 square miles) were identified during the planning process. Significant historic and prehistoric road and trail systems and areas of potential early man sites also were identified. To achieve the goals of the Cultural Resource Element, seven basic actions are proposed: (a) *Recognition*—ACEC and other special systems designations; (b) *Preservation-Protection*—Cultural Resource Management Plans, environmental awareness/education, surveillance, stabilization, restoration, and road designation; (c) *Monitoring*; (d) *Inventory*; (e) *Mitigation Plans*; (f) *Research*; and (g) *Review-Coordination*. Each of these is described below.

RECOGNITION

Special designations provide formal recognition for cultural resources: 52 archaeological areas have been included in 47 ACECs (see ACECs, below, for details); four paleontological ACECs have been designated.

Other special designations also recognize prehistoric-historic resources. On the Federal level there are Congressional, Secretarial and inter-Secretarial designations including: (1) *National Register of Historic Places*, (2) National Historic Trails, (3) National Historic Landmarks, (4) Historic American Buildings Survey, and (5) Historic American Engineering Record. On the State level, recognition is provided for California Historical Landmarks and California Points of Historical Interest. At the local level various historical societies acknowledge significant cultural areas. "Research Natural Area" is a BLM designation which has been applied to a few areas where the potential for paleoenvironmental data which can be related to archaeological values is high (Appendix VII to the Proposed Plan, October 1980).

These special designations are not necessarily mutually exclusive. For example, all National Historic Landmarks are also listed on the *National Register of Historic Places*.

PRESERVATION-PROTECTION

Protection and preservation of cultural and paleontological resources will be achieved through a variety of management tools. These include: management plans for cultural resources and other values, stabilization, surveillance, vehicle route designation, and environmental education/awareness programs.

As mentioned above and in the ACEC section of this Plan, ACEC management prescriptions will provide direction during preparation of activity plans. These plans will detail the protection and mitigation measures necessary for preservation of cultural and paleontological resources within ACECs.

When possible, cultural and paleontological resource preservation and protection measures will be included in other types of activity plans, especially Wilderness Management Plans and Recreation Management Plans. In addition, Cultural Resource Management Plans (CRMPs) will be prepared for areas containing sensitive/significant cultural resources where special management is warranted. For the purposes of this element, these areas have been termed "Prehistoric-Historic Resource Areas."

Prehistoric-Historic Resource Areas include all archaeological values in small areas and the important associated environments related to past human use and occupation. Prehistoric-Historic Resource Areas will provide opportunities for continuing archaeological research and education and in some cases provide for the public interpretation of cultural resources. In some instances these areas will provide a data bank of archaeological remains for future research. Although the management of these areas may limit other uses, it will be consistent with the multiple-use class guidelines. Prehistoric-Historic Resource Areas will be subdivided, when appropriate, into two zones:

Public Interpretive-Use Zone—Within the larger Prehistoric-Historic Resource Areas, zones for facilities such as access routes, interpretive displays, trailheads, and public contact stations may be established. These zones would be managed in conjunction with the Visitor Services Program (see Recreation Element).

Prehistoric-Historic Preservation Zone—In these zones, cultural resources will be essentially reserved or placed in a "data bank" for use by future scientists with more sophisticated investigative techniques. Access may be controlled by the use of a permit system. In Class C, these measures will be developed in conjunction with the Wilderness Management Plans (see Wilderness Element). Cultural resource research will only be allowed where danger to the resource is apparent or the research is deemed highly important. Such zones will be reviewed periodically, at least every five years.

Cultural Resource Management Plans will also be prepared for sensitive/significant cultural resources in Classes M and I where management prescriptions do not conflict with the multiple-use class guidelines.

Stabilization-Restoration

Management prescriptions for ACECs, Cultural Resource Management Plans, mitigation plans, and other resource management plans which address cultural and paleontological resources will contain descriptions of the methods of stabilization or restoration to be applied when appropriate.

Surveillance

Surveillance of sensitive/significant cultural and paleontological resources will be an ongoing program involving rangers, visitor services personnel, archaeologists and historians, paleontologists, and volunteers. Through surveillance, data will be gathered on the condition and use of cultural resources. (See the Monitoring section of this element and the Recreation Element for additional details.)

Environmental Awareness/Education

Under the Recreation Element, a program of public interpretation and education and environmental awareness will be developed. Cultural and paleontological resources will be given equal footing with other resources in this program. Educationally oriented brochures, pamphlets, monographs, and other works of popular and technical nature emphasizing the relevance, fragility, and other values of cultural and paleontological resources will be designed and distributed. Other forms of interpretation and education will be employed on the ground, especially in the Public Interpretive-Use Zones and at other sites as appropriate. (See the Recreation Element for further discussion of this program.)

Vehicle Route Approval

Vehicle route approval in Classes L and M and closures in Class M are other tools for cultural and paleontological resource protection. Cultural and paleontological resource data will be used during the route approval process to help minimize or eliminate adverse impacts on these resources from access and vehicle use (see Motorized-Vehicle Access Element).

MONITORING

Cultural and paleontological resource locations will be monitored to determine the types and extent of impacts on archaeological sites caused by multiple-use class designation, as well as impacts from consumptive uses and natural processes. This will provide baseline data on resource condition and trend and will be used to evaluate the effectiveness of general planning and implementation. Monitoring systems will also be developed as part of Cultural Resource Management Plans to evaluate their effec-

tiveness. Measures to be employed in monitoring site disturbance will include subjective evaluations of site condition (through surveillance by rangers, archaeologists, and other staff members and the concerned public) and more objective measures of the number, condition, size, types, etc., of artifacts, features, and remains.

INVENTORY

As only about 5 percent of the CDCA has been inventoried for cultural resources, additional inventory is essential to improve knowledge and management of the cultural resources of the Desert. Field inventories for cultural resources in other than project-specific cases will be undertaken primarily within Classes M and I. These field assessments will focus on areas little known archaeologically where recreation and other uses are concentrated. Otherwise, inventory will be undertaken in poorly understood areas of the Desert, within any class and/or in areas where indirect impacts can be expected to be the highest based on monitoring studies. Contingent on budget allocations, 2,000 acres or more per resource area will be inventoried each year. Volunteers will be used where feasible.

MITIGATION

When protection and/or preservation of cultural and paleontological resources cannot be achieved, mitigation through proper data recovery or other means will be undertaken as developed through mitigation plans. These plans will detail steps necessary to recover the resources or otherwise ameliorate the impacts. These plans will be completed and implemented by the resource specialists on a priority basis subject to the resources available from the BLM program or programs (activities) involved. Also, they will establish a clear statement of the mitigation procedures and levels to be followed. Mitigation will be employed primarily in Classes M and I where resource protection measures cannot override the multiple-use class guidelines. A list of priority areas for cultural resource mitigation planning is presented in Appendix VII to the Proposed Plan (October 1980).

RESEARCH

The Bureau will encourage and support well-directed archaeological, ethnographic, paleontological, and historical research, especially in high-impact risk areas, as in Classes M and I, and elsewhere where management goals will be well served. As archaeological and historical knowledge of the Desert is still so limited, additional research is essential to develop a better understanding of prehistory and history of the CDCA.

REVIEW-COORDINATION

In all cases 36 CFR 800 procedures relative to the National Historic Preservation Act of 1966 (as amended) will be followed pursuant to the Programmatic Memorandum of Agreement between the Bureau of Land Management, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation (Appendix VII to the Proposed Plan, October 1980).

Peer review of prehistoric-historic undertakings and reports (both internal and contracted) will be an ongoing Bureau activity as the Desert Plan is implemented. The BLM will coordinate with the archaeological groups in the preservation of select archaeological sites and the acquisition of endangered cultural properties.

IMPLEMENTATION

The Programmatic Memorandum of Agreement covering the implementation of the Desert Plan between the Bureau of Land Management, the California State Historic Preservation Officer, and the National Advisory Council on Historic Preservation outlines the implementation of the Cultural Resource Element. Implementation actions will include the following:

(1) Specific management prescriptions for cultural resource ACECs will be completed and implemented on a priority basis following approval of the California Desert Plan. Some of the management plans are finalized; others will be implementable as the plans are finalized (within two years of Plan adoption).

(2) Formal nominations or eligibility determination requests for potential *National Register of Historic Places* properties will be an ongoing process. At least two properties per CDCA Resource Area office will be submitted annually. The documentation for these properties will rely primarily on overviews, special studies, site records, and other material on file with the BLM and other agencies or institutions. As a first priority, properties submitted for *National Register* eligibility determinations or formal nominations will be ACECs and those with the highest impact risk, particularly those in Classes M and I.

(3) Cultural resource management will be included whenever necessary, in other activity plans (e.g., Wilderness Management Plans, Recreation Management Plans). Cultural resources will be given the same consideration as other resource values.

(4) Cultural Resource Management Plans or mitigation plans will be completed on sensitive/significant cultural resources (as identified in Appendix VII to the Proposed Plan, October 1980) on a priority basis based on the potential for adverse impacts on cultural resources or the likelihood of successful protection-preservation. These priorities may be subject to change as future inventory

increases knowledge of the resources of the Desert.

(5) Cultural resource data will be used in the vehicle route approval process to help minimize impacts on cultural resources.

(6) Monitoring of cultural resource site integrity and impact trends will be undertaken as part of the desert-wide monitoring program. Plan implementation effectiveness will be assessed. Specific information pertaining to actual monitoring techniques, frequency of visitation, the type of artifacts and features to be monitored, and the approximate locations to be monitored and the activities to be evaluated are discussed in Appendix VII to the Proposed Plan (October 1980).

(7) Cultural resource inventories will be conducted annually, depending on funding and personnel constraints. Discovery of currently unknown cultural resources may lead to the indentification of additional ACECs or candidates for Special Area designation, the designation of additional areas for cultural resource management plans or mitigation plans, and/or a change in multiple-use class through the Plan Amendment process.

(8) Volunteers will be used in aspects of cultural resource work upon approval of a Bureauwide volunteer program. To the extent feasible, volunteers will be used in inventory, construction of protective devices, monitoring, surveillance, public interpretation, and in other tasks as appropriate.

(9) Support will be provided for well-directed anthropological and historical research by processing antiquity permit applications and providing funding or supplies where appropriate. The Bureau will encourage research studies, especially in high-impact risk zones and elsewhere, where management goals would be well served.

NATIVE AMERICAN ELEMENT

Prominent features of the CDCA landscape, wildlife species, prehistoric and historic sites of occupation, worship, and domestic activities, and many plant and mineral resources are of traditional cultural value in the lives of the Desert's Native people. In some cases these resources have a religious value. Specific sites or regions may be important because of their role in ritual or the mythic origin of an ethnic group. These values will be considered in all CDCA land-use and management decisions.

The outline for this element is as follows:

GOALS
ACTIONS PLANNED
RESPONSE TO POLICY AND LAW
RESPONSE TO ISSUES
MANAGEMENT TOOLS
IMPLEMENTATION

GOALS

The Native American Element addresses both the contemporary and traditional concerns of Native Americans and organized tribal governments. The Plan inventory has attempted to identify the full spectrum of Native American cultural values. The element deals with these values in two distinct contexts: those values associated with traditional heritage and religious concerns; and values and concerns which arise from the long-range goals and planning efforts of reservation governments in, or adjacent to, the California Desert Conservation Area (CDCA).

The goals of this program are to:

(1) Achieve the full consideration of Native American values in all land-use and management decisions. The BLM will seek to manage and protect these values, wherever possible and feasible. Guidance is provided through this element to insure that this management is consistent not only with the applicable legislation but also with the concerns and cultural values of the appropriate Native American group(s).

(2) Provide guidance for contact and consultation with tribal organizations and reservation governments as specified in the Memorandum of Agreement between BLM and the California State Native American Heritage Commission (NAHC). Inconsistencies in the manner and degree of involvement of these organizations in projects adjacent to Federal lands has often reflected an absence of effective channels of communication between the Federal Government and representative Native American government organizations. This element seeks to correct these inadequacies within the CDCA by: (1) identifying regional tribal governments, associations, and inter-tribal government organizations; (2) identifying the National Environmental Policy Act notice responsibilities of the BLM and Native American Heritage Commission, relative to the Native American community and setting these forth in a Memorandum of Agreement (Appendix VIII to the Proposed Plan, October 1980); (3) providing an outline for contact procedures and the identification of "appropriate and informed" tribal groups.

ACTIONS PLANNED

RESPONSE TO POLICY AND LAW

A number of recent legislative actions guides the degree and type of Native American consultation and involvement in cultural resource management programs.

Recent protection of traditional Native American values has been provided by the American Indian Religious Freedom Act of 1978 (P.L. 95–341). The purpose of this statute is to ensure that agency policies and practices are brought into compliance with the constitutional injunction against abridging the free exercise of religion (*President's Task Force Report on P.L. 95–341*).

The *Task Force Report on P.L. 95–341* recognizes the special social and religious values which many natural and cultural resources hold for traditional Native Americans. The integration of the cultural systems in association with the planning for and administration of CDCA public lands will require direct positive actions by the BLM to protect and manage these values as fragile and nonrenewable resources.

The rights guaranteed to Native people under existing legislation include access to sites, use and possession of sacred objects, and the freedom to worship through ceremonies and traditional rites.

Specific guidelines and policy have been developed in the course of planning and through a Memorandum of Understanding with the Native American Heritage Commission and the California State Historic Preservation Office (Appendix VIII to the Proposed Plan, October 1980). These policies and guidelines integrate consideration of Native American socio-cultural values in all program development and implementation.

The confidentiality of Native American information submitted to BLM in review of projects on public lands has been given special consideration by the BLM in drafting policy. Specifically, it is the policy under the Bureau's Cultural Resource Program that field inventory data are considered privileged and will be released only in agreement with the Indian consultants.

The BLM has adopted guidelines for controlling access to data pertaining to areas of Native American religious or heritage significance. Data on Native American sociocultural values will be treated as "sensitive," consistent with the policies and procedures outlined in a Memorandum of Understanding between the BLM, Native American Heritage Commission, and the State Historic Preservation Office (Appendix VIII, Part 2, to the Proposed Plan, October 1980).

The California Desert has traditionally been the home of many distinct and diverse groups of Native Americans. Dealing simultaneously with the often varied cultural con-

CALIFORNIA DESERT CONSERVATION AREA

NATIVE AMERICAN RESERVATIONS

118°
117°
37°
36°
35°
34°
33°
Mono County
BISHOP
BIG PINE RANCHERIA
FORT INDEPENDENCE
INDEPENDENCE
LONE PINE
OWENS LAKE
TULE RIVER
CHINA LAKE NAVAL WEAPONS CENTER
RIDGECREST
NAVAL WEAPONS CENTER
FORT IRWIN MILITARY RESERVATION
DEATH VALLEY NATIONAL MONUMENT
PANAMINT SHOSHONE RANCH (FURNACE CREEK)
Inyo County
San Bernardino County
RED ROCK CANYON STATE PARK
CALIFORNIA CITY
EDWARDS AIR FORCE BASE
Kern County
LANCASTER
BARSTOW
USMC YERMO AREA
USMC NEBO AREA
MOJAVE DESERT
GEO. AFB
VICTORVILLE
MARINE CORPS BASE
29 PALMS
TWENTY NINE PALMS
JOSHUA TREE NATIONAL MONUMENT
BAKER
KELSO
PROVIDENCE MTNS. STATE RECREATION AREA
NEEDLES
FORT MOHAVE
CHEMEHUEVI
COLORADO RIVER
BLYTHE
FORT YUMA
YUMA
EL CENTRO
DESERT STATE PARK
CHOCOLATE MTNS
GUNNERY RANGE
NAVAL LEASE
Mc CAIN VALLEY
CUYAPAIPE
MANZANITA AREA
BOUNDARY
LA POSTA
CAMPO
SAN DIEGO
SCYCUAN
VIEJAS
BARONA RANCH
CAPITAN GRANDE
COSMIT
INJA
MESA GRANDE
SAN PASQUAL
SANTA YSABEL
RICON
LA JOLLA
PALA
PAUMA
YUIMA
PECHANGA
CAHUILLA
RAMONA
SANTA ROSA
SOBOBA
MORONGO
SAN MANUEL
SAN BERNARDINO
RIVERSIDE
LOS ANGELES
PACIFIC OCEAN
PALM SPGS
AGUA CALIENTE
INDIO
COACHELLA
ANZA BORREGO
LOS COYOTE
SANTA ROSA MTNS
JOSE MARTINEZ
Mt. Diablo Base Line and Meridian
San Bernardino Base Line and Meridian
Miles
Kilometers

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Bureau of Land Management
DESERT PLANNING STAFF

cerns of these groups poses a complex problem. Procedures for identifying these concerns have been identified in consultation with Native American tribal organizations, elders, the California State Native American Heritage Commission, and the State Historic Preservation Office. Final guidelines for contact and consultation procedures have been drafted and appear in Appendix VIII to the Proposed Plan (October 1980).

RESPONSE TO ISSUES

A number of major issues have arisen in the course of the BLM inventory and analysis of Native American concerns. Primary among these are the following:

(1) Practical problems arise in the identification, protection, and/or mitigation of impacts on Native American resources. The accurate evaluation of potential impacts on cultural values can only be made within the cultural context from which those values are derived. Impact evaluations and management guidelines must, therefore, be carefully developed in close coordination with all potentially affected Native American groups in the course of Plan implementation (see Appendix VIII to the Proposed Plan, October 1980).

(2) A primary concern of many reservation governments is the development of guidelines which would insure the input of tribal government review in the evaluation of any proposed activity which could have effects on tribal lands. Specific guidelines have been developed to incorporate the formal comments of tribal governments into the environmental review process of the BLM. These guidelines include not only actions which might affect reservation lands but also activities which could affect the values outlined above (Item 1).

(3) Conflicts between Native American cultural values and other activities can produce many difficult management situations, e.g., mining, grazing management programs, wild horse and burro issues, etc. These conflicts can be most effectively identified and resolved through the development of detailed management plans.

(4) Many impacts on resources of Native American value are not amenable to mitigation. Desecration or sacrilegious treatment of religiously significant sites cannot be mitigated as can many adverse effects on material resources. These substantial potential and often irreversible impacts on cultural values will be carefully considered in all actions of the Plan.

MANAGEMENT TOOLS

The Desert Plan provides a number of tools for the management, protection, and enhancement of Native American cultural values and the resources with which they are associated. At the most general level, components of the multiple-use class guidelines have been drafted to incorporate Native American concerns. Classes C and L provide protective resource management which complement many identified Native American values. These values are also protected under the provisions of the Interim Management Policy for lands under wilderness review.

Native American resource concerns have also been directly incorporated in the general guidelines of the Plan (e.g., plant collection and harvesting) and other Plan elements such as cultural resources, vegetation, etc. The wilderness and open-area review process included the specific treatment of identified resources of Native American value. Regional Native American groups, reservation governments, and traditionalists have been identified for assistance and coordination in preparing specific management plans during Plan implementation.

Areas of Critical Environmental Concern (ACECs) provide a tool for dealing specifically with sensitive resources of Native American value which are exposed to a high risk of adverse impact. The ACEC designation has been used cautiously in drafting this element due to the risk of impact on the resource which accompanies public disclosure of sensitive values. The ACEC designation was proposed only in small, important areas of value which were fairly well known to the general public and where the ACEC designation was recommended by the appropriate Native American group(s). Activity plans for ACECs will be developed in close coordination with reservation governments and tribal organizations. The ACEC recommendations associated with this element are discussed in the Areas of Critical Environmental Concern section, below.

Specific design of procedures for managing Native American values has taken place in close coordination with tribal governments, traditionalists, elders, religious practitioners, and agencies of the State of California which share a complementary management responsibility. Guidelines for both the management of heritage values and formal tribal coordination have been developed in coordination with Native people, the State Native American Heritage Commission, and the State Historic Preservation Office. These guidelines will be consistently applied in BLM land management to incorporate tribal government participation and Native American cultural values in all resource management activities.

IMPLEMENTATION

Priorities for implementation of the Native American Element will be directed toward the protection of the most critical and threatened resources of Native American value. Such areas will include the ACECs and areas of extensive, diverse, and sensitive cultural values. Areas of preliminary wilderness recommendation will be evaluated in conjunction with the appropriate Native American group(s) to identify potential impacts. Through the guidelines provided in this element and the related appendices to the Proposed Plan (October 1980), the consistent management and protection of Native American values will be included as an integral component of all management actions.

WILDLIFE ELEMENT

The California Desert Conservation Area supports over 635 species of vertebrates and thousands of invertebrate organisms in a diversity of wildlife habitats. Immediate management is required to protect unique and sensitive habitats; sensitive, rare, threatened, and endangered species; and representatives of more common desert habitats and ecosystems and the fish and wildlife resources they support.

The outline for this element is as follows:

GOALS
ACTIONS PLANNED
MANAGEMENT TOOLS
APPLICATION
IMPLEMENTATION
SCHEDULE AND PRIORITIES
MONITORING

GOALS

A number of public laws, acts, and executive orders provide direction to the BLM in managing wildlife resources. Some of these are: National Environmental Policy Act of 1969; Endangered Species Act of 1973 (as amended); Sikes Act; Executive Order No. 11514, Protection and Enhancement of Environmental Quality; Executive Orders 11644 and 11989, Off-Road Vehicles on Public Lands; Executive Order 11990, Protection of Wetlands; and Executive Order 11988, Floodplain Management. The BLM has translated applicable parts of these laws, acts, and executive orders into policies and guidance, which are contained within the BLM manual system. Some of the more important BLM manuals providing direction to the wildlife program are: Manual 6840, Threatened and Endangered Wildlife; Manual 6740, Wetland-Riparian Area Protection and Management; and Manual 1608, Supplemental Guidance, California State Supplement to Program Outlook Guides FY-80-84.

In response to these laws and policies, there are a number of interrelated objectives for wildlife species and habitats. These objectives are to:

(1) Manage federally and State-listed species and their habitats to comply with existing legislation and Bureau policies. In brief, the continued existence of these species will not be jeopardized by Bureau actions. Where possible and feasible, populations and habitats will be stabilized and/or improved. The overall objective will be to improve the status of such species so that delisting can occur. Management of these species and their habitats will occur through close coordination with other State and Federal agencies.

(2) Give certain species, designated sensitive by the BLM, special consideration and attention in the planning process because of their present condition and status. The overall objective would be to manage these species and their habitats so as to minimize the potential for Federal or State listing.

(3) Consider the habitat of all fish and wildlife in implementing the Plan, primarily through adherence to and development of objectives dealing with habitats and ecosystems (see objectives 4, 5, and 6). Because of space allowances in the Plan and EIS, as well as convenience, certain species and habitats are highlighted in discussions. Such species include those of official Federal and State lists, species with high public visibility (raptors, game birds, some fur bearers, commercially valuable reptiles), and species which are recognized as indicators of habitat condition.

(4) Manage representative habitats using a holistic approach. Each habitat will be large enough and managed in such a way as to retain viability and integrity of the natural systems.

(5) Give habitats unique to the CDCA special management consideration and manage them so as to maintain their unique biological characteristics.

(6) Manage sensitive habitats using a holistic, systems-type approach. Sensitive habitats are defined much like "sensitive species." These habitats are of very limited size within the CDCA and are especially fragile or susceptible to impacts. Examples of kinds of sensitive habitats are: riparian areas, wetlands, sand dunes, relict and island habitats, washes (such as catclaw-blackbanded rabbitbrush and ironwood washes), and important ecotonal zones between the different major ecosystems and deserts. Such habitats will be highlighted in the Plan.

ACTIONS PLANNED

MANAGEMENT TOOLS

Several management tools are available for use in meeting the objectives of the Wildlife Element of the Plan. The primary active wildlife management tools used in the Plan are Areas of Critical Environmental Concern (ACEC) and Habitat Management Plans (HMP). Management prescriptions for ACECs identified for wildlife resources will include aggressive management actions to halt and reverse declining trends and to ensure the long-term maintenance of these critical fish and wildlife resources. Management prescriptions for ACECs will receive the priority in the BLM for preparation, implementation, and funding (see Implementation section of this element for policies and schedules).

Habitat Management Plans are detailed plans developed specifically for wildlife habitats or species which require intensive, active management programs. In the Desert Plan, HMPs can be placed in any multiple-use class. Multiple-use class guidelines set the limits for the recommendations that can be included in an HMP. Habitat Management Plans would be of lower priority than ACECs and would compete with other activity and use plans for preparation and implementation.

Some fish and wildlife resources requiring special

management attention can be protected in Multiple-Use Class L through the number and location of routes approved.

A fourth tool used in the Plan is designation of Special Areas (SA). This tool highlights habitats and species known to be important for special consideration in the environmental assessment process for any kind of project.

Wilderness Management Plans are an "active" wildlife management tool. They are prepared for the areas to be recommended as suitable for wilderness. These plans will be included in the wilderness package which will be submitted to Congress for final legislation on wilderness area designations.

Two additional designations that are used in the Wildlife Element are Research Natural Area (RNA) and Sikes Act Agreement. Research Natural Areas have been proposed in a few locations where research and education would be one of the primary uses (see Special Areas, below). Sikes Act Agreements are cooperative agreements between the BLM and the California Department of Fish and Game for joint development and implementation of an HMP. A preliminary list of HMPs where Sikes Act Agreements are recommended is included in Table 2. Changes in this list may occur as individual HMPs are prepared and management needs become more precisely known.

Accomplishment of objectives in the Wildlife Element of the Plan also will be aided to varying degrees by stipulations found in other elements and the multiple-use class guidelines. For example, Wetland/Riparian Area guidelines for the multiple-use classes protect valuable wetland habitat. Various measures in the Livestock Grazing and Wild Horse and Burro Elements have been designed with the intention of aiding fish and wildlife resources. Stipulations have also been included in other elements.

APPLICATION

The management actions are designed to fulfill the habitat/ecosystem and species management objectives described previously. Multiple-use class guidelines and specific actions regarding wildlife in other resource elements provide a framework for management. Within this framework ACECs, HMPs, and route approvals will enhance representative, unique, and sensitive ecosystems and wildlife habitats as well as sensitive, rare, threatened, and endangered species.

Eighty-nine special fish and wildlife areas that would receive active habitat management and/or special attention in the environmental assessment process (see Map 3, "Planned Management Areas for Fish and Wildlife," and Table 2; the first column on the table also serves as the map key.). Twenty-eight areas have been identified as ACECs solely or partially to protect fish and wildlife resources. Habitat Management Plans will be prepared for 58 areas. Thirteen of these areas are also ACECs, and four of the HMPs are either already complete or in preparation. Ten areas will be protected by limiting approved routes in Multiple-Use Class L. All of the areas will receive Special-Area designation.

Several fish and wildlife areas have been identified primarily to protect sensitive, rare, threatened, or endangered fish and wildlife species. Other SAs will benefit these species, as well as many representative, unique, and sensitive ecosystems and wildlife habitats. Planned management of listed species is shown in Table 3. Habitats of these species are generally indicated on Map 4, "Sensitive, Rare, Threatened, and Endangered Wildlife Species."

In addition to the use of HMPs, ACECs, route approvals, and SAs, the following general policies help accomplish the objectives of this element of the Plan:

(1) The protection afforded federally and State-listed species will remain the same for all multiple-use classes. Any Federal action which may impact either the habitat or individuals of federally listed species must be put into formal consultation with the U.S. Fish and Wildlife Service (FWS). Species officially proposed for listing, which may be impacted through a Federal action, may be dealt with through conference with the FWS.

(2) Discovery of previously unknown but significant wildlife values may serve as the basis for initiating the amendment of a multiple-use class designation. Designation of "Critical Habitat" for a federally listed species may necessitate a change in multiple-use class designation.

(3) Protective provisions, stipulations, or objectives for wildlife will be considered in all permits, licenses, activity plans, etc., to avoid or minimize habitat deterioration.

(4) Habitat Management Plans for Critical Habitat of federally listed species will be completed within three years of final listing or acceptance of the Desert Plan. They will be revised to incorporate formal recovery plans which may be developed.

(5) Inventories for State-listed species will be completed within three years of Desert Plan acceptance or final listing of new species by the State. Habitat Management Plans for State-listed species will be completed within two years following completion of the inventories. Activities having an impact on State-listed species will be addressed in the environmental assessment process.

(6) A sensitive-species list will be maintained and updated whenever data indicate a need for change.

(7) Species in the CDCA which are officially proposed for addition to the Federal list of threatened and endangered species will be added to the BLM sensitive-species list following their acceptance for consideration.

(8) Where conditions warrant and where legally possible, all existing water sources and those developed in the future on public lands will include wildlife as a principal use.

(9) Wildlife objectives will be included in all Wilderness Management Plans.

IMPLEMENTATION

SCHEDULE AND PRIORITIES

Table 2, "Planned Management Areas for Fish and Wildlife," outlines the kinds of actions needed to manage and protect key wildlife resources and the proposed timeframes for implementation. The success of management and protection ultimately depends on timely implementation, which in turn depends on funding and sufficient qualified personnel.

In all, 45 of the Wilderness Study Areas carry a preliminary recommendation for designation in the Plan. During the interim period before Congress decides on their final disposition, these areas have the potential for offering high protection to wildlife resources. The high potential for protection is dependent in several areas upon immediate and active management, e.g., burro reductions.

MONITORING

A long-term monitoring system to gauge the effectiveness and overall success of the Wildlife Element and the entire Plan is being developed. Many baseline study plots have already been established, i.e., over 100 breeding and winter bird census plots, 27 desert tortoise study plots, etc. More must be selected to provide adequate coverage. There have been numerous studies during the last decade on impacts of other resource uses on wildlife in the CDCA, such as impacts of off-road vehicles, yucca harvesting, general recreation, and vehicle noise. While these studies provide valuable information for future monitoring, much more is necessary. Examples of baseline studies and research that will become part of the wildlife monitoring system are:

(1) The impact of approved access routes, particularly in habitats of officially listed species, sensitive species, and raptors;

(2) Effectiveness of increased surveillance in controlling vandalism;

(3) Effects of grazing practices on desert bighorn and desert tortoise and their habitats;

(4) Effects of burro populations and reductions on species such as the desert bighorn sheep;

(5) Conditions of fish and wildlife water sources, particularly those used by people, livestock, horses and burros, and mining interests;

(6) Effects of continued vehicle use on wildlife habitats and populations in areas designated as "open" for vehicle free play;

(7) Condition and trends for officially listed, sensitive, and certain other species; and

(8) Effectiveness of HMPs and ACECs in stabilizing or improving populations and habitats for officially listed, sensitive, and certain other species and their habitats.

As part of this Plan, the BLM will study the effects of livestock grazing on desert bighorn sheep in the eastern Mojave Desert (i.e., Kingston, Clark, New York, Providence, Granite, Piute, Woods, Hackberry, Kelso, Old Dad, Ivanpah, and Mescal Mountains, Midhills, and Castle Peaks), and to determine (1) the numbers of bighorn sheep in each mountain range; (2) the health, condition, and population trends in each herd; and (3) the effects of livestock grazing on concentration areas and permanent and seasonal ranges. These studies will be initiated as soon as possible and might require 10 years to complete. If livestock grazing is found to have negative impacts on the bighorn sheep and grazing threatens the health and viability of herds, then changes will be made in grazing allotments so that healthy, viable herds of bighorn can continue to exist in this region.

In general, where other land uses (grazing, vehicle use, intense visitor use) are found to adversely affect officially listed and sensitive species or other significant wildlife resources, action will be taken to remove or reduce impacts.

In addition to the HMPs and ACEC plans shown in Table 2, several desert-wide species plans will be developed, particularly for sensitive species with large geographic ranges or wide distribution, e.g., desert tortoise, desert bighorn, and flat-tailed horned lizard.

Studies on animals and their habitats will be closely integrated with baseline monitoring programs for soils, water quality, air quality, vegetation, recreation, and livestock grazing. Further information is available in Appendix IX to the Proposed Plan (October 1980).

Table 2
Planned Management Areas for Fish and Wildlife

Map Key	Location	Acres (000)	Special Wildlife Habitat	Federally Listed Species	State Listed Species	BLM Sensitive Species	Other Species	Proposed Wildlife Management Prescription: ACEC	HMP	RA	SA	RNA	Other Management Designations: Sikes	Specific Management Actions Requiring Immediate Implementation (1-3 years): Control Vehicle Use	Fence	Remove Exotic Vegetation	Establish Cooperative Agreement with Private Landowner	Increase Surveillance and/or Parking	Restrict Camping	Remove/Reduce Burros/Horses	Land Acquisition	Private Organizations and State Agencies	Change in Livestock Grazing Practices	Protection of Water Sources	General Long-Term Management Goals: Protect, Stabilize and/or Enhance Fish and Wildlife Resource Values
W-1	Cottonwood Creek	5	x				x				x				x				x						x
W-2	Deep Spring Valley (Shadscale Community and Black Toad)	10	x				x		D		x												x		x
2	Western Rand Mountains	16				x		x			x			x										x	x
3	Eureka Valley Dunes	23	x				x	x[c]	B		x							x							x
W-3	East Slope Inyo Mountains	64	x				x		B		x		x		x	x				x[e]				x	x
4	Saline Valley (Dunes and Mesquite Marsh)	9	x				x	x[c]	B		x		x		x	x			x	x				x	x
W-4	Hunter-Cottonwood Mountain/Grapevine Canyon (Bighorn Sheep Habitat)	59					x		A		x		x		x				x	x			x	x	x
W-5	Lee Flat (Shadscale Community)	33	x						C		x												x		x
W-6	Panamint Valley Dunes	2	x				x			x	x							x							x
W-7	Black Springs	<1	x								x				x									x	x
6	Darwin Falls/Canyon	6	x				x	x			x			x		x			x	x					x
W-8	Argus Mountains (Bighorn Sheep Habitat)	90			x		x		B[j]		x		x						x	x				x	x
12	Argus Range (Inyo Brown Towhee)	9	x		x		x	x[e]			x				x	x	x		x	x				x	x
W-9	Panamint Lake	4	x							x	x			x					x	x					x
W-10	West Panamint Mountains Canyon	121	x				x		A		x		x				x		x	x				x	x
8	Surprise Canyon	13	x				x	x[d]			x					x	x		x	x				x	x
W-11	Rose Valley (Mohave Ground Squirrel Habitat)	18			x				B		x		x												x
W-12	East Sierra Canyon	88	x				x		A		x		x	x	x		x	x	x				x	x	x
11	Sand Canyon	2	x				x	x[c]			x			x			x	x	x				x		x
W-13	Robber's Roost	3					x				x[f]			x				x	x						x
W-14	Upper Amargosa River	3	x						C		x				x				x	x				x	x
W-15	Shoshone Cave (Whip-scorpion Habitat)	<1					x		A		x														x
W-16	Chicago Valley (Mesquite Thicket)	10	x							x	x								x	x				x	x
W-17	California Valley (Mesquite Thicket)	4	x							x	x								x	x				x	x
13	Amargosa River/Grimshaw Lake	14	x		x		x	x			x			x		x	x	x	x		x	x	x	x	x
14	Kingston Range	64	x				x	x[c]	B		x		x									x	x	x	x
18	Salt Creek (Dumont)	3	x					x			x			x		x			x					x	x
W-18	Lone Tree Canyon (Potential "California" Bighorn Sheep Reintroduction Area)	47			x				D		x		x	x				x			x				x
20	Sierra-Mojave-Tehachapi Ecotone	162	x		x		x	x	B		x		x	x				x	x	x			x	x	x
22	Desert Tortoise Research Natural Area	26			x	x		x	O		x		x						x			x			x
W-19	Koehn Lake	4	x						O		x							x						x	x
W-20	Red Mountain/El Paso Mountains (Raptor Breeding Area)	304					x		B		x			x				x	x	x					x
W-21	Western Mojave Desert (Crucial Habitats)[i]	512	x		x	x	x		B		x	x[k]		x				x	x	x		x	x		x
37	Harper Dry Lake	4	x				x	x			x							x						x	x
W-22	Superior Valley (Joshua Tree Woodland and Mohave Ground Squirrel Habitat)	55	x		x				C		x		x												x
W-23	Newberry/Granite Mountains (Raptor Breeding Area)	256					x		B		x		x	x				x	x	x					x
W-24	Ord Mountains (Jojoba Habitat)	6	x							x	x														x
W-25	Shadow Valley (Desert Tortoise Habitat)	42				x			C		x		x							x			x		x
19	Clark Mountain	20	x				x	x[c]	B		x		x	x						x			x	x	x
W-26	Ivanpah Valley (Desert Tortoise Crucial Habitat)	38				x			B		x		x							x			x		x
W-27	Cima Dome	54	x				x		B		x							x		x			x	x	x
31	New York Mountains	85	x				x	x	B		x		x				x	x		x	x	x	x	x	x
W-28	Indian Springs	4	x						C		x				x									x	x
41	Fort Soda/Mohave Chub	8	x	x	x			x	O		x		x	x		x								x	x
W-29	East Cronese Lake	8	x				x	x		x	x			x		x			x						x

Legend

ACEC: Area of Critical Environmental Concern. Timetable for completion of ACEC management prescriptions is two years. (See ACEC section of Plan.)

HMP: Habitat Management Plan. The following symbols indicate the length of time to completion of the HMP:

O - Completed or in progress
A - 1-2 years
B - 2-5 years
C - 5-7 years
D - 7-10 years

Implementation of HMPs will be an ongoing process but the majority of stipulations will be implemented within two years after completion of the HMP.

RA: Route Approval. Route approval in these areas will be completed within one year following acceptance of Desert Plan.

SA: Special Area Designation. This designation will take effect immediately.

RNA: Research Natural Area.

Sikes: Sikes Act Agreement

Footnotes

[a]Includes Fremont/Stoddard Valleys (Desert Tortoise Crucial Habitat), Indian Wells Valley (Mohave Ground Squirrel Habitat), Fremont Valley (Mohave Ground Squirrel Habitat), Boron/Black Hills (Mohave Ground Squirrel Habitat) and Western Mojave Desert (Saltbush Community).

[c]ACEC includes only a portion of the area covered by the HMP.

[d]Within West Panamint Mountains Canyons HMP (W-10).

[e]Within East Sierra Canyons HMP (W-12).

[f]Within Sierra-Mojave-Tehachapi Ecotone ACEC (20).

[g]ACEC within Argus Mountains Bighorn Sheep Habitat HMP (W-8).

[h]ACEC within Chuckwalla Bench Desert Tortoise Crucial Habitat HMP (W-52).

[i]Within Fenner/Chemehuevi Valleys Desert Tortoise Crucial Habitat HMP (W-35).

[j]Includes Argus Range Inyo Brown Towhee ACEC (12).

[k]RNA approximately 10,000 acres.

Table 2 (cont.)
Planned Management Areas for Fish and Wildlife

		Acres (000)	Special Wildlife Habitat	Federally Listed Species	State Listed Species	BLM Sensitive Species	Other Species	ACEC	Proposed Wildlife Management Prescription: HMP	RA	SA	RNA	Other Management Designations: Sikes	Control Vehicle Use	Fence	Remove Exotic Vegetation	Establish Cooperative Agreement with Private Landowner	Increase Surveillance	Restrict Camping and/or Parking	Remove/Reduce Burros/Horses	Land Acquisition in Conjunction with Private Organizations and State Agencies	Change in Livestock Grazing Practices	Protection of Water Sources	Protect, Stabilize and/or Enhance Fish and Wildlife Resource Values
W-30	Cady Mountains (Bighorn Sheep Habitat)	67				x		B			x		x	x				x	x		x		x	x
43	Afton Canyon	7	x			x	x	A			x		x	x	x	x	x	x	x		x		x	x
W-31	Pisgah Lava Flow	17	x								x	x							x					x
W-32	Old Dad Mountains (Bighorn Sheep Habitat)	19				x		B			x		x										x	x
W-33	Granite Mountains	56	x			x		B			x	x	x						x	x	x	x	x	x
W-34	Kelso Dunes	31	x			x					x			x								x		x
33	Fort Piute	4	x				x	A			x		x		x	x	x	x	x					x
W-35	Fenner/Chemeheuvi Valleys (Desert Tortoise Crucial Habitat)	692	x			x		B			x		x				x		x	x	x	x		x
W-36	Stepladder Mountains (Teddy Bear Cholla Thicket)	25	x					i	x		x						x							x
W-37	Chemehuevi Wash	333	x					B			x			x					x	x	x				x
W-38	Whipple Mountains	55	x				x	B			x		x							x	x			x	x
W-39	Vidal Wash	77	x					C			x			x					x	x					x
W-40	Bullion Mountains (Bighorn Sheep Habitat)	16					x	B			x		x											x	x
W-41	Cadiz Dunes	32	x				x				x			x					x						x
49	Whitewater Canyon	12	x				x	x			x						x	x							x
50	Big Morongo Canyon	4	x		x		x	x			x			x		x	x	x	x		x				x
W-42	Coachella Valley (Fringe-toed Lizard Habitat)	4			x		x				x		x	x					x	x					x
W-43	Little San Bernardino Mountains (Palm Oasis)	<1	x								x													x	x
W-44	Santa Rosa Mountains	196	x	x	x		x		O		x		x								x			x	x
60	Salt Creek Pupfish/Rail Habitat	3	x	x	x			x			x					x	x				x			x	x
W-45	Orocopia Mountains (Bighorn Sheep Habitat)	55					x		B			x		x					x					x	x
W-46	Eagle Mountains (Bighorn Sheep Habitat)	54					x		B			x												x	x
W-47	Coxcomb Mountains (Bighorn Sheep Habitat)	29					x		B			x												x	x
W-48	Granite/Palen Mountains (Bighorn Sheep Habitat)	67					x		B			x												x	x
W-49	Midland (Ironwood Thicket)	44	x							x	x			x						x					x
W-50	Rice Valley Dunes	9	x					C			x			x					x	x					x
W-51	McCoy Wash	20	x					C			x			x					x	x					x
W-52	Chuckwalla Bench (Desert Tortoise Crucial Habitat)	225	x			x		B			x		x	x			x			x	x	x			x
59	Chuckwalla Bench	80	x			x		x[h]			x			x			x			x	x	x			x
W-53	Chuckwalla Mountains (Bighorn Sheep Habitat)	63					x		B			x		x					x	x				x	x
56	Corn Spring	4	x		x			x			x			x		x			x	x					x
W-54	Ford Dry Lake	6	x				x		B			x		x					x	x					x
57	Chuckwalla Valley Dune Thicket	3	x					x			x			x					x	x					x
W-55	Milpitas Wash	125	x						A			x			x				x	x		x	x		x
W-56	Palo Verde Mountains (Saguaro Habitat)	2	x								x								x						x
W-57	Picacho Land and Wildlife Management Area	86					x				x														x
W-58	Indian Wash	29	x						B			x		x					x	x					x
W-59	Algodones Dunes	132	x				x		B			x		x		x			x	x					x
70	East Mesa Flat-tailed Horned Lizard Habitat	110					x	x[e]	A			x		x					x	x					x
61	San Sebastian Marsh/San Felipe Creek	23	x				x	x	A			x		x	x	x	x	x	x	x		x		x	x
W-60	Coyote Mountains/Davies Valley (Magic Gecko Habitat)	38			x				B			x		x					x	x					x
W-61	Smuggler's Cave (Southern Chaparral Habitat)	4	x				x		B			x		x					x	x					x
64	Yuha Basin	98					x	x[e]	A			x		x					x	x					x
W-62	Pinto Wash	5	x							x		x		x					x	x					x

TABLE 3

Planned Management for Sensitive, Rare, Threatened, and Endangered Fish and Wildlife of the CDCA*

	Mgmt.	No. Areas	Acres (000) in Proposed Management Areas	Acres (000) in Areas Assigned Multiple Use Class[A]
FEDERALLY LISTED SPECIES				
1 Mohave Chub[L]	ACEC/HMP	1	<0.1 (1 locality)	<0.1 (1 locality)
2 Desert Slender Salamander[L]	HMP	1	<0.1 (1 locality)	<0.1 (1 locality)
3 Brown Pelican[L]	SA	—	—	0[B]
4 Aleutian Canada Goose	SA	—	—	0[B]
5 Bald Eagle[L]	SA	—	—	0[B]
6 Peregrine Falcon[L]	SA	—	—	0[B]
7 Yuma Clapper Rail[L]	SA	—	—	0[C]
8 Coachella Valley Fringe-toed Lizard[L]	HMP	1	4	4
STATE LISTED SPECIES				
9 Desert Pupfish	ACEC	2	<0.1	<0.1[D]
10 Tehachapi Slender Salamander	ACEC/HMP HMP	1 1	0[E] 0[E]	0[E]
11 Black Toad	HMP	1	<0.1	<0.1
12 Magic Gecko	HMP	2	42 (5 localities)	69 (5 localities)
13 California Black Rail	ACEC	1	<0.1 (1 locality)	<0.1[F] (1 locality)
14 California Yellow-billed Cuckoo	ACEC	1	<0.1 (1 locality)	<0.1[F] (1 locality)
15 Elf Owl	ACEC	1	<0.1 (1 locality)	<0.1[F] (1 locality)
16 Least Bell's Vireo	ACEC HMP	2 1	<0.1 (3 localities)	<0.1[F] (4 localities)
17 Inyo Brown Towhee	ACEC	1	<0.1	<0.1[F]
18 Mohave Ground Squirrel	ACEC/HMP HMP	1 2	24 296	320[G]
19 Amargosa Vole	ACEC	1	1	1
20 California Bighorn Sheep	HMP	1	47	0[H]
21 Peninsular Bighorn Sheep	HMP	2	225	232
BLM SENSITIVE SPECIES				
22 Nevada Speckled Dace	ACEC	1	11 linear mi.	13[J] linear mi.
23 Amargosa River Pupfish	ACEC	1	11 linear mi.	12 linear mi.
24 Inyo Mountain Salamander	HMP	1	<0.1 (10 localities)	<0.1 (10 localities)
25 San Sebastian Leopard Frog	ACEC	1	<0.1 (1 locality)	<0.1 (1 locality)
26 Desert Tortoise	ACEC/HMP HMP	1 5	25 1,705	1,875[I]

*Important Note: Acreages include both public and private lands within planning polygons. Some species such as the black toad, Coachella Valley fringe-toed lizard, and Amargosa vole occur primarily on private lands.

TABLE 3—
Planned Management for Endangered Fish and Wildlife—Continued

	Mgmt.	No. Areas	Acres (000) in Proposed Management Areas	Acres (000) in Areas Assigned Multiple Use Class[A]
27 Flat-tailed Horned Lizard	ACEC/HMP	2	145	155[K]
28 Desert Bighorn Sheep	ACEC	2	149	2,605
	ACEC/HMP	2	141	
	HMP	13	602	
	SA	1	86	
OTHER SPECIES				
29 Shoshone Cave Whip-scorpion	HMP	1	<0.1 (1 locality)	<0.1 (1 locality)
30 Andrews' Dune Scarab Beetle	HMP	1	132	147
31 Western Pond Turtle	ACEC/HMP	1	<0.1 (1 locality)	<0.1 (1 locality)
32 Golden Eagle	ACEC	1	12	2,508[F]
	ACEC/HMP	2	226	
	HMP	10	1,339	
33 Osprey	SA	—	—	<0.1 (1 locality)
34 Vermilion Flycatcher	ACEC	2	<0.1 (2 localities)	<0.1[F] (3 localities)
35 Summer Tanager	ACEC	3	<0.1 (3 localities)	<0.1[F] (3 localities)
36 Kingston Mountains Chipmunk	ACEC/HMP	1	28	28
37 Coachella Round-tailed Ground Squirrel	HMP	1	4	4
38 Yellow-eared Pocket Mouse	ACEC/HMP	1	25	55
	HMP	1	30	
39 Panamint Kangaroo Rat	HMP	2	20	20

FOOTNOTES

A. Areas represent actual habitat where organism occurs or potentially occurs. Does not include buffer zones or adjacent supporting habitat (e.g., watershed upstream from a riparian area or stream).

B. Habitat within the boundaries of the CDCA occurs on and around the Salton Sea. Public lands with surface and/or mineral rights on and adjacent to the Salton Sea are not included within planning polygons. Stipulation in the Land Tenure Adjustment and Geology-Energy-Minerals Resources Elements are included to minimize disturbances to this unique and sensitive fish and wildlife resource.

C. Like the species listed for B, the Yuma clapper rail occurs on and around the Salton Sea. There are other localities for the CDCA, but none are known breeding sites.

D. Found around the Salton Sea as well as in the Salt Creek pupfish/rail habitat and San Sebastian Marsh/San Felipe Creek ACECs. See Footnote A.

E. Several riparian habitats in the East Sierra Canyons HMP and Sierra-Mojave-Tehachapi Ecotone HMP/ACEC are potential habitat.

F. These sites include only the breeding localities in the CDCA.

G. Includes only lands within selected representative habitats that are considered crucial to maintain its existence. Total habitat within planning polygons is approximately 1.2 million acres.

H. Currently not found in CDCA; management includes potential reintroduction area only.

I. Includes only major and minor populations within planning polygons. Total desert tortoise habitat within planning polygons is 2.9 million acres.

J. Figure does not include approximately 44 linear miles of potential/ephemeral habitat.

K. Figure includes only optimal habitat.

L. Also State-listed.

CALIFORNIA DESERT CONSERVATION AREA

Planned Management Areas For Fish And Wildlife

AREA OF CRITICAL ENVIRONMENTAL CONCERN

HABITAT MANAGEMENT PLAN

ROAD DESIGNATION RESTRICTION

SPECIAL ATTENTION AREA

Key	Location
W - 1	Cottonwood Creek
W - 2	Deep SpringsValley (Shadscale Community)
2	Deep Springs Valley Black Toad Habitat
3	Eureka Valley Dunes
W - 3	East Slope Inyo Mountains
4	Saline Valley (Dunes and Mesquite Marsh)
W - 4	Hunter-Cottonwood Mtn/Grapevine Cyn (Bighorn Sheep Habitat)
W- 5	Lee Flat (Shadscale Community)
W - 6	Panamint Valley Dunes
W - 7	Black Springs
6	Darwin Falls Canyon
W - 8	Argus Mountains (Bighorn Sheep Habitat)
12	Argus Range (Inyo Brown Towhee)
W - 9	Panamint Lake
W - 10	West Panamint Mtns Canyons
8	Surprise Canyon
W - 11	Rose Valley (MohaveGround Squirrel Habitat)
W - 12	East Sierra Canyons
11	Sand Canyon
W - 13	Robber's Roost
W - 14	Upper Amargosa River
W - 15	Shoshone Cave (Whip-scorpion Habitat)
W - 16	Chicago Valley (Mesquite Thicket)
W - 17	California Valley (Mesquite Thicket)
13	Amargosa River/Grimshaw Lake
14	Kingston Range
18	Salt Creek (Dumont)
W - 18	Lone Tree Canyon (Potential "California" Bighorn Sheep Reintroduction Area)
20	Sierra - Mojave - Tehachapi Ecotone
22	Desert Tortoise Research Natural Area
W - 19	Koehn Lake
W - 20	Red Mtn/El Paso Mountains (Raptor Breeding Area)
W - 21	Western Mojave Desert Cruicial Habitat 1
37	Harper Dry Lake
W - 22	Superior Valley (Joshua Tree Woodland and MohaveGround Squirrel Habitat)
W - 23	Newberry/Granite Mountains (Raptor Breeding Area)
W - 24	Ord Mountains (Jojoba Habitat)
W - 25	Shadow Valley (Desert Tortoise Habitat)
19	Clark Mountain
W - 26	Ivanpah Valley (Desert Tortoise Crucial Habitat)
W - 27	Cima Dome
31	New York Mountains
W - 28	Indian Springs
41	Fort Soda/Mohave Chub
W - 29	East Cronese Lake
W - 30	Cady Mountains (Bighorn Sheep Habitat)
43	Afton Canyon
W - 31	Pisgah Lava Flow
W - 32	Old Dad Mountains (Bighorn Sheep Habitat)
W - 33	Granite Mountains
W - 34	Kelso Dunes
33	Fort Piute
W - 35	Fenner/Chemehuevi Valleys (Desert Tortoise Crucial Habitat)
W - 36	Stepladder Mountains (Teddy Bear Colla Thicket)
W - 37	Chemehuevi Wash
W - 38	Whipple Mountains
W - 39	Vidal Wash
W -40	Bullion Mountains (Bighorn Sheep Habitat)
W - 41	Cadiz Dunes
49	Whitewater Canyon
50	Big Morongo Canyon
W - 42	Coachella Valley (Fringe-toed Lizard Habitat)
W - 43	Little San Bernardino Mtns (Palm Oasis)
W - 44	Santa Rosa Mountains
60	Salt Creek Pupfish/Rail Habitat
W - 45	Orocopia Mountains (Bighorn Sheep Habitat)
W - 46	Eagle Mountains (Bighorn Sheep Habitat)
W - 47	Coxcomb Mountains (Bighorn Sheep Habitat)
W - 48	Granite/Palen Mountains (Bighorn Sheep Habitat)
W - 49	Midland (Ironwood Thicket)
W - 50	Rice Valley Dunes
W - 51	Mc Coy Wash
W - 52	Chuckwalla Bench (Desert Tortoise Crucial Habitat)
59	Chuckwalla Bench
W - 53	Chuckwalla Mountains (Bighorn Sheep Habitat)
56	Corn Spring
W - 54	Ford Dry Lake
57	Chuckwalla Valley Dune Thicket
W - 55	Milpitas Wash
W - 56	Palo Verde Mountains (Saguaro Habitat)
W - 57	Picacho Land and Wildlife Management Area
W - 58	Indian Wash
W - 59	Algodones Dunes
70	East Mesa Flat-tailed Horned Lizard Habitat
61	SanSebastian Marsh/San Felipe Creek
W - 60	Coyote Mountains/Davies Valley (Magic Gecko Habitat)
W - 61	Smuggler's Cave (Southern Chaparral Habitat)
64	Yuha Basin
W - 62	Pinto Wash

1) Includes Fremont / Stoddard Valleys (Desert Tortoise Crucial Habitat), Indian Wells Valley (Mohave Ground Squirrel Habitat), Fremont Valley (Mohave Ground Squirrel Habitat), Boron / Black Hills (Mohave Ground Squirrel Habitat), and Western Mojave Desert (Saltbush Communities).

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CALIFORNIA DESERT CONSERVATION AREA

Sensitive, Rare, Threatened And Endangered Fish And Wildlife

INVERTEBRATES:
1. Shoshone Cave Whip Scorpion
2. Andrews' Dune Scarab Beetle (a)

FISH:
3. "Mohave" Chub
4. "Nevada" Speckled Dace
5. Desert Pupfish
6. Amargosa "River" Pupfish

AMPHIBIANS/REPTILES
Desert Slender Salamander (b)
7. Tehachapi Slender Salamander (c)
8. Inyo Mountains Salamander
9. Black Toad
10. "San Sebastian" Leopard Frog
11. Western Pond Turtle
Desert Tortoise (d)
12. Magic Gecko (e)
13. Coachella Valley Fringe-toed Lizard
14. Flat-tailed Horned Lizard (f)

BIRDS:
15. Brown Pelican (g)
16. "Aleutian" Canada Goose (g)
Golden Eagle (h)
17. Bald Eagle (g)
18. Osprey (g)
19. Peregrine Falcon (g)
20. "Yuma" Clapper Rail (i)
21. "California" Black Rail (i)
22. "California" Yellow-billed Cuckoo (i)
23. Elf Owl (i)
24. Vermilion Flycatcher (i)
25. "Least" Bell's Vireo (i)
26. Summer Tanager (i)
27. "Inyo" Brown Towhee

MAMMALS:
28. "Kingston Mountains" Chipmunk
29. Mohave Ground Squirrel (f)
30. "Coachella" Round-tailed Ground Squirrel (j)
31. Yellow-eared Pocket Mouse
32. Panamint Kangaroo Rat (k)
33. "Amargosa" Vole
34. "California" Bighorn Sheep (l)
35. "Peninsular" Bighorn Sheep (m)
"Desert" Bighorn Sheep (m)

Known Bighorn Sheep Corridor
Probable Bighorn Sheep Corridor

(a) Range includes habitat for a number of uncommon insects
(b) Not shown
(c) Potential range
(d) Includes crucial habitat of 4 major populations and range of 4 minor populations; crucial habitat includes smaller areas which are essential to the continued existance of the species
(e) Probable habitat
(f) Crucial habitat
(g) Non-breeding
(h) Potential foraging range; areas also include potential foraging range for Prairie Falcon
(i) Breeding
(j) Range approximates that of Coachella Valley Fringe-toed Lizard
(k) Mapped distribution includes Argus and Panamint Mountains populations
(l) Previously known from CDCA; area shown is a potential reintroduction site
(m) Mule Deer range generally approximates Bighorn Sheep range in the CDCA

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VEGETATION ELEMENT

Although a common attribute of deserts is the sparseness of plant cover, plants are very important to the desert ecosystem and to its aesthetic aspect. Annual wildflower displays occur extensively, in spring, throughout the CDCA. Profusion of these displays relates to the frequency and intensity of precipitation during the fall and winter months. Intense summer storms bring other species that complete their active life cycle in a matter of weeks. While wildflower displays and other special characteristics of desert vegetation provide enjoyment to desert visitors, they also serve to maintain the rich diversity of vegetation in the CDCA.

Botanists view the important environmental factor of vegetation through two perspectives which define its management. The floristic and the vegetation perspectives are substantively different. The floristic perspective includes concerns about the number of rare, threatened, and endangered plant species and unusual plant assemblages which have been identified in the CDCA. The vegetation perspective includes concerns about the protection and maintenance of the quality and quantity of production. The management of consumptive use of vegetation, manipulation of vegetation to achieve resource goals, and the cultivation of new desert crops must consider the Desert's natural functions along with the consumptive needs of the public.

The outline for this element is as follows:

GOALS
ACTIONS PLANNED
CONSUMPTIVE USES OF VEGETATION
RARE, THREATENED, AND ENDANGERED SPECIES
UNUSUAL PLANT ASSEMBLAGES
WETLAND AND RIPARIAN AREAS
VEGETATION MANIPULATION
POTENTIAL NEW DESERT CROPS
IMPLEMENTATION
MONITORING
ADDITIONAL INVENTORY NEEDS

GOALS

The goals of the Vegetation Element are:

(1) To conserve federally and State-listed rare, threatened, or endangered plants and to further the purposes of the Endangered Species Act of 1973 (ESA) and similar State laws. The BLM, through its actions and decisions, will not jeopardize the continued existence of any federally or State-listed rare, threatened, or endangered species, nor will it adversely modify the Critical Habitat (as determined by the U.S. Fish and Wildlife Service) of any such species.

(2) To treat those unusual plant assemblages (UPAs) rated as highly sensitive and very sensitive in a manner that will preserve their habitat and ensure the continued existence of the plant assemblage. Those UPAs classified as sensitive and not sensitive will receive special consideration in the Bureau's planning and decision-making processes.

(3) To manage wetland and riparian areas in the Desert. Specific objectives will be:

(a) To avoid the long-term and short-term impacts associated with the destruction, loss, or degradation of wetland and riparian areas;

(b) To preserve and enhance the natural and beneficial values of wetland and riparian areas which may include constraining or excluding those uses that cause significant long-term ecological damage;

(c) To include practical measures to minimize harm in all actions causing adverse impacts on wetland and riparian areas; and

(d) To retain all wetlands and riparian habitats presently under BLM administration where high resource values exist and adverse impacts cannot be mitigated.

(4) To maintain the continued existence and biological viability of the vegetation resource in the CDCA while providing for the consumptive needs of wildlife, livestock, wild horses and burros, and uses of the public at large and to manage this resource under the principle of sustained yield.

(5) To provide guidance for the manipulation of plant habitats or vegetation through changing the plant composition, density, and/or cover for accomplishment of specific resource goals. This process may involve removing noxious or poisonous plants from rangelands, increasing forage production, creating open areas within dense brush communities to favor certain wildlife species, or eliminating introduced plant species, such as tamarisk, from riparian areas. Caution will be used when manipulating vegetation. The techniques used today are viable, but should be used only after careful consideration. A balanced use of resources, favoring diversified plant and animal communities, would be desirable over monocultures (pure stands) or the total replacement of native communities.

(6) The Bureau encourages the use of private lands in the Desert for the commercial production of valuable desert plants and will cooperate with local governments which have adopted plans identifying specific areas as suitable for this use.

ACTIONS PLANNED

CONSUMPTIVE USES OF VEGETATION

Vegetation Production

An understanding of the production/biomass relationship of desert vegetation is necessary if the vegetation is to be managed on a sustained-yield basis. In stable natural desert ecosystems, the perennial plant biomass component remains more or less constant even though a new

biomass is being produced regularly. This indicates a process or series of processes by which biomass disappears at a rate similar to that at which it is being produced. Some such processes are obvious, as is grazing by larger animals; others, involving invertebrate animals and microbes, are subtler. Nevertheless, it should be understood that if an ecosystem is to remain balanced the average yearly increment of biomass production must be equalled by the same increment of biomass consumption, i.e., on the average, consumption equals production. The amount of standing biomass that persists at any given time should be expected to fluctuate with environmental cycles, i.e., seasons, droughts, etc.

The relationship between production and biomass has relevance if the kind of consumption that takes place, whether it be by livestock, big game, non-game wildlife, or other uses, is to be directed by management. Biomass production relationships for the CDCA are summarized in Figure 1.

Approximately 14 percent of the perennial plant biomass of the CDCA (Figure 1) is renewed each year as new production. That part of the production occurring on public lands judged suitable for livestock grazing (see Livestock Grazing Element) is a point of focus for management recommendations dealing with the allocation of vegetation to livestock and other recognized uses. Since only a part of the yearly plant production is suitable and/or available for livestock in a multiple-use/sustained-yield mode of operation, it is informative to identify that portion in more detail. This portion has been termed "renewable livestock forage" here and in the Livestock Grazing Element. It represents only that part of the production that: (1) is contributed by plant species considered palatable to livestock; (2) can be used (grazed) without adversely affecting the productive capacity of the palatable species or the overall composition of the plant community in which they grow; (3) is produced on terrain suitable for livestock use (i.e., less than 50 percent slope and within 4 miles of livestock waters); and (4) occurs on lands producing above a specified minimum level (i.e., 25 lbs. usable forage per acre).

The allocation of vegetation production for the CDCA is summarized in Figure 2. The category "Reserved" is that which is not identified for a specific use but represents a portion of the production used by wildlife and other consumers, as well as that which would play a role in watershed protection.

Plant Harvesting

Legal and Biological Considerations

Many considerations are important for developing management strategies for vegetation harvesting, including the public demand for the use of vegetative products, the biological effects of removing plants or plant parts from their environment, and the legal requirements of a multiple-use agency to provide for the needs of the public while managing for sustained yield and compliance with State laws.

The following are important biological considerations for regulating vegetation harvesting:

(1) Desert environments tend to produce slow-growing, long-lived perennial plant species, with high densities of annuals during favorable years. In drought years reproduction is very low.

(2) Desert environments tend to produce less plant biomass than other environments.

(3) Dead standing and dead down plant parts provide important components of wildlife habitat.

(4) Dead plant parts provide a source of organic matter for nutrient cycling and soil formation.

(5) A dynamic ecological balance exists between the living and non-living members of an ecosystem. Unregulated harvesting of vegetation in excessive quantities could upset this ecological balance, resulting in a significant change in the structure and composition of the ecosystem.

(6) Little is known about the direct and indirect effects of harvesting vegetation on desert environments.

The following are important legal and policy considerations:

(1) The collection and removal of plant parts by recreational users is permitted with stipulations (43 CFR 8363.1-2).

(2) Vegetation may be sold or disposed of under a free-use system by permit and with stipulations (43 CFR 5400 and 5500).

(3) The State of California has passed a California Native Desert Plants Act (California Food and Agriculture Code, Division 23 [Chapters 1–8]) which restricts the numbers and types of plants (living and dead) that can be collected and provides for a permit system administered by the counties. This Plan establishes BLM policies on the public lands. The BLM will coordinate its administration of permits for plant harvesting with local governments, when such coordination is appropriate, and requests that local governments coordinate their permit procedures with BLM.

(4) The Endangered Species Act of 1973 restricts commercial importing and exporting of endangered and threatened plant species.

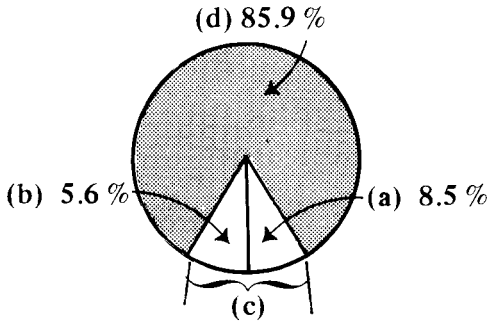
Guidelines for Harvesting

Because of the diversity and complex nature of the vegetation found within the CDCA, no set standard prescription can be developed for harvesting. Instead, each Resource Area will develop its own specific stipulations following the guidelines listed below. Additional data needs include, but are not limited to, identification of user needs, assessment of the quantities of resources available, determination of sustained yield by area and species, appraisal of the value of each available resource, and

FIGURE 1a

Classes of Perennial Plant Production

as a Percentage of Plant Biomass on Public Lands in the CDCA

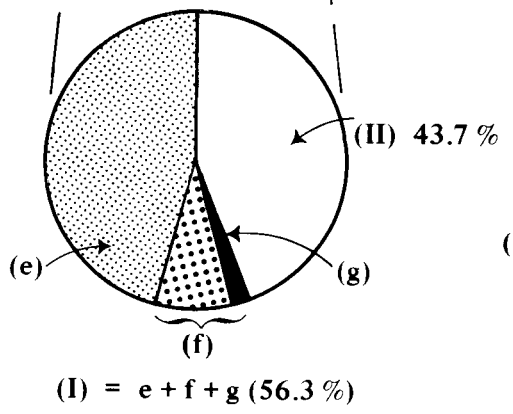


Yearly		% of Total Biomass [1]
(a)	Forage Production	= 8.5
(b)	Non - Forage Production	= 5.6
(c)	Total Production	= 14.1
(d)	Standing Biomass From Previous Years' Growth	= 85.9 %

FIGURE 1b

Classes of Perennial Plant Production

as a Percentage of Plant Production on Public Lands in the CDCA



(I) = e + f + g (56.3 %)

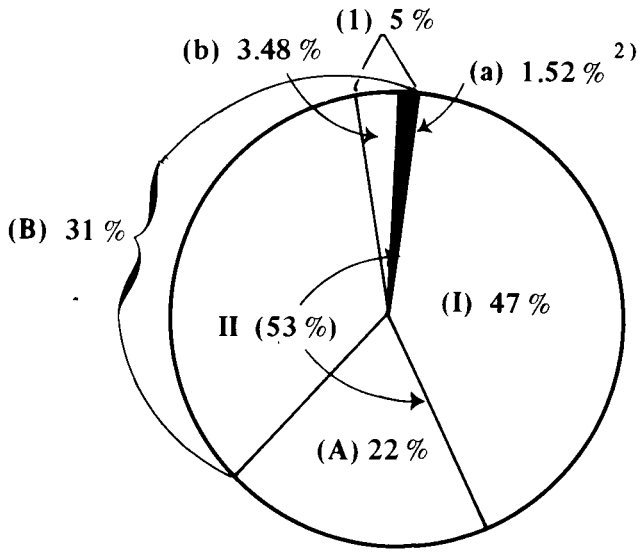
Yearly		% of Total Production [2]	
(I)	Forage Production	= 56.3	
	(e) Non - renewable Forage Production =	46.7	"Reserve"
	(f) Renewable Livestock Forage Production =	9.6	"Reserve"
	(g) Portion of "b" Identified for Allocation =	1.8	
(II)	Non - Forage Production	= 43.7	

[1] Total Biomass (c + d) = Approximately 18,000,000 metric tons

[2] Total Production (I + II) = Approximately 2,500,000 metric tons

FIGURE 2

Identified and Reserved Allocation Estimates of Plant Production for Public Lands in the CDCA



		% of Total 1) Production
I	Outside Grazing Allotments =	47
II	Inside Grazing Allotments =	53
A.	Not Usable by Livestock (reserved) =	22
B.	Total Forage (Usable by livestock, wildlife, and wild horses and burros) =	31
(1)	Renewable Forage (Portion of total forage available for allocation without degrading habitat) =	5
(a)	Identified Forage =	1.52
(b)	Non-Identified Forage =	3.48
(2)	Non-renewable Forage =	26

1) Total Production (I + II) = Approximately 2,500,000 metric tons

Total Reserved Production (Not identified for allocation) = Approximately 98 % of Total Production

2) Identified Forage:

Allocated to Livestock =	1.00 %	
Allocated to Bighorn Sheep and Mule Deer =	0.02 %	= 1.52 %
Allocated to Wild Horses and Burros =	0.50 %	

study of the effects of harvesting through ongoing research. Also, programmatic environmental assessment reports for the collection and harvesting of native vegetation will be prepared.

General Guidelines—Vegetation harvesting will be encouraged in areas where vegetation would be destroyed by other actions, such as sand and gravel pits. Salvage of plant resources in these areas will reduce pressure from collectors in other undisturbed locations. Cutting, harvesting, gathering, or any other collection of vegetation in the CDCA will be by permit only. These permits will be increasingly selective in application from Classes I through C; Class C permits will be issued only in special cases. Further details are provided in specific guidelines below.

Specific Guidelines—Three categories of vegetation harvesting are recognized: collection of live whole plants, collection of live plant parts, and collection of dead and down plant parts. Guidelines for each are as follows:

(1) Collection of live whole plants:
   (a) Collection will be allowed by commercial and/or non-commercial users by permits only in Multiple-Use Classes L, M, and I. Allowable quantities will be stated in the permits. Quantities will be based on the principles of maintaining sustained yield and minimizing impacts on other resources.
   (b) Scientific and educational uses of live whole plants will be permitted on a case-by-case basis in Multiple-Use Class C.
   (c) Plants listed as rare, threatened, or endangered will not be collected except for scientific purposes by permit or where plants would be destroyed by another action and can be salvaged.

(2) Collection of live plant parts (fruit, flowers, limbs, leaves, etc.):
   (a) Live plant parts may be collected by non-commercial users with BLM permits in all multiple-use classes. The permit will state the quantities which may be collected based on principles stated above (1). No use of mechanical equipment, severe damage to plants, or damage to habitat will be permitted in the gathering process. Other stipulations may apply on a case-by-case basis.
   (b) Commercial harvesting will be permitted in Classes L, M, and I by permit. The allowable quantities will be stated in the permit based on the principles of maintaining sustained yield and minimizing impacts on other resources. No use of mechanical equipment, severe damage to plants, or damage to habitat will be permitted in the process.
   (c) Commercial harvesting will be administered through the Bureau's vegetative material sale process.

(3) Collection of dead and down plant parts:
   (a) Non-commercial harvesting by free-use permit will be allowed in Classes L, M, and I. Quantities of harvested desert ironwood, palo verde, and mesquite will not exceed ¼ cord; pinyon and juniper will not exceed 1 cord. The frequency of collection and the number of permits issued will be established by the Resource Area. No use of mechanical equipment will be allowed except for chain saws.
   (b) Burning dead and down wood for on-site campfires will be permissible without a permit in designated areas. When recreation-use permits are issued for large groups, users will be required to bring their own wood.
   (c) Commercial harvesting will be allowed in Classes M and I by permit. Quantities will be determined on a case-by-case basis. Collection of ironwood will not be permitted except in salvage operations.

RARE, THREATENED, AND ENDANGERED SPECIES

A total of 91 species of vascular plants have been identified as rare, threatened, or endangered in the CDCA. Two of these are federally listed endangered species, and nine more have been designated by the State of California as endangered or rare. An additional 54 plant species are currently considered by the U.S. Fish and Wildlife Service (FWS) as candidates for endangered or threatened listing. The remaining species are either considered by the FWS as species of concern or as rare and endangered by the California Native Plant Society (CNPS, 1980).

Map 5 shows the distribution of rare, threatened, or endangered plant species in the CDCA. A list of these species can be found in the legend accompanying this map. Complete tables of these plants, giving information on life history, flowering season, habitat, distribution, and scarcity, can be found in Appendix X to the Proposed Plan (October 1980).

Rare, threatened, and endangered species will be managed in accordance with applicable laws and regulations. These plants will also be protected through wilderness and Areas of Critical Environmental Concern designation and through consideration in all Bureau site-specific environmental impact analyses to ensure that actions funded or authorized by BLM do not jeopardize the continued existence of these plants. The Bureau will conduct or contract for inventories and studies on candidate endangered and threatened plants in order to adequately assess the true rarity of each species and the significance of individual populations of each species.

Those plant species on List 2 ("Plants Rare and Endangered") of the California Native Plant Society's *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 1980) and those species recognized by FWS (March 21, 1980) as "Species of Special Concern" (see

Appendix X to the Proposed Plan, October 1980) will be given special consideration in the BLM's planning, environmental assessment, and decision-making processes.

Pending final decisions on the 54 plant species in the CDCA determined to be candidates for listing as either threatened or endangered by the FWS (Appendix X to the Proposed Plan, October 1980), all such plants will be afforded the full protection of the Endangered Species Act unless the California BLM State Director judges on a case-by-case basis that the evidence against listing a particular plant species is sufficient to allow a specific action. The burden of proof against listing and the responsibility for possible subsequent constraints in the event that the FWS does list the species in question lies with the BLM.

Two of the FWS candidate endangered plants on public lands in the CDCA are targeted for listing as endangered. These are the Sodaville milkvetch (*Astragalus lentiginosus* var. *sesquimetralis*), which occurs at Big Sand Spring in the northern part of Death Valley, and the Amargosa nitrophila (*Nitrophila mohavensis*), which occurs east of Death Valley Junction. If these plants are officially listed, as appears likely, Critical Habitat will also be designated for them.

UNUSUAL PLANT ASSEMBLAGES

Unusual plant assemblages (UPAs) are those stands of vegetation within the CDCA which can be recognized as extraordinary due to one or more factors. These factors include unusual age, unusual size, unusually high cover or density, or disjunction from main centers of distribution. Plant associations which are relatively rare in the Desert due to their alliance with restricted and discontinuous habitats are also considered UPAs. Examples of these UPA types are vegetation associated with water, such as seeps, springs, riparian areas, and plants growing on unusual and restricted substrates (limestone outcroppings, sand dunes, etc.). A number of UPAs have been identified within the CDCA. These UPAs are grouped according to their sensitivity to disturbance (see Appendix X to the Proposed Plan, October 1980).

Map 6 shows the location of the UPAs identified for the CDCA. The legend accompanying this map gives a complete listing of these UPAs.

The BLM through its planning system will continue to identify and designate special areas possessing representative rare, unique, and unusual features of ecologic, geologic, and aquatic value for the scientific and educational benefits of future generations. Representative unique, unusual, or otherwise significant ecosystems will be identified and included in the Special Area management program. This program includes, but is not limited to, the BLM Natural Area Program, Areas of Critical Environmental Concern, and the National Landmarks Program. These areas will be large enough to ensure the continued existence of natural ecosystems. Management priority will be assigned based on existing or potential threats to these ecosystems and funding.

Appendix X to the Proposed Plan (October 1980) contains various management options for UPAs and a classification of sensitivity. Highly sensitive and very sensitive UPAs will be treated in a manner which preserves the habitat and ensures the continued existence of the plant assemblages.

All UPAs will be taken into account when conducting all site-specific environmental impact analyses. Where possible, impacts on these UPAs will be avoided; where impacts cannot be avoided, every effort will be made to achieve the least degree of impact and to mitigate the areas through rehabilitation to stable conditions during or following the action.

WETLAND AND RIPARIAN AREAS

Wetland and riparian areas are a rare occurrence in the CDCA and are very important to the desert ecosystem. They are managed under the provisions of Executive Order 11990, "Protection of Wetlands" (42 CFR 26951) and BLM Manual 6740, "Wetland-Riparian Area Protection and Management." Riparian vegetation consists of those plants associated with perennially and intermittently flowing rivers and streams and also vegetation on the shores of lakes and reservoirs. Riparian vegetation often includes tree species such as cottonwoods, sycamores, and willows. Wetlands are areas which are permanently or intermittently flooded because the water table is at, near, or above the soil surface for extended intervals; vegetation usually consists of emergent water-loving plants, such as bullrushes and cattails, which require a periodically saturated soil condition.

Map 6, "Unusual Plant Assemblages," shows the distribution of the important riparian and wetland areas of the CDCA. These areas are mapped under the following UPA headings: vegetation associated with salt- and brackish-water marshes; vegetation associated with seeps and springs; vegetation associated with palm oases; vegetation associated with riparian zones and bottomland woodlands; and mesquite thickets.

Wetland-riparian areas will be considered in all proposed land-use actions where appropriate and legally possible. Steps will be taken to ensure their unique characteristics and ecological requirements are managed in accordance with legislative, Executive, and Secretarial directions. To the extent possible all actions will avoid adverse impacts on wetland and riparian areas. Positive programs will be initiated to rehabilitate those areas in a deteriorated condition.

VEGETATION MANIPULATION

Types of vegetation manipulation include removing noxious or poisonous plants from rangelands; increasing forage production; creating open areas within dense

brush communities to favor certain wildlife species; or eliminating introduced plant species, such as tamarisk, from riparian areas. These modifications should be considered as one tool in the management of the California Desert.

Methods of Manipulation

Several methods of manipulation are available to managers and can be used for specific goals. The objectives will be clearly defined through site-specific planning. Types of modification techniques include:

Mechanical Control—This type of manipulation would involve the use of bulldozer blades, disking, chaining, roller cutting, etc. These techniques create a high degree of soil disturbance and will not be allowed in Classes C and L. Use in Classes M and I will be carefully considered in the context of other significant impacts.

Chemical Control—Aerial broadcast application will not be allowed due to potential environmental consequences. Spot application will be allowed in Classes M and I after site-specific planning. Noxious weed eradication may be allowed in Class L after site-specific planning.

Exclosures—This is a manipulation technique where livestock and certain wildlife species can be excluded from fenced areas. This procedure provides comparison data and is valuable in the determination of grazing effects on vegetation. This technique will be allowed in Classes L, M, and I.

Prescribed Burning—When fires are purposely set under prescribed conditions certain species can be favored or eliminated, livestock forage can be increased, and wildlife habitat can be modified to favor a particular species. This technique will be allowed in Classes L, M, and I after a site-specific management plan is developed.

Little has been published on the effects of fire on desert vegetation. This is in part due to the low fire frequency and the low intensity of burns when they do occur. However, fire—even with low frequency and intensity—will modify the structure and composition of an area and therefore affect the ecosystem. Some shrubs, such as felt-thorn and rabbitbrush, respond to burning by sprouting new shoots from their bases, while plants like big sagebrush very seldom sprout. Other plants, such as mesquite, fall somewhere in between and are unpredictable in their sprouting behavior. If fires are recurring, the nonsprouting species can be eliminated through direct kill. Fire can also be used to purposely alter plant composition or age class to favor a particular species. For example, fire can be used to increase gross forage production in some areas. Big galleta grass, an important forage species, will show increases in production at the expense of shrub plants like mesquite and catclaw. Increased fires could thus alter a plant community by increasing the amount of perennial grass and decreasing some of the shrub components. Other factors, such as climate and soils, are also very important and may dictate whether a desert grassland could be developed using prescribed burning techniques.

POTENTIAL NEW DESERT CROPS

Interest has increased in recent years in several potential new arid zone crops, particularly jojoba. The seeds of jojoba contain a liquid wax which is almost identical to the industrially important oil of the sperm whale. An important market exists for such a product because importation of sperm whale oil has been forbidden since 1970.

The need for leasing public land for growing jojoba appears to be speculative because the plant has not yet been successfully cultivated for commercial purposes. Therefore, the economic potential from growing the species cannot be demonstrated (43 CFR 2520.0-8[d][3]; see "Facts Report–Jojoba–An Arid Land Species" in Appendix X to the Proposed Plan, October 1980). The seed or oil yield that can be expected from jojoba cannot be predicted at this time (Hermanos, 1979). The greatest uncertainty about the future of jojoba involves the selection of genetic material which is capable of consistently producing substantial seed yields.

Other new potential arid zone crops which are under consideration for the future and which might be grown in the CDCA include guayule, buffalo gourd, mesquite, and gopher plant. Guayule is a source of natural rubber. Buffalo gourd produces vegetable oil, protein, and starch. Mesquite could produce food for livestock and human beings in commercially viable amounts, and the woody biomass might be used for fuel. Gopher plant has been proposed as a petroleum substitute. Use of all of these species is in the research and development stage. If jojoba or any of the other species prove commercially successful in the future, the possibility of leasing public lands in the CDCA may be considered. Until such time as one or more of these species proves to be successful, leasing only for small experimental plots is being considered. (See "Potential New Arid-Zone Agricultural Crops" in Appendix X to the Proposed Plan, October 1980).

IMPLEMENTATION

MONITORING

Monitoring efforts will be directed to those areas with the greatest management need. Criteria will include the presence of vegetation or a species of high value or sensitivity and the type and intensity of impact. Also, actions that will modify vegetation structure or composition will be monitored. These actions include, but are not limited to, grazing leases (see Livestock Grazing Element), ORV competitive events and open areas, the construction of utility corridors, and mining or mineral development.

Currently, five monitoring baseline methods (see Appendix X to the Proposed Plan, October 1980) have been used within the CDCA: exclosures, permanent plots,

permanent photo sites, spot sampling, and remote sensing. All of these methods are viable and will continue to be used depending on the resource and the type of uses in the area.

ADDITIONAL INVENTORY NEEDS

Additional inventory needs have been identified in several areas. The need for vegetation inventories in determining forage availability for livestock, wildlife, and wild horses and burros is obvious (see these elements for details). Inventory efforts are also necessary to determine the distribution and status of rare, threatened, and endangered plants and UPAs. This need has been more fully discussed previously in the section on rare, threatened, and endangered plants. The inventory need with regard to UPAs is much the same, with priority being given to those UPAs which are highly sensitive and very sensitive (see Appendix X to the Proposed Plan, October 1980). In order to assess the number of plants and plant parts which may be harvested without deleterious effects on the species and ecosystem in question, it is necessary to concentrate inventory efforts on an area-by-area basis. This has been more fully discussed under the Consumptive Use of Vegetation subsection of this Element.

CALIFORNIA DESERT CONSERVATION AREA

Rare, Threatened And Endangered Plant Species

- PLANT SPECIES OFFICIALLY LISTED AS RARE, THREATENED, OR ENDANGERED BY THE STATE OF CALIFORNIA * OR THE FEDERAL GOVERNMENT **
- PLANT SPECIES OF THE CDCA RECOGNIZED BY THE FISH AND WILDLIFE SERVICE AS CANDIDATES FOR LISTING AS EITHER THREATENED OR ENDANGERED
- SPECIES OF SPECIAL CONCERN (FWS) AND SPECIES FROM THE CALIFORNIA NATIVE PLANT SOCIETY INVENTORY OF RARE AND ENDANGERED VASCULAR PLANTS OF CALIFORNIA (1980) LIST 2: "PLANTS RARE AND ENDANGERED" WHICH ARE NEITHER OFFICALLY LISTED BY THE STATE OF CALIFORNIA OR THE FEDERAL GOVERNMENT, NOR ARE CONSIDERED TO BE CANDIDATES FOR LISTING

SEE REVERSE SIDE FOR COMPLETE LEGEND

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

Map No. 9

Rare, Threatened and Endangered Plant Species

PLANT SPECIES OFFICIALLY LISTED AS RARE, THREATENED, OR ENDANGERED BY THE STATE OF CALIFORNIA * OR THE FEDERAL GOVERNMENT **

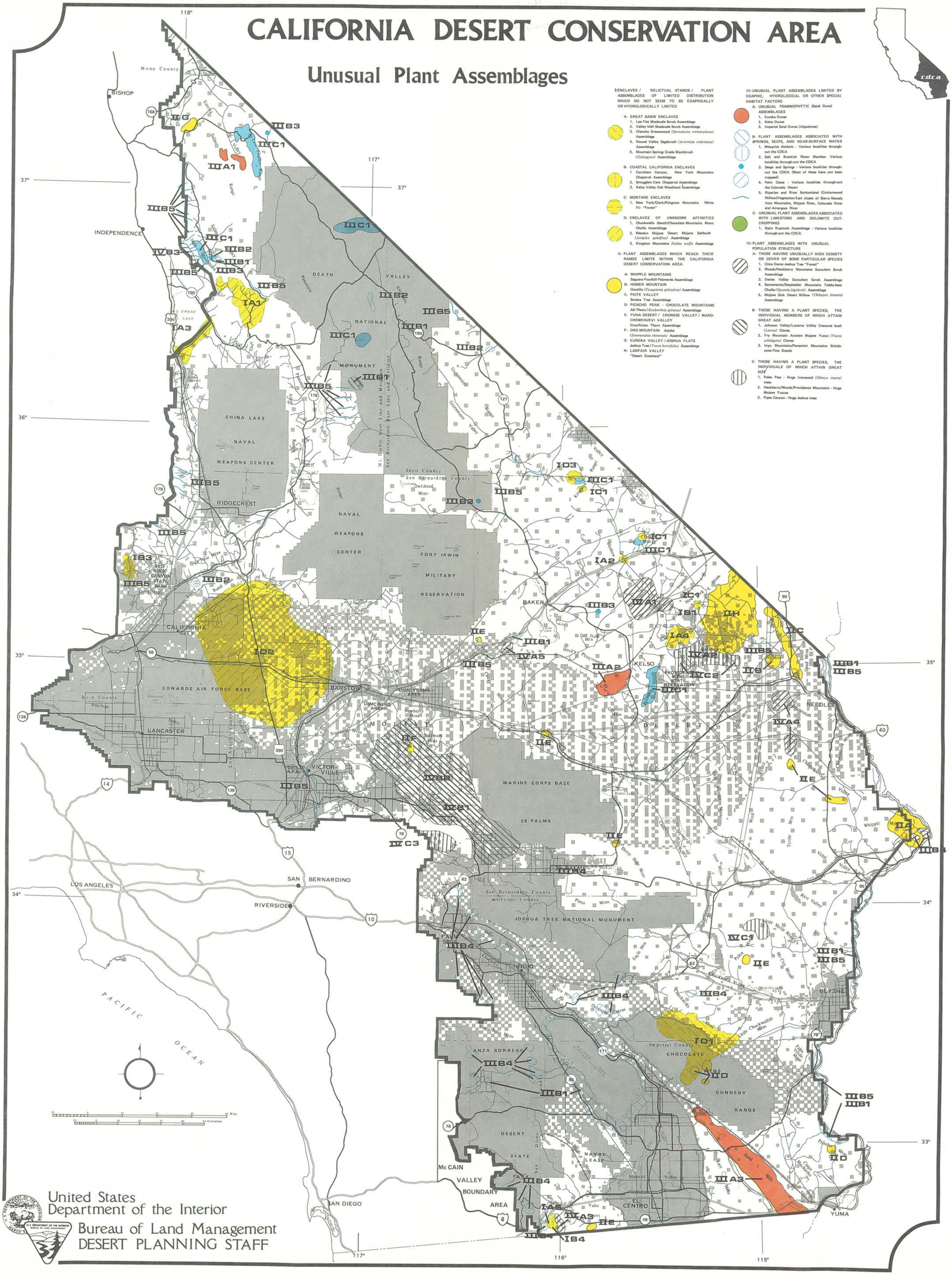
FAMILY	SPECIES	Map No.
Asteraceae	*Helianthus niveus var. tephrodes*	1*
Chenopodiaceae	*Nitrophila mohavensis*	2*
Euphorbiaceae	*Croton wigginsii*	3*
Fabaceae	*Astragalus lentiginosus var. sesquimetralis*	4*
	A. magdalenae var. piersonii	5*
Onagraceae	*Oenothera avita ssp. eurekensis*	6**
Poaceae	*Swallenia alexandrae*	7**
Polygonaceae	*Dedeckera eurekensis*	8*
	Eriogonum ericifolium var. thornei	9*
Rubiaceae	*Gallium angustifolium ssp. borregoense*	10*
Scrophulariaceae	*Cordylanthus eremicus ssp. bernardinus*	11*

PLANT SPECIES OF THE CDCA RECOGNIZED BY THE FISH AND WILDLIFE SERVICE AS CANDIDATES FOR LISTING AS EITHER THREATENED OR ENDANGERED

Asteraceae	*Cymopterus deserticola*	12
	Enceliopsis covillei	13
	Erigeron parishii	14
	Eriphyllum mohavense	15
	Grindellia fraxino-pratensis	16
	Helianthus niveus var. tephrodes	1 *
	Hemizonia arida	18
	H. floribunda	19
	H. mohavensis	20
	Perityle villosa	21
Berberidaceae	*Berberis nevinii*	22
Boraginaceae	*Cryptantha ganderi*	23
Brassicaceae	*Caulostraminea jaegeri*	24
	Lepidium flavum var. filipense	25
Cactaceae	*Coryphantha vivipara var. alversonii*	26
	C. vivipara var. rosea	27
	Opuntia basilaris var. brachyclada	28
	O. basilaris var. treleasei	29
	O. bigelovii var. hoffmannii	30
	O. munzii	31
	Sclerocactus polyancistrus	32
Chenopodiaceae	*Nitrophila mohavensis*	2 *
Crassulaceae	*Dudleya saxosa ssp. saxosa*	34
Euphorbiaceae	*Ditaxis californica*	35
	Euphorbia platysperma	36
Fabaceae	*Astragalus funereus*	37
	A. jaegerianus	38
	A. lentiginosus var. micans	39
	A. lentiginosus var. sesquimetralis	4 *
	A. magdalenae var. piersonii	5*
	A. mohavensis var. hemigyrus	42
Gentianaceae	*Centaurium namo-philum*	43
Hydrophyllaceae	*Phacelia novenmillensis*	44
Lamiaceae	*Monardella robisonii*	45
Lennoaceae	*Ammobroma sonorae*	46
Loasaceae	*Petalonyx thurberi ssp. gilmanii*	47
Malvaceae	*Sphaeralcea rusby ssp. eremicola*	48
Papaveraceae	*Arctomecon merriamii*	49
Polemoniaceae	*Linanthus macculatus*	50
Polygonaceae	*Chorizanthe spinosa*	51
	Dedeckera eurekensis	8 *
	Eriogonum bifurcatum	53
	E. ercifolium var. thornei	9 *
	E. kennedyi var. pinicola	55
	E. ovalifolium ssp. vineum	56
	Gilmania luteola	57
Rubiaceae	*Gallium angustifolium ssp. borregoense*	10 *
	G. hilendiae ssp. kingstonense	59
Scrophulariaceae	*Cordylanthus eremicus ssp. bernardinus*	11 *
	Maurandya petrophila	61
	Mimulus rupicola	62
Liliaceae	*Calochortus excavatus*	63
	C. striatus	64
Poaceae	*Puccinellia parishii*	65

SPECIES OF SPECIAL CONCERN (FWS) AND SPECIES FROM THE CALIFORNIA NATIVE PLANT SOCIETY INVENTORY OF RARE AND ENDANGERED VASCULAR PLANTS OF CALIFORNIA (1980) LIST 2: "PLANTS RARE AND ENDANGERED" WHICH ARE NEITHER OFFICALLY LISTED BY THE STATE OF CALIFORNIA OR THE FEDERAL GOVERNMENT, NOR ARE CONSIDERED TO BE CANDIDATES FOR LISTING

Asteraceae	*Brickellia knappiana*	66
	Enceliopsis nudicaulis	67
	Hulsea vestita ssp. inyoensis	68
	Machaeranthera orcutii	69
	Perityle inyoensis	70
Brassicaceae	*Arabis shockleyi*	71
	Caulanthus simulans	72
Cactaceae	*Echinocereus engelmannii ssp. minzii*	73
	Opuntia phaeacantha var. mohavensis	74
	O. wigginsii	75
Convolvulceae	*Calystegia piersonii*	76
Crossosomataceae	*Forsellesia pungens var. glabra*	77
Euphorbiaceae	*Tetracoccus ilicifolius*	78
Fabaceae	*Astragalus cimae var. cimae*	79
	A. cimae var. sufflatus	80
	Lupinus excubitus var. medius	81
	L. holmgrenanus	82
	Marina orcuttii var. orcuttii	83
Hydrophyllaceae	*Phacelia amabilis*	84
	P. anelsonii	85
	P. mustelina	86
Lamiaceae	*Salvia greatae*	87
Polygonaceae	*Eriogonium eremicola*	88
	Eriogonum gilmanii	89
	E. microthecum var. panamintense	90
Rhamnaceae	*Colubrina californica*	91
Roscaeae	*Potentilla patelifera*	92
Rubiaceae	*Gallium hypotrichum ssp. tomentellum*	93
Scrophulariaceae	*Penstemon calcareus*	94
	P. californicus	95
	P. stephensii	96
Agavaceae	*Agave utahensis var. eborispina*	97
Cyperaceae	*Fimbristylis thermalis*	98
Ephedraceae	*Ephedra funerea*	99



CALIFORNIA DESERT CONSERVATION AREA
Unusual Plant Assemblages
I: ENCLAVES / RELICTUAL STANDS / PLANT ASSEMBLAGES OF LIMITED DISTRIBUTION WHICH DO NOT SEEM TO BE EDAPHICALLY OR HYDROLOGICALLY LIMITED
A- GREAT BASIN ENCLAVES
1. Lee Flat Shadscale Scrub Assemblage
2. Valley Well Shadscale Scrub Assemblage
3. Olancha Greasewood (Sarcobatus vermiculatus) Assemblage
4. Round Valley Sagebrush (Artemisia tridentata) Assemblage
5. Mountain Springs Grade Blackbrush (Coleogyne) Assemblage
B- COASTAL CALIFORNIA ENCLAVES
1. Caruthers Canyon, New York Mountains Chaparral Assemblage
2. Smugglers Cave Chaparral Assemblage
3. Kelso Valley Oak Woodland Assemblage
C- MONTANE ENCLAVES
1. New York/Clark/Kingston Mountains White Fir "Forest"
D- ENCLAVES OF UNKNOWN AFFINITIES
1. Chuckwalla Bench/Chocolate Mountains Munz Cholla Assemblage
2. Western Mojave Desert Mojave Saltbush (Atriplex spinifera) Assemblage
3. Kingston Mountains Nolina wolfii Assemblage
II: PLANT ASSEMBLAGES WHICH REACH THEIR RANGE LIMITS WITHIN THE CALIFORNIA DESERT CONSERVATION AREA
A- WHIPPLE MOUNTAINS
Saguaro-Foothill Paloverde Assemblage
B- HOMER MOUNTAIN
Ocotillo (Fouquieria splendens) Assemblage
C- PIUTE VALLEY
Smoke Tree Assemblage
D- PICACHO PEAK - CHOCOLATE MOUNTAINS
All-Thorn (Koeberlinia spinosa) Assemblage
E- YUHA DESERT / CRONESE VALLEY / WARD-CHEMEHUEVI VALLEY
Crucifixion Thorn Assemblage
F- ORD MOUNTAIN Jojoba
(Simmondsia chinensis) Assemblage
G- EUREKA VALLEY / JOSHUA FLATS
Joshua Tree (Yucca brevifolia) Assemblage
H- LANFAIR VALLEY
"Desert Grassland"
III: UNUSUAL PLANT ASSEMBLAGES LIMITED BY EDAPHIC, HYDROLOGICAL OR OTHER SPECIAL HABITAT FACTORS
A- UNUSUAL PSAMMOPHYTIC (Sand Dune) ASSEMBLAGES
1. Eureka Dunes
2. Kelso Dunes
3. Imperial Sand Dunes (Algodones)
B- PLANT ASSEMBLAGES ASSOCIATED WITH SPRINGS, SEEPS, AND NEAR-SURFACE WATER
1. Mesquite thickets - Various localities through-out the CDCA
2. Salt and Brackish Water Marshes- Various localities through-out the CDCA
3. Seeps and Springs - Various localities through-out the CDCA (Most of these have not been mapped)
4. Palm Oases - Various localities through-out the Colorado Desert
5. Riparian and River Bottomland (Cottonwood Willow) Vegetation-East slopes of Sierra Nevada Inyo Mountains, Mojave River, Colorado River and Amargosa River
C- UNUSUAL PLANT ASSEMBLAGES ASSOCIATED WITH LIMESTONE AND DOLOMITE OUT-CROPPINGS
1. Basic Rupicole Assemblage - Various localities through-out the CDCA
IV: PLANT ASSEMBLAGES WITH UNUSUAL POPULATION STRUCTURE
A- THOSE HAVING UNUSUALLY HIGH DENSITY OR COVER OF SOME PARTICULAR SPECIES
1. Cima Dome Joshua Tree "Forest"
2. Woods/Hackberry Mountains Succulent Scrub Assemblage
3. Davies Valley Succulent Scrub Assemblage
4. Sacramento/Stepladder Mountains Teddy-bear Cholla (Opuntia bigelovii) Assemblage
5. Mojave Sink Desert Willow (Chilopsis linearis) Assemblage
B- THOSE HAVING A PLANT SPECIES, THE INDIVIDUAL MEMBERS OF WHICH ATTAIN GREAT AGE
1. Johnson Valley/Lucerne Valley Creosote bush (Larrea) Clones
2. Fry Mountain Ancient Mojave Yucca (Yucca schidigera) Clones
3. Inyo Mountains/Panamint Mountains Bristle-cone Pine Stands
C- THOSE HAVING A PLANT SPECIES, THE INDIVIDUALS OF WHICH ATTAIN GREAT SIZE
1. Palen Pass - Huge Ironwood (Olneya tesota) trees
2. Hackberry/Woods/Providence Mountains - Huge Mojave Yuccas
3. Pipes Canyon - Huge Joshua trees
cdca
PACIFIC OCEAN
Miles
Kilometers
United States
Department of the Interior
Bureau of Land Management
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WILDERNESS ELEMENT

The opportunity to protect wilderness values on a regional basis is an integral part of the comprehensive land-use planning effort for the CDCA. More than 5 million acres of public lands were found to have wilderness characteristics, and through this Plan BLM has identified and preliminarily recommended approximately 2.1 million acres of land as suitable for inclusion in the National Wilderness System. Prior to Congressional designation, both "suitable" and "nonsuitable" areas receive special management to assure that their wilderness characteristics and values are not impaired.

The outline for this element is as follows:

GOALS
ACTIONS PLANNED
PRELIMINARY RECOMMENDATIONS FOR WILDERNESS
METHODOLOGY
INTERIM MANAGEMENT
AFTER CONGRESSIONAL DESIGNATIONS
IMPLEMENTATION
SCHEDULE AND PRIORITIES
MONITORING

GOALS

The Wilderness Act of 1964 provided for the establishment of a National Wilderness Preservation System with areas to be designated from public lands within the National Forests, the National Parks, and the National Wildlife Refuges. Public lands administered by the BLM were included for wilderness review under the Federal Land Policy and Management Act of 1976. Lands under BLM jurisdiction are inventoried and evaluated for wilderness potential. In the CDCA, 137 areas, covering 5.7 million acres, were determined to have wilderness characteristics and were designated Wilderness Study Areas (WSAs) in May 1978. Recommendations will be made to Congress as to the suitability or nonsuitability of each WSA for inclusion in the National Wilderness Preservation System. With approval of this Plan, 45 Wilderness Study Areas become "preliminarily recommended" as suitable for wilderness designation by Congress.

The CDCA was established by FLPMA with a mandate that a comprehensive desert-wide management plan be prepared. This required that wilderness be evaluated in the CDCA in time to have those values considered in the Desert Plan.

The goal of this element is identification of CDCA wilderness which will provide a representative system of areas and accomplish two major objectives:

(1) Accomplish the intent and policy of Congress as stated in the Wilderness Act of 1964 to ". . . secure for the American people of present and future generations the benefit of an enduring resource of wilderness."

(2) Provide a variety of physical settings and challenges which will offer opportunities for primitive recreation and solitude.

ACTIONS PLANNED

PRELIMINARY RECOMMENDATIONS FOR WILDERNESS

The selection of areas suitable for wilderness designation reflects the Bureau policy that wilderness is a status which should last forever. The resource analysis of each WSA preliminarily recommended as suitable led to the determination that wilderness is the highest and best use of these areas, both now and in the future.

The Plan offers a preliminary recommendation of 45 WSAs, 2,099,000 acres of the public lands in the CDCA, as suitable for wilderness designation by Congress. Map 7 shows the location of all WSAs in the CDCA, those considered suitable for designation, and the wilderness status of adjacent or nearby lands administered by other Federal and State agencies. Preliminary recommendations for wilderness are also shown as Multiple-Use Class C on Map 1, "CDCA Plan," inserted in the back cover pocket of this document, and listed on Table 4.

METHODOLOGY

The BLM's Wilderness Review Program consists of three phases; the inventory phase, the study phase, and the reporting phase. A brief description of each follows. (A more detailed description of the procedures followed in each phase can be found in Appendix III to the Proposed Plan, October 1980.)

The inventory phase of the BLM's Wilderness Program in the CDCA began in April 1978 and ended in February 1979. It was a period of extensive field investigation and public involvement through public hearings and workshops and through written comments. As a result, 5.7 million acres of BLM-administered public lands were identified as Wilderness Study Areas (WSAs) because they met the criteria of Section 2(c) of the Wilderness Act of 1964.

Following the identification of WSAs, the Wilderness Program entered its second, or study, phase. In the study phase, which was conducted within the framework of the CDCA planning process, consideration was given to all resource values and opportunities, and a determination of "highest and best use(s)" for each WSA was made. The study-phase analysis led to preliminary recommendations for each WSA as suitable or nonsuitable for wilderness designation by Congress. Those areas considered suitable for wilderness designation are represented as Multiple-Use Class C in this Plan.

In determining wilderness suitability or nonsuitability for each WSA in the CDCA, the relative wilderness quality of each WSA was analyzed. In addition, specific criteria for resource-conflict resolution were applied; they included:

Table 4

45 WSAs of Which All or Portions are Preliminarily Recommended for Wilderness Designation

NAME	WSA #
Bighorn Mountains	217
Bristol/Granite Mountains	256
Castle Peaks	266
Chemehuevi Mountains	310
Chuckwalla Mountains	348
Cinder Cones	239
Coxcomb Mountains	328
Eagle Mountains	334
El Paso Mountains	164
Fish Creek Mountains	372
Fort Piute	267
Funeral Mountains	143
Golden Valley	170
Greenwater Valley	148
Hunter Mountain	123
Indian Pass	355
In-Ko-Pah Mountain	368
Inyo Mountains	122
Kelso Dunes	250
Kingston Range	222
Little Lake Canyon	157
Little Sand Spring	119
Lower Saline Valley	117A
Mecca Hills	343
Newberry Mountains	206
Nopah Range	150
North Algodones Dunes	360
Orocopia Mountains	344
Owens Peak	158
Owlshead Mountains	156
Palen/McCoy	325
Panamint Dunes	127
Picacho Peak	355A
Providence Mountains	263
Resting Spring Range	145
Rodman Mountains	207
Saline Valley	117
Santa Rosa Mountains	341
Sheephole/Cadiz	305
Slate Range	142
South Providence Mountains	262
Turtle Mountains	307
Whipple Mountains	312
Whitewater	218A
Wildrose Canyon	134

(1) Ecosystem and landform representation and uniqueness;

(2) Proximity to urban centers; and

(3) Accessibility to all segments of the population.

Public opinion was obtained from public meetings conducted during both the inventory and study phases; from the study phase worksheets distributed with the final wilderness inventory maps and narrative booklet in March 1979; from the Draft Plan workbook in February 1980; and from letters, telephone conversations, and in-person contacts.

The Draft Plan Alternatives and EIS, published in February 1980, presented the first preliminary wilderness suitability recommendations which varied according to the overall objectives for each alternative. Public comment on the Draft Plan Alternatives and new information were used to develop the wilderness suitability and nonsuitability of preliminary recommendations appearing in this Plan. All or portions of 45 WSAs, totalling about 2.1 million acres of public lands, are preliminarily recommended as suitable for wilderness, or Class C, while 92 areas are considered nonsuitable.

With approval of this Plan, the reporting phase of the CDCA Wilderness Program commences. A wilderness study report consists of actually forwarding, or reporting, the recommendations on suitability or nonsuitability for wilderness designation to the Secretary of the Interior.

Areas designated as Class C (recommended as suitable for wilderness) have highly significant resource values, which include wilderness values, but may also include wildlife, cultural, scenic, botanical, geologic, and other values. To protect these significant resource values, any suitable areas not designated as wilderness by Congress will revert to a Multiple-Use Class L designation. Should it be determined in the reporting phase through new information gained from mineral surveys or other sources that the subsequent Class L designation is inappropriate for some of these areas, the classification will be changed, through the Plan Amendment process, to the appropriate multiple-use class, unless Congressional action specifies an alternative.

Similarly, those areas recommended as nonsuitable and approved as such by Congress will then be managed in accordance with the appropriate multiple-use class as designated in this Plan. However, until Congress acts, these nonsuitable areas will be managed under BLM's *Interim Management Policy and Guidelines for Lands under Wilderness Review* (IMP) (December 12, 1979).

The Wilderness Element does not represent a final decision by the Secretary of the Interior. Further requirements specified by Congress remain to be satisfied with respect to wilderness, involving both the areas shown in this Plan as "suitable" for wilderness designation and the areas shown as "nonsuitable."

Only Congress can designate an area as wilderness. The Wilderness Act and FLPMA establish a process by which the Bureau of Land Management sends its recommendations to the Secretary of the Interior, who sends his recommendations to the President, who then sends *his* recommendations to Congress for final action. The Wil-

derness Act requires public hearings be held prior to forwarding recommendations. In the California Desert that hearing requirement was satisfied by the hearings held on the Proposed Plan. The Federal Land Policy and Management Act requires that "prior to any recommendations for the designation of an area as wilderness the Secretary shall cause mineral surveys to be conducted by the Geological Survey and the Bureau of Mines to determine the mineral values, if any, that may be present in such areas." Wilderness study reports must be prepared. (The requirement for mineral surveys applies only to areas to be recommended as "suitable" for wilderness designation.)

These requirements will be met as soon as possible after publication of this Desert Plan.

INTERIM MANAGEMENT

Congress will make the final determination on which areas will be included in the National Wilderness Preservation System. Until Congress acts on wilderness recommendations, the BLM will manage all WSAs in the CDCA as directed by FLPMA, Section 603, that is, "so as not to impair the suitability of such areas for preservation as wilderness," as prescribed in the Interim Management Policy guidelines. Excerpts from these guidelines are included in Addendum B to this document. Mineral and grazing uses will be allowed to continue in the manner and degree in which they were being conducted on the date of approval of FLPMA, even if such use would impair wilderness suitability. The BLM is directed to prevent unnecessary or undue degradation of the lands and their resources and to afford environmental protection. Valid existing rights must be recognized in the management of these areas.

During the interim management period, from September 21, 1976, until Congress acts, implementation of the Desert Plan in those WSAs which have been recommended for management in Multiple-Use Classes L, M, and I will be constrained by the fact that many uses allowed in those classes would impair wilderness suitability. In addition, implementation of the Desert Plan in Multiple-Use Class C areas requires Congressional action on recommended areas since wilderness Interim Management Policy prohibits the implementation of wilderness management measures solely because the lands are under wilderness review. Existing uses may only be restricted if it is determined that such uses are impairing wilderness suitability or to minimize damage to other resources.

The overall management of the WSAs will be as outlined under the Interim Management Policy guidelines or in accordance with the guidelines of the multiple-use class within which each WSA falls, whichever is more restrictive. Since the Multiple-Use Class C guidelines will be deferred during the interim management period, areas so designated will be managed in accordance with Class L guidelines, in conjunction with the Interim Management Policy. The Class L guidelines will be used for interim management of the Class C areas, since the Multiple-Use Class L designation would become immediately effective should Congress not officially designate these areas as wilderness.

In summary, until Congress makes a final determination on wilderness, the management of an individual area during the interim period will be determined by the Interim Management Policy or Class L guidelines, whichever is more restrictive, and by 43 CFR 3802 for mineral exploration and development. The latter will apply where the underlying class is C or L. Where the underlying class is M or I, the IMP and regulations will apply (see Addendum B to this document). Even though provided for in the Class L guidelines and/or the IMP, no competitive off-road-vehicle events will be allowed to cross Class C.

AFTER CONGRESSIONAL DESIGNATION

Those areas designated as wilderness by Congress will be managed in accordance with the provisions of the 1964 Wilderness Act, the specific legislation approving wilderness designation, and approved Wilderness Management Plans. These individual Wilderness Management Plans will require creative measures to structure the Bureau's actions to meet the requirements of the Wilderness Act. Generally these plans will contain actions that:

(1) Maintain an enduring system of high-quality wilderness;

(2) Perpetuate the wilderness resource;

(3) Provide, to the extent consistent with items 1 and 2, opportunities for public use, enjoyment, and understanding of wilderness, and the unique experiences dependent upon a wilderness setting;

(4) Maintain plants and animals indigenous to the area;

(5) Maintain stable watersheds within constraints of the Wilderness Act;

(6) Consider protection needs for populations of threatened or endangered species and their habitats in management of wilderness;

(7) Consider accessibility to all segments of the population (including the handicapped, elderly, and underprivileged) in the management of wilderness;

(8) Consider valid nonconforming resource uses and activities in the management of wilderness so as to have the least possible adverse effect and/or wherever possible a positive effect; and

(9) Provide access to inholdings of private lands and vehicle access required by many areas because of the lack of water and the harsh environment of the Desert.

IMPLEMENTATION

SCHEDULE AND PRIORITIES

The Plan was completed and signed for implementation

by the Assistant Secretary, Land and Water Resources, in December 1980, thus marking the end of the study phase of the CDCA Wilderness Program. The Bureau's reporting phase will continue for a period which could legally extend to October 21, 1991, as per Section 603 of FLPMA, but which, in accordance with BLM program objectives for high-priority areas, should be completed by 1985.

At the close of the reporting phase, the Secretary of the Interior will review the Bureau's report recommendations and recommend to the President those public lands in the CDCA which he feels are suitable and nonsuitable for wilderness preservation. Within two years of that time, the President will make his recommendations to the Congress, which, it is assumed for planning purposes, will act within one year.

The wilderness study reports which will be developed for each WSA preliminarily recommended as suitable for wilderness designation will specifically address the motorized-vehicle access needs for each of these areas. Approved routes of travel, when designated, will provide sufficient and suitable routes for gaining access to the wilderness resource while eliminating routes and uses which would adversely affect wilderness values. In some cases, permanent routes of travel will be approved to provide access to proposed wilderness areas. These will be incorporated in reports proposing wilderness legislation.

It is also recognized that military aircraft training and testing activities in the California Desert are an important part of the national defense system of the United States. The overflights of military aircraft at low levels over recommended Class C areas are expected, and this intrusion on desert wilderness values is not considered sufficiently detrimental to warrant a nonsuitability recommendation. Therefore, in submitting these Class C recommendations to the Secretary, the Bureau will recommend that in the Congressional action establishing these wilderness areas this be considered.

MONITORING

Monitoring for resource protection is a priority. During the period preceding Congressional action, while interim management is in effect, resource condition site surveys and environmental assessments of actions proposed within WSAs will be conducted to assure compliance with the Interim Management Policy and multiple-use class guidelines.

Those areas designated as wilderness by Congress will undergo periodic resource condition site surveys and visitor-use surveys in accordance with approved Wilderness Management Plans.

CALIFORNIA DESERT CONSERVATION AREA

Wilderness

PWA - PRELIMINARY WILDERNESS AREA
- RECOMMENDED
- NON - RECOMMENDED
- RECOMMENDED (BEYOND PWA)

NON - B L M WILDERNESS AREA
- EXISTING
- PROPOSED

118° 117° 37° 36° 35° 34° 138 14 18 15 10 78 111 86 62 95 40

Mono County BISHOP INDEPENDENCE OWENS LAKE CHINA LAKE NAVAL WEAPONS CENTER RIDGECREST NAVAL WEAPONS CENTER FORT IRWIN MILITARY RESERVATION RED ROCK CANYON STATE PARK CALIFORNIA CITY EDWARDS AIR FORCE BASE LANCASTER BARSTOW USMC YERMO AREA USMC NEBO AREA MOJAVE VICTORVILLE MARINE CORPS BASE 29 PALMS JOSHUA TREE NATIONAL MONUMENT SAN BERNARDINO RIVERSIDE LOS ANGELES SAN DIEGO PACIFIC OCEAN PALM SPGS INDIO BAKER DEATH VALLEY NATIONAL MONUMENT KELSO PROVIDENCE MTNS STATE RECREATION AREA DESERT NEEDLES BLYTHE ANZA-BORREGO DESERT STATE PARK Mc CAIN VALLEY BOUNDARY AREA CHOCOLATE MTNS GUNNERY RANGE NAVAL LEASE EL CENTRO YUMA

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

WILD HORSE AND BURRO ELEMENT

Wild horses and burros are protected by a Federal law that declares these animals an integral part of the public land resources. Positive proper management by BLM is required to achieve and maintain population levels which ensure healthy herds and animals and to maintain a thriving natural ecological balance through reduction or elimination of conflicts now creating severe adverse impacts on other highly valued natural resources, especially wildlife.

The outline for this element is as follows:

GOALS
ACTIONS PLANNED
IMPLEMENTATION
HMAPS: DESCRIPTIONS AND PRIORITIES
MONITORING
LIMITATION DURING INTERIM MANAGEMENT

GOALS

The following specific goals comply with the directives of law and policy regarding wild horses and burros and address public concern about their potential for damaging other resources. These goals are designed to reduce conflict where other high resource values occur and to intensively manage wild horses and burros in areas where low or moderate conflicts with other resources occur. The intent is to emphasize management of wild horse and burro herds rather than merely putting additional restrictions on their behavior. The objectives are to:

(1) Provide for the year-long food requirements of wild horses and burros by reserving sufficient forage to meet the biological requirements of a specified number of animals.

(2) Provide adequate cover for wild horses and burros by maintaining free access to existing cover for these animals. Attainment of this objective would be consistent with the need to restrict wild horse and burro use from selected riparian areas, when required to protect other resource values.

(3) Provide adequate water to meet the year-long requirements of wild horses and burros by improving existing waters, developing new waters, and developing alternative waters when wild horses and burros must be excluded from an existing water.

(4) Provide adequate living space for wild horses and burros by designing new structures or modifying existing structures in such a manner as to allow for the normal distribution and movement patterns of these animals. The key to attainment of this objective is preservation of the home ranges established by a majority of wild horses and burros by use of individual Herd Management Areas (HMAs). Attainment of this objective would be consistent with the need to restrict wild horse and burro access in selected areas in order to protect other resource values, and specifically to manage burros so that they do not jeopardize the continued existence and welfare of bighorn sheep.

(5) Protect wild horses and burros on public lands by conducting surveillance to prevent unauthorized removal or undue harassment of the animals.

ACTIONS PLANNED

Planned management actions are based upon inventory data on existing conditions and trends and management programs with a demonstrated utility for wild horse and burro management. In 1975, BLM began removing excess wild horses and burros from the CDCA. While the CDCA Plan was being prepared, a total of 1,110 excess animals were removed under the guidance of interim Herd Management Area Plans (HMAPs). These animals have been placed under private maintenance agreements through BLM's Adopt a Horse and Burro Programs.

Twenty-two wild horse and burro areas, some containing both types of animals, were identified within the Desert during CDCA inventories. Populations of wild horses and burros will be protected and managed in 17 Herd Management Areas (HMAs) and eliminated from the five other areas where major conflicts exist with natural and wildlife resources (Map 8). Herd Management Area Plans (HMAPs) will be prepared for these HMAs which will provide specific direction for managing the animals in accordance with applicable law and the wild horse and burro objectives identified in this element. The amount of forage allotted to wild horses and burros within HMAs totals 26,447 animal unit months (AUMs). These AUMs can support a total of 281 wild horses and 2,747 burros. Implementation of the Plan will require removal of approximately 10,100 wild horses and burros through 1985. Table 5 summarizes proposed actions for each HMA.

The Plan focuses upon the wild horse and burro concentration areas and resources subject to competitive uses within the wild horse and burro areas. The concentration areas occur where, during most years, wild horses and burros tend to congregate and a high probability of encountering the herds is expected. If populations are maintained at appropriate levels in the concentration areas, more than adequate forage is expected to exist for that population level throughout the remainder of the wild horse and burro area.

The process for determining proposed population levels included delineation of the concentration areas; estimation of the areas' carrying capacities; and review of these carrying capacities by wildlife biologists, archaeologists, and Native American resource specialists. Equal consideration is given to livestock and wild horses and burros for allocation of forage where HMAs are within grazing allotments. (See Appendix XII to the Proposed Plan, October 1980, for further discussion and rationale of population determinations.)

In addition, wildlife biologists identified management

prescriptions required to eliminate conflicts with the wildlife resource. These prescriptions will be acted upon in the development of Wild Horse and Burro HMAPs. An example of a management prescription is development of waters away from sensitive areas, such as those important to bighorn sheep. (For detailed discussion see Appendix XII to the Proposed Plan, October 1980.) If management prescriptions can mitigate the resource conflicts, then this option is chosen above the elimination of the entire herd. Table 5 shows population estimates for all HMAs, with population levels based upon recommendations of numerous resource disciplines.

In accordance with Bureau policy, forage will rarely be allocated to wild horses and burros on lands other than public lands. In herd areas which include private land, forage may be provided for the wild horses and burros on the private land by cooperative agreement.

IMPLEMENTATION

HMAPS: DESCRIPTION AND PRIORITIES

Six HMAPs will be prepared to outline long-term management for the 17 HMAs where wild horses and burros will be retained on a continuing basis. Herd Management Areas are grouped for inclusion under a particular HMAP, based upon HMAs located within the same general location and/or HMAs requiring coordination with other agencies.

Herd Management Area Plans will identify the objectives for wild horse and burro management and the specific management techniques which will be used to attain the objectives. These objectives and management techniques will be designed to improve or enhance the wild horse or burro populations and their habitat. Objectives and management techniques for wild horse and burro populations will be designed to improve the condition of the animals and enhance the population's age structure/sex ratio to maintain a viable herd and, at the same time, minimize the need for removing excess animals. Objectives and management techniques for wild horse and burro habitat will be designed to improve or enhance the habitat requirements of food, cover, water, and living space and to preserve the free-roaming behavior of the animals.

Preparation of HMAPs is prioritized according to the level of resource conflicts found within the HMAs. Each interim HMAP will be amended to conform with the guidelines of the Plan. If the proposed level of animals stated in the interim HMAP is greater than that specified in the Plan, gathering will proceed as scheduled while the final HMAP is being prepared. The high-priority HMAPs will be prepared and implemented beginning in Fiscal Year (FY) 1981 with the planned population levels reached by the end of FY-85. The medium-priority HMAPs will be prepared and put into effect by FY-82 with planned population levels reached by the end of FY-85. Low-priority HMAPs will be prepared and put into effect by FY-83 with the planned population levels reached in that same year.

The highest priority HMAP is the Saline/Panamint Valley HMAP. This plan contains the Waucoba-Hunter Mountain, Lee Flat, and Panamint Valley HMAs. By the end of FY-85, 3,065 burros and 200 horses will be gathered.

Another high-priority HMAP is the Centennial Valley HMAP. This plan will involve the Centennial Valley and Slate Range HMAs. The HMAP will be written cooperatively with the China Lake Naval Weapons Center. An estimated 80 percent of the burros and horses are residents of the Weapons Center. Approximately 4,565 burros and 635 horses will be captured by the end of FY-85. The Weapons Center is expected to supply an equivalent percentage of funds for the roundup.

The Yuma, Arizona, BLM District has the lead for writing and implementing the Colorado River HMAP. The California Desert District will provide partial funding and manpower. The Colorado HMAP contains the Dead Mountain, Chemehuevi, Chocolate/Mules, and Picachos HMAs.

The East Mojave HMAP is a medium-priority management area. The HMAP contains the Clark Mountain, Lava Beds, Granite-Providence Mountains, Woods-Hackberries Mountains, Cima Dome, and Piute Mountains HMAs. This HMAP will be completed by the end of FY-81. The proposed population level of 180 animals will be reached no later than the end of FY-85. If a constant rate of removal is provided, then 1,328 animals will be moved and adopted during the four-year period.

The Chicago Valley HMAP is a low-priority plan. The plan contains the Chicago Valley, Sand Springs, and Piper Valley HMAs. This HMAP will be written and the planned number of animals attained by FY-83. Approximately 150 wild horses and burros will be gathered.

The Low Desert HMAP is also a low-priority plan. All of the HMAs managed under this HMAP consist of very small populations of wild horses and burros. The HMAs to be managed under this HMAP are Kramer, Morongo, Palm Canyon, and Coyote Canyon. By FY-83, the HMAP will be written and reduction to proposed numbers completed during the same year. By delaying the gathering of excess animals in these areas, approximately 40 animals will have to be gathered.

In summary, attainment of the population levels identified in the Plan will require removal of approximately 10,100 wild horses and burros through FY-85 from an estimated current population of 11,172 animals. Since the animals will be gathered over a period of time, the total number of animals gathered to reach the planned population level will be greater than existing levels due to an estimated annual increase of 10 percent. The estimated cost of this effort is in excess of $3 million.

A capture plan will be prepared whenever wild horses

TABLE 5

Planned Wild Horse and Burro Management

Herd Management Area	Approximate Acres	Approximate Percentage		Land Ownership	Estimated Current Populations		Proposed Populations		Proposed Herd Management Area Plan	HMAP Priority
		Public Lands		Other	Horses	Burros	Horses	Burros		
Waucoba/Hunter Mt.[1]	598,000	100			200	1,540	0	444	Saline/	
Panamint[2]	851,000	50		50		1,270		240	Panamint	High
Lee Flat[8]	115,000	100				30		30	HMAP[11]	
Centennial[3]	920,000	20		80	600	3,684	168	1,137	Centennial/	
Slate Range	391,000	20		80		840		408	Slate HMAP[12]	High
Clark Mtn.	173,100	100				365		44		
Lava Beds[4] [8]	178,500	100				75		75		
Granite/Providence	136,500	100				420		0	East	
Woods/Hackberry[8]	39,400	50		50	12	170	6	0	Mojave	Medium
Cima Dome[5]	69,000	100				55		55	HMAP	
Piute Mtn.[16]	30,100	100				55		0		
Dead Mtn.[9]	48,600	60		40		55		0		
Chemehuevi[10]	391,000	85		15		1,200		150	Colorado	
Chocolate/Mules[6]	333,000	75		25		230		22	River	Medium
Picacho	40,000	95		5	45		42		HMAP[13]	
Piper Mountain	69,000	100			44	150	17	82	Chicago[14]	
Sand Spring/Last Chance	230,000	100				0		0	Valley	Low
Chicago Valley[7] [8]	276,000	95		5	28	28	28	28	HMAP	
Kramer	13,800	60		40		25		16		
Morongo[8]	39,100	65		35		25		16	Low	
Palm Canyon	11,500	5		95	6		6		Desert	Low
Coyote Canyon	20,700	20		80	20		20		HMAP[15]	
Total					955	10,217	287	2,747		
Total AUMs					11,460	85,823	3,378	23,075		

1 Includes Saline HMA from Draft Plan.

2 Includes Towne Pass HMA from Draft Plan.

3 Includes Darwin, Trona, and Coso Basin HMAs from Draft Plan.

4 Name changed from Indian Spring HMA in the Draft Plan.

5 Includes Marl Springs and Cut Springs HMAs from Draft Plan.

6 Includes Milpitas Mtn., Picacho, and a portion of Chuckwalla HMAs from Draft Plan.

7 Includes Ash Meadows HMA from Draft Plan.

8 The HMA contains no identified resource conflicts, and adequate forage exists for a potential increase in populations. The HMAP should address opportunities for adjustments in proposed populations through monitoring of vegetation and other resources and should also examine existing and potential waters. The initial recommendation is at existing populations.

9 Majority of the land in the Concentration Area is on the Fort Mojave Indian Reservation, where zero burros are desired.

10 Tentative number in this HMA negotiated with the Chemehuevi Indian tribe and Yuma and Desert Districts.

11 The preparation of this HMAP should be coordinated with Death Valley National Park.

12 These numbers, both the existing populations and proposed populations, are preliminary and will be adjusted based on information currently being gathered and analyzed by the Naval Weapons Center, China Lake, for the Wild Horse and Burro Management Area Plan and Environmental Impact Statement for those lands within the boundaries of the Naval Weapons Center. The HMAP for Wild Horses and Burros on public lands surrounding the Naval Weapons Center will be developed in cooperation with the Navy since their policy may influence BLM's management of the herds on these surrounding lands.

13 Yuma District has taken lead responsibility in HMAP preparation and proposed numbers may differ based on site specific analysis.

14 This HMAP should be written cooperatively with Las Vegas District.

15 The HMAP should be written in cooperation with Edwards Air Force Base, Anza-Borrego Desert State Park, and those Indian tribes affected by exchange of animals.

or burros are removed from public lands. Such plans will be prepared to include the total area affected by a specific gathering effort and will conform to the objectives of the available HMAP. Capture plans will contain a description of and rationale for the proposed gathering effort. The plans will outline the specific capture techniques, types of holding facilities, and transportation techniques to be used. Capture plans will be changed or updated when significant changes in the capture program are proposed.

This Plan requires the removal of excess burros to reach the specified level of 2,747 burros through 1985. This will be accomplished through a program of humane roundup, capture, and adoption to qualified individuals. The BLM will diligently promote this program and seek out adoptors for burros.

In addition, the current programs of research into population-limiting measures such as sterilization will be closely monitored, and these techniques will be used in the future if they are developed and are cost efficient, although this will not help initial reduction of existing populations.

Every effort will be made to obtain appropriations to carry out this program. The BLM also provides for reimbursable charges to adoptors to pay for veterinary fees, shots, feed, and transportation costs for burros rounded up and being held for adoption. If this is not adequate for roundup and adoption of excess animals, BLM can accept contributions from concerned organizations to help pay for the cost of roundup and adoption programs.

In situations where roundup actions prove to be futile because of extreme conditions of topography or vegetation, or if an adoption demand by qualified individuals does not exist, excess burros may be destroyed on the range in the most humane and cost efficient manner possible in accordance with the Wild and Free-Roaming Horse and Burro Act (as amended) in order to meet the objectives of the Plan and the law.

If wild horses and burros become established in areas outside of the HMAs identified in this Plan, these animals will be removed in a timely manner without the need for an additional HMAP.

During the development of HMAPs, if an HMAP's population level is significantly different (±20 percent) than the population level identified in this Plan, the Plan Amendment process will be undertaken to insure that objectives of the Plan are met.

Protection of wild horses and burros on public lands will be provided through vehicular patrols of the Desert by Desert Rangers and other BLM employees. These patrols will be conducted for the purpose of detecting unauthorized capture, removal, and/or destruction of wild horses and burros on public lands. In most instances the patrols will be performed as a part of routine visits to HMAs. Additional protection will be provided by aerial flights over HMAs. These flights will be conducted whenever required to respond to reported violations of the Wild and Free-Roaming Horse and Burro Act as well as on a nonpublicized periodic basis. All confirmed violations of the Wild and Free-Roaming Horse and Burro Act will be investigated in a timely manner by a BLM special agent.

MONITORING

As a part of the development of individual Herd Management Area Plans, a monitoring system will be designed to evaluate effectiveness of HMAP management techniques in meeting objectives of the HMAP. These studies will also be used to design and evaluate schemes of selective animal removal. As a minimum, the following monitoring studies will be used:

Estimates of Population Numbers

Population estimates will be developed once each year (beginning the first year following HMAP preparation) to monitor progress in obtaining proposed population levels within the target dates. Additional population estimates will be developed periodically, but no less than once every five years after proposed population levels have been obtained, to monitor population trends.

Monitoring Distribution and Movement Patterns

Distribution and movement patterns will be monitored seasonally for at least three years. When possible, fixed-wing aircraft will be used to monitor these patterns.

Monitoring Population Dynamics

Sample composition counts (youth/adult ratios) will be conducted on 10 percent of the HMAs annually to estimate reproductive capacity of wild horse and burro populations. Sample sex-ratio classifications will be made on 5 percent of the HMAs annually to estimate fecundity rates. In addition, sex-ratio data will be collected from captured animals (by HMA) to estimate wild horse and burro survival rates. In addition, age structure data will be collected from carcasses found on the range.

Determination of Seasonal Diets

Fecal analysis studies will be conducted four times each year, for a minimum of one year, to determine the seasonal diets of wild horses and burros. Fecal material will be collected to be representative of the four major seasons of the year.

Monitoring Vegetation

Additional monitoring of the wild horse and burro habitats will be conducted in each HMA using applicable standards identified under the Livestock Grazing Element of this Plan.

Adjustments Based on Monitoring

Once herds have reached the population levels prescribed in the HMAPs, upward or downward adjustments in the proposed levels of wild horses and burros will be made when the monitoring systems show that the wild horse and burro habitat or other sensitive resources are not being adequately protected as described in the HMAPs.

In addition, the management techniques or objectives in the HMAPs may be adjusted through analysis of monitoring studies.

If these adjustments are plus or minus 20 percent of the recommended population level in the Plan, the Plan Amendment process will be undertaken to insure the objectives of this Plan are met.

LIMITATIONS DURING INTERIM MANAGEMENT

Management of WSAs will limit some aspects of wild horse and burro management. For example, temporary water developments and fences (corrals, traps) may be installed if they satisfy the nonimpairment criteria. New water developments or fences may be installed if the following criteria are met:

(1) Motorized access will not be required for maintenance if the area is designated as wilderness;

(2) Improvements are substantially unnoticeable in the WSA as a whole;

(3) After any needed reclamation is complete, the area's wilderness values must not have been degraded so far as to impair the area's suitability for preservation as wilderness.

Cross-country use of motorized vehicles or construction of temporary access routes may be approved for construction of approved range improvements if BLM has determined that the improvements satisfy the nonimpairment criteria. Specific guidelines for range improvements can be found in the *Interim Management Policy and Guidelines for Lands Under Wilderness Review* (BLM, December 1979).

Motorized access for the purpose of wild horse and burro management (maintenance of facilities, transportation of captured animals) may be permitted on existing access routes. Cross-country motorized access may be authorized along routes specified by the BLM if it satisfies the nonimpairment criteria, including reclamation requirements; no grading or blading will be permitted. Temporary roads may be built if the BLM has determined that they satisfy the nonimpairment criteria.

Helicopters used for capture or inventory work may land on existing airstrips, heliports, and helispots and on improved sites. Facilities for temporary landings may be built if they satisfy the nonimpairment criteria.

CALIFORNIA DESERT CONSERVATION AREA

Wild Horse/Burro Management Areas

BURRO CONCENTRATION
BURRO RANGE
RETAIN BURRO
HORSE CONCENTRATION
HORSE RANGE
RETAIN HORSE
8 CONCENTRATION NUMBER

REFER TO DESERT DISTRICT WILDHORSE AND BURRO FILES FOR ADDITIONAL INFORMATION

HERD MANAGEMENT AREA

- A- Centennial
- B- Chemehuevi
- C- Chicago Valley
- D- Chocolate / Mule Mtns
- E- Cima Dome
- F- Clark Mountain
- G- Coyote Canyon
- H- Dead Mountain
- I- Granite / Providence Mtns
- J- Kramer
- K- Lava Beds
- L- Lee Flat
- M- Morongo
- N- Palm Canyon
- O- Panamint
- P- Picacho
- Q- Piper Mountain
- R- Piute Mountain
- S- Sand Spring / Last Chance
- T- Slate Range
- U- Waucoba / Hunter Mtn
- V- Woods / Hackberry

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

LIVESTOCK GRAZING ELEMENT

Currently and historically, livestock grazing has been and continues to be a significant use of renewable resources on public land in the California Desert. The Federal Land Policy and Management Act (FLPMA) and the Public Rangelands Improvement Act of 1978 recognize livestock grazing as a principal use for the production of food and fiber. Pursuant to the decision in **Natural Resources Defense Council, Inc., v. Morton** *(388 F. Supp. 829, 1974; 527 F. 2d 1386, 1976) livestock grazing on public land has been judged to be a major Federal action requiring an environmental impact statement (EIS) mandated by the National Environmental Policy Act (NEPA).*

The outline for this element is as follows:

GOALS
ACTIONS PLANNED
BACKGROUND
SUMMARY OF ACTIONS PLANNED
DETAIL OF ACTIONS
Perennial Range
Carrying Capacity
Allocations
Range Condition
Ephemeral Range
Ephemeral/Perennial Range
New Proposed Allotments
Management Prescriptions
Additional Information
IMPLEMENTATION
ASSUMPTIONS
DECISIONS
ALLOTMENT MANAGEMENT PLANS
MONITORING
CONSULTATION PROCESS
STEWARDSHIP PROGRAM
LIMITATIONS DURING INTERIM MANAGEMENT

GOALS

The goals of the Livestock Grazing Element are to:

(1) Continue the use of the California Desert for livestock production to contribute to satisfying the need for food and fiber from public land.

(2) Use livestock grazing as a tool to change or improve vegetation for meeting livestock needs as well as other management objectives set forth in the Plan.

(3) Maintain lands that are in good to excellent condition at these production levels. Those lands in poor to fair condition will be improved by the application of appropriate management prescriptions to regulate livestock grazing within the framework of multiple use and sustained yield.

(4) Improve vegetation use by improving distribution of livestock through the use of range improvements and specific management prescriptions which will be fully developed and implemented with Allotment Management Plans (AMPs).

(5) Conduct specific monitoring procedures of condition and trend to determine the necessary grazing adjustments to meet management goals.

ACTIONS PLANNED

BACKGROUND

Domestic livestock have been grazed in the California Desert for more than 100 years. Both the acreage and the intensity of livestock use on Federal land in the California Desert have continually declined during this century. Lands formerly grazed on the western edge of the Desert have passed into private ownership and are no longer available for public leases or permits. In recent years, recreational use, particularly that of off-road motorized vehicles, has had further impact on range at the western fringe, resulting in additional livestock management problems and decreasing forage production potential. The rapid expansion of wild burro populations since their protection under the Wild and Free-Roaming Horse and Burro Act of 1971 has caused intense conflicts over forage in some areas.

Currently, 4.5 million acres (36 percent of public lands in the CDCA) in 54 grazing allotments are being leased to cattle and sheep interests. An estimated $290,000 in grazing fees were collected in 1979. Approximately 75,000 sheep and 14,000 cattle obtain all or part of their sustenance from the California Desert. Sheep grazing is generally intermittent, while use by cattle may be continuous or intermittent, depending on the locality and type of ranching operation, as well as the pattern of annual rainfall.

SUMMARY OF PLANNED ACTIONS

The following allocations are planned:

(1) The allocation of 13,804 animal unit months (AUMs) of perennial forage for livestock use on 13 existing allotments designated as perennial;

(2) The allocation of 60,903 AUMs of perennial forage for livestock use on 21 existing allotments designated as ephemeral/perennial, plus additional livestock use of ephemeral forage (as it becomes available); and

(3) The allocation of ephemeral forage on 20 existing ephemeral allotments (as it becomes available). The five-year average in the CDCA was 45,249 AUMs (1980).

Perennial forage allotments will be reviewed and re-adjusted if monitoring results indicate the necessity of doing so. It is expected that approximately three years of monitoring will be needed to obtain adequate data for analysis before re-adjustment decisions can be made. Ephemeral forage allotments will be re-adjusted on an annual basis.

The perennial forage allocation amounts to a 25-

percent decrease in existing preference. These allotments comprise 4,509,728 acres of public land (36 percent) within the CDCA and livestock allocation will be 74,707 AUMs. This Plan also allows livestock grazing on 15 proposed allotments, which includes the extension of the boundaries of eight existing allotments, totalling 479,039 acres of the public land (4 percent) within the CDCA, or up to 6,217 AUMs.

Range improvements, which will promote the more efficient use of the forage resource, include an estimated 327 miles of fence, 220 miles of water pipeline, 61 wells, 58 spring developments, 29 catchments, and 153 troughs.

Season of use will be clarified and/or adjusted in 21 allotments to improve range and vegetation condition and to satisfy wildlife resource needs. A summary of proposed range improvements by allotment is included in Appendix XIII to the Proposed Plan (October 1980). Detailed actions are presented on Table 6 at the end of this element. A summary of these actions is presented on Table 7. The location of existing and proposed allotments is shown on Map 9.

DETAILS OF ACTIONS

Three range types—perennial, ephemeral, and ephemeral/perennial—have been identified to more effectively manage desert grazing allotments, due to the variability in the amount, quality, and timing of forage production in the CDCA. Each of the allotments has been classified as to type and will be managed within the framework specified.

Perennial Range

Perennial range type is found usually at elevations above 3,500 feet, or in the northern portions of the CDCA where woody shrubs and bunchgrasses are the major livestock forage. The production and growing season of the forage type are more consistent, allowing an estimate of annual production which can be used to establish allocations which require no major adjustments in annual stocking rates, except in very extreme conditions. The consistency of forage production in this range type is due to comparatively predictable winter precipitation.

Allotments classified as perennial have an AUM active preference established as a result of forage surveys, the allocation processes, and a comparison of past use to present condition. This base may be adjusted through subsequent monitoring and analysis (Appendix XIII to the Proposed Plan, October 1980). Use will not exceed 50 percent of the current year's growth on the key species in key areas.

Forage allocations outlined in Table 6 were based on consideration of data from: vegetation and range forage surveys; use records from allotment files; special reports and interviews; and forage needs of wildlife and wild horses and burros (Appendices XII and XIII to the Proposed Plan, October 1980). The forage survey records were considered the most relevant type of information for establishing a baseline of the livestock carrying capacities given.

Carrying Capacity

Carrying capacity is operationally defined as the level of use that can take place without causing either an increase or decrease in range production over time (i.e., maintain sustained yield). All available range forage survey data, past and present, that could be located for the CDCA were assembled and evaluated in the process of arriving at the carrying capacities indicated for grazing allotments (Table 6 and Appendix XIII to the Proposed Plan, October 1980). The amount and quality of the data assembled varied from allotment to allotment. The methods used in establishing the forage baseline ranged from those made during initial BLM adjudication through detailed ocular reconnaissance surveys to a current desert-wide multistage-sampling remote-sensing evaluation. Values for individual allotments obtained from these methods vary in a manner that reflects both differences in the methodology used and differences in vegetation production resulting from the weather conditions for the period of the survey. For the purposes of consistency and simplicity, the values obtained from the recent multistage-sampling remote-sensing survey are presented in Table 6 as the most current estimate of carrying capacity. The reliability of these estimates is considered to be satisfactory when reviewed in comparison with earlier survey results from common areas (Appendix XIII to the Proposed Plan, October 1980).

It should be noted that climatic conditions comparatively favorable to plant growth prevailed during the period of the most recent survey. As a result, the forage production during the survey period is thought to exceed the long-term average.

Forage production was extracted from the total production values through the evaluation of each plant species in terms of its proper use by livestock in a plant community setting. (Appendix XIII to the Proposed Plan, October 1980, gives the proper-use factors used.) The portion of the total production considered as usable livestock forage was thus derived. The usable livestock forage values were converted to animal unit months (AUMs) by dividing the results by 450 kg (990 lbs) per AUM (an AUM is equivalent to the amount of forage required by a 1,000-lb cow for 1 month—Appendix XIII to the Proposed Plan, October 1980). The resulting AUM values were further adjusted for range suitability considerations (slope greater than 25 percent, distance from water greater than 4 miles, perennial renewable livestock forage production below 25 lbs/acre, etc.).

The forage surveys used merely represent a starting point from which to adjust AUM allocations, after monitoring studies are evaluated. In view of the difficulties in

establishing carrying capacity from survey data gathered by any means in use today, great emphasis is being placed on monitoring for determining the basis for future adjustments. These needed adjustments will be made in accordance with Bureau manuals and procedures.

Allocations

Livestock allocations of the adjusted carrying capacity were made with consideration for competing uses (wildlife and wild horses and burros) and condition class rating (Appendix XIII to the Proposed Plan, October 1980).

Allocations to deer and bighorn sheep were based on the number of animals reported to be in the allotment (Appendix XIII to the Proposed Plan, October 1980).

In cases where wild horse and burro Herd Management Areas overlapped grazing allotments, wild horses and burros and livestock were given equal consideration for forage allocation (Appendix XIII to the Proposed Plan, October 1980).

To achieve the objective of promoting range condition improvement, carrying capacity estimates on those allotments rated at an average condition of fair or poor were reduced by 25 percent and 50 percent, respectively (Appendix XIII to the Proposed Plan, October 1980). The recommended livestock AUMs (Table 6) reflect the above adjustment.

Since no adjustment was made for the above-average rainfall received during the survey period, capacity estimates should be considered high in most areas. As a result, when existing livestock authorizations are higher than the recommended allocation, active preference will be lowered to that level. When existing use is lower than the allowable allocation, no increases are recommended until monitoring studies verify that an increase is warranted.

Adjustments in livestock-use authorizations would be made as needed to correct any identified improper use of perennial forage. Allocations of additional forage identified through the monitoring procedure would follow the framework set forth in the Implementation section of this Plan and existing Bureau procedures (Appendix XIII to the Proposed Plan, October 1980).

Range Condition

The condition rating for an allotment refers primarily to the status of the composition, cover, and vigor of the vegetation relative to the natural potential of the area under consideration and, secondarily, to soil stability relative to accelerated erosion.

Certain forage plants selected from different parts of the CDCA were used as indicators of condition by their characteristic response to grazing pressure. "Decreasers" reduce in the composition under heavy grazing pressure. "Increasers" multiply in the composition under heavy grazing pressure. When conditions appreciably deteriorate, the less-desirable plants or "invader species" become more abundant (Appendix XIII to the Proposed Plan, October 1980).

The rankings of *excellent, good, fair,* and *poor* were assessed as follows.

Whether plant cover and species composition exhibit amounts and proportions representative of the "climax" for the areas is judged from relict areas, exclosures, fence-line contrasts, and/or historical information.

Condition classes were rated as follows:

Excellent
- —Similar to climax condition.
- —Decreasers abundant, good vigor.
- —Cover good for potential of site.
- —No accelerated erosion.
- —Production 75 percent and over of potential.

Good
- —Somewhat similar to climax condition.
- —Decreasers still representative of the site and vigor, but are starting to be replaced by increasers.
- —Invaders, though present, are insignificant.
- —Cover still good for site.
- —Accelerated erosion very minor but present.
- —Production is 50–75 percent of potential.

Fair
- —Decreasers show low vigor with remnant populations occurring in sheltered areas.
- —Invaders are common, increasers are expanding.
- —Accelerated erosion evident but not common.
- —Cover tending to be reduced.
- —Production is 25–50 percent of potential.

Poor
- —Invaders and increasers predominate.
- —Decreasers gone or those left are in inaccessible areas.
- —Accelerated erosion evident.

Ephemeral Range

Ephemeral range types usually occur in regions below elevations of 3,500 feet where annual forbs and grasses are the major forage. Ephemeral forage production can vary extremely from year to year, requiring management flexibility in prescribing stocking rates and seasons of use.

Allotments classified as ephemeral will be managed under ephemeral authorizations. Authorizations will be issued after an interdisciplinary team, along with grazing operators involved, make a field examination of the allotment and determine whether production of 200 pounds per acre of dry weight will be available for turnout, except in highly crucial desert tortoise habitat, where a 350-pounds-per-acre requirement is specified (Appendix XIII to the Proposed Plan, October 1980). These restrictions pertain to both sheep and cattle operations.

The 200-pounds-per-acre requirement is based upon

the professional judgment of experienced range conservationists (Appendix XIII to the Proposed Plan, October 1980). The 350-pounds-per-acre turnout requirement in the highly crucial desert tortoise habitat is based on the recommendation of wildlife personnel (Appendix XIII to the Proposed Plan, October 1980). Photographs will be taken of the production at turnout to insure standardization. Production clip plots will be used to verify estimates. The allowable use would not exceed that which would leave an average of 200 or 350 pounds residual forage, depending on tortoise habitat classification as specified for turnout, at the end of the growing season (Appendix XIII, Part 4, to the Proposed Plan, October 1980).

Ephemeral/Perennial Range

This range type is an intermediate type or a combination of the previous two types. Grazing of this forage would be managed by first establishing a stocking rate based on the perennial forage, and then by annually increasing that rate under the same approach used on ephemeral allotments, according to how well the ephemeral forage responds to climatic conditions.

The restrictions for livestock turnout and monitoring presented under Ephemeral Range, above, will also pertain to the ephemeral component of the ephemeral/perennial range.

Some allotments currently designated as perennial are being converted to the ephemeral/perennial designation to reflect the forage types within the allotment. This conversion may affect the active preference authorized in the allotment (Table 6 and Appendix XIII to the Proposed Plan, October 1980).

New Proposed Allotments

Selected historical public grazing allotments which had been used in the past but are not currently leased were reviewed as candidates for establishing grazing leases. The allotments proposed (Table 6) were judged using the following criteria:

Suitability for grazing—The allotment area must have available forage for allocation to livestock. Water availability and slope angle must be appropriate.

Demand for grazing—There must be an existing demand or an anticipated demand in the future.

No major conflicts—Allotments were proposed only in areas where their establishment would not create a major conflict with other natural and cultural resource values. Resource conflicts were identified by a review process which considered other resources and were resolved by boundary changes or elimination of the entire candidate allotment (Appendix XIII, to the Proposed Plan, October 1980).

Those lands that qualified as proposed allotments after considering the above criteria may still be restricted by Wilderness Study Areas. Proposed allotments that contain Wilderness cannot be established until Congress approves these areas as nonwilderness or approves them as wilderness with grazing, unless the allotments are grandfathered or are found to be nonimpairing under Interim Management Policy.

Management Prescriptions

In brief, the management practices proposed for meeting the objectives of the Livestock Grazing Element are the establishment of appropriate: (1) stocking levels; (2) seasons of use; (3) turnout times based on forage readiness (plant phenology) and tortoise emergence in highly crucial tortoise habitat; (4) levels of forage use; (5) monitoring and adjustment procedures; (6) watering and handling practices in high livestock concentration areas; and (7) range improvements (springs, wells, catchments, pipelines, troughs, fences, etc.). The details for each allotment will be developed during the Allotment Management Plan process in the framework of the guidelines detailed here.

During preparation of this Plan, conflicting resource recommendations by specialists on specific issues were resolved by management decisions (Appendix XIII to the Proposed Plan, October 1980). The decisions, summarized below, and the forage allocations which were made, are according to the public interest and with due consideration of the needs of all range users.

Turnout dates for sheep and cattle on ephemeral forage within highly crucial tortoise habitat will be determined by consultation with allotment operator, area range conservationist, area wildlife biologist, and county agricultural extension agent. Turnout dates will be based on the emergence of tortoise in habitat and availability of a minimum of 350 pounds per acre dry weight ephemeral forage. Adequate lead time will be made by this consultation to allow the rancher to arrange necessary livestock and transportation to coincide with the turnout date.

Grazing will be restricted to one pass by sheep in highly crucial tortoise habitat. Concentration areas for livestock will be designated, such as watering sites and sheep bedding areas. Allotment Management Plans (AMPs) will be developed to ensure comparable habitat protection in both cattle and sheep allotments.

When bighorn sheep and livestock conflicts are identified, Allotment Management Plans (AMPs) will be developed with the specific objective of maintaining or improving bighorn numbers.

Since riparian areas are very important in desert ecosystems, they will be either fenced (where appropriate and legally possible), with adequate water being piped out for livestock use, or used by livestock in a way that ensures that proper use levels of forage are not exceeded and that natural and cultural resource values are protected. Riparian areas will be considered as important areas for monitoring. The design for management of these areas will be specified in the AMPs and Habitat

Management Plans (HMPs). A more detailed consideration of these areas appears in the Vegetation Element.

Additional Information

(1) The range condition rating is used as a consideration for establishing stocking rates on poor and fair condition range so as to promote more rapid recovery toward the production potential (Appendix XIII to the Proposed Plan, October 1980).

(2) Wild horse and burro management plans are treated more specifically in the Wild Horse and Burro Element.

(3) The methods used for allocating forage to wild horses and burros in grazing allotments are discussed in Appendix XIII to the Proposed Plan (October 1980).

(4) Vegetation production and allocation data for uses in addition to livestock grazing inside and outside of grazing allotments are discussed briefly in the Vegetation Element.

(5) *Preference* use refers to the preference authorization specified on current permits and leases for perennial and ephemeral/perennial allotments, as defined. *Ephemeral* use is an approximation of the use that is occurring currently on ephemeral allotments as determined by averaging the licensed use over the last five years. *Existing* use is either or both preference and ephemeral. *Actual* use information implies more precision and is generally unavailable. See page 73, explanatory notes, on Table 6.

IMPLEMENTATION

ASSUMPTIONS

The following assumptions were made in preparation of the Livestock Grazing Element.

Livestock Stocking Rates

As stated further in the element, carrying capacity, determined by survey methods, only serves as a starting point. It is assumed that the estimates are accurate and that livestock operators will follow their licensed use. It is also assumed that the licensed use will not result in overuse of the vegetation, except in concentration areas such as watering troughs, bedding grounds, or holding areas. When monitoring studies on key areas show over 50 percent use of key perennial species, appropriate adjustments will be made to bring the use within carrying capacity.

AMP Implementation

It is assumed that all AMPs will be implemented within five years of the AMP approval. It is also assumed that AMPs will incorporate, and operate under, the management prescriptions resulting from the resolution of other resource conflicts. Again, monitoring studies would be used to evaluate the effectiveness of livestock management in maintaining the concepts of multiple use and sustained yield.

Range Improvements

Development of range improvements will follow the standards and guidelines set forth in the BLM Manual and/or policy. This would insure projects are technically feasible and environmentally sound.

Since exact numbers and locations of projects are not known at this time, a site-specific environmental assessment would be done prior to project layout and construction. The assessment would address the project's impact on Wilderness Study Areas, visual resource management, listed threatened or endangered plant and animal species, wildlife, vegetation, cultural resources and Native American values and socio-economic factors.

DECISIONS

The grazing decisions will be implemented in the following manner:

(1) A Rangeland Program Summary (RPS) will be prepared and used to summarize preliminary decisions made and schedule of actions to be taken. If reductions are required, there will be continuous consultation with affected ranchers and other concerned members of the public. A special effort will be made to mitigate the effects of these decisions on any livestock operator whose operation will suffer major detriment.

(It should be noted that the Draft Final Decisions on grazing which appear on page 39 and subsequent pages in Appendix XIII to the Proposed Plan, October 1980, are draft conflict resolutions; the final decisions will be included and incorporated within the RPS, discussed below. These final decisions will be based upon public comment received on the Proposed Plan, plus recognition of institutional and legal constraints raised during the comment period. Among these were the presence of private control of water and private lands present in several of the riparian areas.)

(2) During the determination of forage within the allotments where bighorn sheep occur, vegetation areas within the Critical Bighorn Sheep Habitat boundary were deleted from consideration for livestock allocation. During the development of individual Allotment Management Plans, the exclusion of these areas from allotments will be addressed.

(3) The proposed livestock grazing decisions will be issued to the appropriate livestock operators within one year following the effective date of this Plan. The proposed decision will allow 15 days after delivery for the operator to protest it. All decisions will become final and become effective the following grazing season. Some re-

ductions may be implemented over a five-year period, depending on severity of the reduction.

(4) If protests are received, the authorized officer will review the decision in light of the comments received and then will issue the final decision. The final decision will allow 30 days in which the operator can appeal the decision. If an appeal is received, it will be handled in accordance with current regulations (43 CFR 4.470).

ALLOTMENT MANAGEMENT PLANS

Allotment Management Plans (AMPs) will be developed following the decision process on a priority basis within each resource area (Appendix XIII to the Proposed Plan, October 1980). Allotment Management Plans will be formulated based upon analysis of data contained in the Plan, case files, and public contact. The management objectives of the Plan, in conjunction with specific resource objectives, will be applied to identify the objectives of the AMPs. All AMPs will be written within five years after adoption of the Plan. All AMPs will be implemented on a priority basis within five years after their development, assuming adequate funding (Table 6).

MONITORING

The studies will be employed to fulfill monitoring requirements whenever possible. When BLM studies are not appropriate, a thorough description of the study technique will be maintained in the allotment file. The allotment file will also contain a schedule for reading each study contained within the allotment. Comparison of data between AMPs will be used when similar conditions exist.

Key areas to be monitored will be specified in the AMP. Monitoring will be conducted jointly by BLM and the operator. Based upon the results of monitoring studies, livestock grazing use may be adjusted upward or downward and/or the grazing management system modified to meet the objectives of the AMP.

If data become available which demonstrate the ephemeral turnout requirements of 200 or 350 pounds are not meeting the objectives of this Plan, then upward or downward adjustments will be made.

Monitoring studies include:

(1) Large-scale aerial photo transects (1:1000): Evolution of composition, cover, and general trend.

(2) Trend and utilization plots: Analysis of trend of vegetation condition, cover, composition, and reproduction.

(3) Livestock grazing exclosures: Vegetation comparison areas.

(4) Actual-use data (use supervision): Recorded actual livestock use.

(5) Field transects: Vegetation cover and composition.

(6) Rain gauge: Precipitation measurements.

(7) Production plots for annuals: Determination of yearly annual plant production.

For further details regarding monitoring refer to Appendix XIII to the Proposed Plan (October 1980).

CONSULTATION PROCESS

Consultation with Federal, State, and local government agencies and organizations; private organizations; and individuals (with primary emphasis on lessees, permittees, landowners, and advisory boards) will be continued through the implementation and monitoring phases of this Plan.

Special attention to this process will be given during the decision process, development of the Rangeland Program Summary (RPS), AMP implementation, and development of monitoring systems (Appendix XIII to the Proposed Plan, Consultation Process, October 1980).

STEWARDSHIP PROGRAM

A stewardship program will be implemented. This program will be coordinated with the Grazing District Advisory Board and organized under the District Multiple-Use Advisory Council (MUAC). As grazing management issues are discussed, the MUAC will bring together interested agencies, groups, researchers and operators, and it will recommend on application of various management techniques and grazing systems.

The concept of a desert-wide stewardship program was endorsed by the Desert Advisory Committee and includes interest groups, agencies, and the Cooperative Extension Service.

The stewardship program is essential as part of the wildlife conflict-resolution process to focus both research and data gathering on the complex ecological interrelationships among resource uses in the CDCA. Little is really known about competition between wildlife and livestock and how it can best be mitigated or managed. The California Desert presents a unique environment in which to develop intensive grazing management systems. A stewardship program will serve as the focal point for discussing systems and processes to enhance vegetation in the CDCA, to assist in monitoring and evaluating progress, and to provide incentives to operators to undertake new grazing management techniques.

While the primary focus of this program is in the context of livestock/wildlife/vegetation interrelationships, nothing herein shall be considered as limiting the role of the MUAC or stewardship program in considering only these resources. The program may address and recommend mitigations or enhancements of all resources in their relationship to livestock grazing.

LIMITATIONS DURING INTERIM MANAGEMENT

In general, livestock grazing, at appropriate stocking levels, is compatible with maintaining wilderness suitabil-

ity. Many areas in the CDCA, having a long history of livestock use, were classified as WSAs during the wilderness inventory, indicating that such areas still retained their wilderness qualities.

In essence, use and maintenance of range improvements may continue and new range improvements may be installed and maintained as long as the activities and structures do not impair the area's wilderness suitability. This would be determined during the environmental analysis process prior to project work.

Also, grazing uses that are new or different from those existing on October 21, 1976, must not impair wilderness suitability (refer to Addendum B to this document, "Excerpts from *Interim Management Policy and Guidelines for Lands Under Wilderness Review*").

Proposed allotments may not become established as allotments prior to Congressional designation of wilderness in the CDCA. (See discussion under New Proposed Allotments, above, in this element.)

* * *

In the following table ("Planned Livestock Grazing Management"), livestock grazing allotments are grouped into two range types: (1) Existing Perennial, Ephemeral/Perennial, and Ephemeral; and (2) Proposed Ephemeral/Perennial and Perennial. For each of these range types proposed grazing management practices are provided.

The following notes will assist in the interpretation of information presented in Table 6.

A. *Map Number*—Allotments are located and identified on element map by this number. (This number is also identical to the Draft and Proposed Plan for easy cross-reference.

B. *Grazing Allotment Name*—Allotments grouped into the range type prevalent on that allotment. This grouping allows like management practices to be easily described. See definition of range types in element.

C. *Allotment Public Acreage*—Determined by comparison of case-file records, Landsat Imagery digitized, and/or USGS topographic map examination. Administrative responsibilities of livestock grazing on Naval Weapons Center included.

D. *Rangeland Condition*—Rating—Ranking based on plant cover and species composition relative to the presumed potential "climax" for area. See element discussion.

Factor—These affect condition by changing plant composition, reducing cover, and/or reducing vigor. These factors are:

A = Unauthorized use and/or high historical use.
B = Uncontrolled or unmanaged burro and/or wild horse populations.
C = Off-road vehicles and/or recreationist.
D = Minerals.
E = Military Land Disturbance.

E. *Current Use*—Preference Use—In essence these are the existing livestock allocations. This was the base level of use that could be authorized yearly to the livestock operator. Existing preference could have included both perennial and ephemeral production. (Refer to discussion in Element.)

Ephemeral Use—(Based on 5-year average)—Ephemeral authorizations for existing use are shown by 5-year average because of yearly fluctuation.

a. These allotments reclassified ephemeral/perennial from perennial for better management. Preference use has had an ephemeral component, but it cannot be distinguished from perennial in method of allocation. See Appendix XIII to the Proposed Plan (October, 1980).
b. These allotments reclassified ephemeral/perennial from ephemeral because of a significant percentage of perennial forage in allotment. No existing preference allocation. See Appendix XIII to the Proposed Plan (October 1980).
c. This allotment reclassified from ephemeral/perennial to ephemeral because of predominant ephemeral forage. See Appendix XIII to the Proposed Plan (October 1980).
d. This allotment reclassified from ephemeral/perennial to ephemeral to reduce impacts on wildlife resources. This reclassification done by management decision. See Appendix XIII to the Proposed Plan (October 1980).

F. *Carrying Capacity*—Has been determined by consideration of all surveys conducted on allotment, including June 1980 remote-sensing (Landsat) and large-scale photo transect information. Carrying capacity on public lands, no consideration of private or exchange of use. See element text and Appendix XIII to the Proposed Plan (October 1980).

G. *Adjustment for Condition Class Improvement*—Perennial and ephemeral/perennial allotments have a portion of the carrying capacity not allocated for consumption to allow an improvement of condition class. Ephemeral condition improvement considerations made in Allotment Management Plan. See element text and Appendix XIII to the Proposed Plan (October 1980).

H. *Bighorn Sheep Renewable Forage Allocation/Deer Renewable Forage Allocation*—Estimated population needs of deer and double the estimated populations of the bighorn sheep have been considered. Both of these allocations of livestock forage carrying capacity represent only the forage for which livestock and wildlife compete for the same species in the same locations. The remainder of wildlife forage needs is available from plant species not utilized by livestock and in regions of the allotment inaccessible to livestock grazing. No allocation made on proposed allotments because boundary adjustments have been made to eliminate any conflicts. See element text and

Appendix XIII to the Proposed Plan (October 1980).

I. *Burro Allocation—Wild Horse Allocation*—Allocation of livestock forage to burros and wild horses made on public land where their range includes all or portions of grazing allotments. Entire forage needs of burros and wild horses derived from public lands, with no allocation from private lands they may range on. See element text and Appendix XIII to the Proposed Plan (October 1980).

J. *Livestock Forage Allocation*—After allocation to previous needs has been satisfied from total carrying capacity, the remainder is considered for livestock. Where the remainder is greater than current preference use, then present use is maintained until monitoring shows low utilization and a demand for more AUMs. If the remainder is lower than current preference, then allotment preference will be reduced until monitoring demonstrates more AUMs available. See element text and Appendix XIII to the Proposed Plan, (October 1980).

K. *Special AMP Provisions*—These provisions have been designed to eliminate livestock conflicts with wildlife. Proposed allotment boundaries have been adjusted to alleviate conflicts with wildlife. See element text and Appendix XIII to the Proposed Plan, (October 1980).
   a. Special wildlife objectives:
      A–1 Specific bighorn sheep objectives.
      A–2 Specific desert tortoise objectives for highly crucial habitat.
      A–3 Specific desert tortoise objectives for crucial habitat.
   b. Riparian area protection improvements.
   c. Special monitoring requirements (e.g., exclosures, utilization checks, etc.).
   d. ACEC protection practices.
   e. Season-of-use consideration.

L. *AMP Implementation Priorities*—Were based on other resource values, range condition, percentage of public land, and opportunities for mitigation of adverse impacts on livestock operation. Consideration given to the number of allotments in resource area and comparison between allotments in the same resource area. See element text and Appendix XIII to the Proposed Plan (October 1980) for more details.
   High —Prepare and implement activity plan as soon as possible.
   Medium —Prepare and implement activity plan as soon as all high-priority allotments are completed.
   Low —Prepare and implement activity plan as soon as all medium-priority allotments are completed.
   a. Gold Valley Allotment already has an Allotment Management Plan. Monitoring has demonstrated an increase of AUMs is available because of low utilization.
   b. These allotments are portions of Nevada allotments already managed under an Allotment Management Plan administered by that State.
   c. Coordination with Las Vegas, Nevada, BLM District Office needed during preparation of AMP.
   d. Possible rare and endangered plant species located in allotment.

TABLE 6

PLANNED LIVESTOCK GRAZING MANAGEMENT
PART A

Map[A] No.	Grazing Allotment[B] Name	BLM File Number	Public Acreage[C] AC.	Rangeland[D] Condition RATING	Rangeland[D] Condition FACTORS	Class of Livestock	Existing Use[E] Preference AUMs	Existing Use[E] Ephemeral (5 Year Avg.) AUMs	Existing Use[E] Carrying[F] Capacity AUMs	Proposed Plan[G] Adjustments For Condition Class Improvement[H] AUMs	Proposed Plan[G] Bighorn Sheep Renewable Forage Allocation[I] AUMs	Proposed Plan[G] Deer Renewable Forage Allocation AUMs	Proposed Plan[G] Burro Renewable Forage Allocation[J] AUMs	Proposed Plan[G] Wild Horse Renewable Forage Allocation[J] AUMs	Proposed Plan[G] Livestock Renewable Forage Allocation[J]	Proposed Plan[G] Special AMP Provisions (See Headnotes)[K]	Proposed Plan[G] AMP Implementation Priorities[L]
	PERENNIAL																
1.	Fishlake Valley	6003	1,482	Good		Cattle	52		96						52		Low[M]
2.	Bar 99	6001	13,150	Good	B	Cattle	307		1,147				27		307		Low[M]
3.	Deep Springs	6005	44,062	Fair	A,B	Cattle	1,250		1,410	353		13		26	1,018	A,D	Med
4.	Last Chance	6004	101,324	Fair	A,B	Cattle	3,267		4,338	1,085	13	5	164	16	3,055	A-1,B	High[M]
5.	Oasis Ranch	6000	22,515	Good	B	Cattle	656		1,297				39	14	656	B	Low[M]
6.	South Oasis	6006	15,499	Fair	B	Cattle	477		1,062	266			223	65	477		Med
7.	Darwin	5010	7,323	Fair	B	Horses	44		659	165			168		44		Low
8.	Hunter Mtn.	5013	59,580	Fair	B	Cattle	1,105		4,274	1,069	10	53	40		1,105	A-1	High
9.	Lacey-Cactus-McCloud	5012	421,172[a]	Fair	B,E	Cattle	4,873		22,444	5,611	6	168	4,949	2,021	4,873	A-1,B	High
10.	Olancha Common	5011	11,934	Good		Cattle	606		1,009			300			606	E	Med
						Sheep /											
11.	Tunawee Common	5009	46,883[a]	Fair	B	Cattle	1,954		2,335	583			212		1,540	A	Med
16.	Oak Creek	5015	160	Fair		Cattle	16		20	4					16		Low
18.	Warren	5002	584	Good	A,C	Sheep	55		55						55		Low
	Perennial Total		745,668				14,662		40,146	9,136	29	539	5,822	2,142	13,804		

TABLE 6—Continued

PART B

Map[A] No.	Grazing Allotment[B] Name	BLM File Number	Public Acreage[C] AC.	Rangeland[D] Condition RATING	Rangeland[D] Condition FACTORS	Class of Livestock	Existing Use[E] Preference AUMs	Existing Use[E] Ephemeral (5 Year Avg.) AUMs	Existing Use[E] Carrying[F] Capacity AUMs	Adjustments For Condition Class Improvement[G] AUMs	Bighorn Sheep Renewable Forage Allocation[H] AUMs	Deer Renewable Forage Allocation AUMs	Burro Renewable Forage Allocation[I] AUMs	Wild Horse Renewable Forage Allocation[I] AUMs	Livestock Renewable Forage Allocation[I] AUMs	Special AMP Provisions (See Headnotes)[J]	AMP Implementation Priorities[K]
	EPHEMERAL /PERENNIAL					Sheep/											
17.	Rudnick Common	5008	153,093	Fair	A,C	Cattle	26,210	[a]	8,291	2,073					6,218	C	High
19.	Walker Pass Common	0077	87,957	Fair	A,C	Cattle	7,242	[a]	4,519	1,130		21			3,368	B,C	High
20.	Pahrump	5000	12,286	Fair		Cattle	550	[a]	471	118					353	A-1	Low[L]
						Sheep/											
21.	Hansen Common	5006	40,131	Good	A	Cattle	354	698	1,196			54			354		Med
27.	Harper Dry Lake	7,119	12,816	Good	C	Cattle	0	740[b]	406						406	A-3,B,C	Med
34.	Valley Well	7117	640	Fair		Cattle	24	0	31	7					24	A-3	Low
35.	Newberry /Ord	7110	25,503	Fair	A,C,D	Cattle	0	1,062[b]	1,031	258					773	C	High
36.	Rattlesnake Cyn.	7111	24,328	Good	C,D	Cattle	1,044	0	1,044						1,044		Med
37.	Whitewater Cyn.	7118	26,878	Good	B,C	Cattle	768	0	1,392			148	38		768		Med
39.	Clark Mountain	7203	88,312	Fair	B	Cattle	1,872	0	2,633	658	20	40			1,872	A-1,2,B,E	High[c]
40.	Colton Hills	7202	147,827	Good	B	Cattle	2,880	480	3,986		35	72			2,880	A-1,2,3,B,E	High
41.	Crescent Park	7213	31,780	Good		Cattle	1,560	0	1,704		15	14			1,560	A-1,2,B,E	High[b]
43.	Granite Mountain	7211	276,125	Good	B,C	Cattle	4,716	1,845	4,145		104	38			4,003	A-1,B,E	Med
44.	Gold Valley	7212	16,190	Good	B	Cattle	1,200	0	1,314		10	35			1,269	A-1,B,E	Low[L]
45.	Horsethief Springs	7207	137,418	Fair		Cattle	2,424	0	5,626	1,407	9	19			2,424	A-1,B,E	Med
46.	Kessler Springs	7208	252,172	Good	A,B	Cattle	8,016	1,700	10,334		6	163	462		8,016	A-1,2,B,E	High
47.	Lanfair Valley	7210	339,553	Good	A,B,C	Cattle	12,168	2,300	15,853		107	67		72	12,168	A-1,2,B,E	High
49.	Round Valley	7216	653	Poor	A	Cattle	27	0	62	31					27	A-1,B,E	Low
50.	Valley View	7200	281,802	Good	B	Cattle	8,485	1,500	9,418		12	10	630		8,485	A-1,2,B,E	High
51.	Valley Wells	7209	237,258	Fair	B	Cattle	4,848	900	6,681	1,670			371		4,640	A-1,B,E	Med
53.	Jean Lake	7217	9,609	Good		Cattle	312	0	251						251	A-2	Med
	Eph /Per Total		2,202,331				84,700	11,225	80,388	7,352	318	681	1,501	72	60,903		

TABLE 6—Continued

PART C

Map[A] No.	Grazing Allotment[B] Name	BLM File Number	Public Acreage[C] AC.	Rangeland[D] Condition RATING	FACTORS	Class of Livestock	Existing Use[E]: Preference AUMs	Existing Use[E]: Ephemeral (5 Year Avg.) AUMs	Existing Use[E]: Carrying[F] Capacity AUMs	Adjustments For Condition Class Improvement[G] AUMs	Bighorn Sheep Renewable Forage Allocation[H] AUMs	Deer Renewable Forage Allocation AUMs	Burro Renewable Forage Allocation[I] AUMs	Wild Horse Renewable Forage Allocation[I] AUMs	Livestock Renewable Forage Allocation[I] AUMs	Special AMP Provisions (See Headnotes)[K]	AMP Implementation Priorities[L]
	EPHEMERAL																
12.	Antelope Valley	5004	6,500	Fair	A,C	Sheep		529									Low
13.	Bissel	5001	4,002	Fair	A,C	Sheep		308								A-3	Low
14.	Cantil Common	5005	305,000	Fair	A,C	Sheep		8,435								A-2,3	High
15.	Monolith Cantil	5007	23,043	Good	A,C	Sheep		200								A-2,3	High
22.	Boron Sheep	7102	4,714	Good	A	Sheep		157								A-3	Med
23.	Buckhorn Cyn.	7103	16,791	Fair	A	Sheep		702								A-3	Med
24.	Goldstone	7104	9,006	Good	D	Sheep		572									Low
26.	Gravel Hills	7107	65,598	Good		Sheep		2,698								A-2,3	High
28.	Lava Mtns.	7108	16,830	Good		Sheep		568								A-2	High
29.	Pilot Knob	7106	97,920[a]	Good	B,E	Cattle		3,584								A-3	Med
30.	Shadow Mtns.	7113	36,583	Fair	A,C	Sheep		2,557									Low
31.	Spangler Hills	7112	66,899	Good	C	Sheep		999								A-3	Med
32.	Stoddard Mtn.	7114	170,126	Good	A,C	Sheep		1,645								A-2,3	High
33.	Superior Valley	7116	167,648	Good	C,D	Sheep		2,247									Med
38.	Afton Canyon	7215	41,825	Fair	C	Cattle		359									Low
42.	Cronese Lake	7219	51,000	Good		Cattle		1,019								A-3	Med
						Horses /											
48.	Piute Valley	7204	33,468	Good		Cattle		180									High
52.	Ford Dry Lake	7044	19,089	Good		Sheep		2,720									
54.	Lazy Daisy	7220	451,617	Good	B,C	Cattle		3,192[d]								A-1,2,3	High
55.	Sheep Driveway	5098	23,040	Fair	A,C	Sheep		1,353									
	Ephemeral Total		1,610,699					34,024									
	Total of all Existing Allotments		4,558,698				99,362	45,249	120,534	16,488	347	1,220	7,323	2,214	74,707		

TABLE 6—Continued

PART D

Map[a] No.	Grazing Allotment[b] Name	Public Acreage[c] AC.	Rangeland[b] Condition RATING	Rangeland[b] Condition FACTORS	Class of Livestock	Carrying[c] Capacity AUMs	Burro Renewable Forage Allocation[c] AUMs	Wild Horse Renewable Forage Allocation[c] AUMs	Livestock Renewable Forage Allocation[c] AUMs	AMP Implementation Priorities[c]
	PROPOSED ALLOTMENTS									
	Ephemeral /Perennial				Sheep /					
57.	Rattlesnake Annex	7,454	Good	C,D	Cattle	592			592	
60.	Round Mtn.	14,000	Good	D	Cattle	1,048			1,048	
66.	Death Valley Jct.	18,150	Good	B	Cattle	1,370	17	59	1,294	c d
69.	Ord Mtn. Extension	41,100	Good	B	Cattle	1,572			1,572	
71.	Whitewater Cyn. Extn.	3,600	Good	B	Cattle	142			142	
80.	Pahrump Extension	41,535	Good		Cattle	1,569			1,569	
Proposed Eph /Per Total		125,839				6,293	17	59	6,217	
	Ephemeral									
58.	Johnson Valley	115,000	Fair	A,C	Sheep					
59.	Ludlow	43,300	Good	A	Sheep					
62.	Rice Valley	37,800	Good	C	Sheep					
63.	Palen	50,500	Good	C,D	Sheep					
64.	Ford Dry Lake Annex	47,200	Good	A	Sheep					
65.	Homewood Cyn.	12,900	Fair	B	Sheep					
73.	Eureka Valley	3,500	Good	B	Cattle					
74.	Last Chance Ext.	8,000	Good	A,B	Cattle					
75.	Superior Valley Ext.	35,000	Good	C,D	Sheep					
Proposed Ephemeral Total		353,200								
Total of all Proposed Allotments		479,039				6,293				

CALIFORNIA DESERT CONSERVATION AREA

Livestock Grazing Element

	EXISTING	PROPOSED
PERENNIAL		
EPHEMERAL / PERENNIAL		
EPHEMERAL		

GRAZING ALLOTMENTS

PERENNIAL:
- 1- Fishlake Valley
- 2- Bar 99
- 3- Deep Springs
- 4- Last Chance
- 5- Oasis Ranch
- 6- South Oasis
- 7- Darwin
- 8- Hunter Mountain
- 9- Lacey / Cactus / McCloud
- 10- Olancha Common
- 11- Tunawee Common
- 16- Oak Creek
- 18- Warren

EPHEMERAL/PERENNIAL:
- 17- Rudnick Common
- 19- Walker Pass Common
- 20- Pahrump
- 21- Hanson Common
- 27- Harper Dry Lake
- 34- Valley Well
- 35- Newberry / Ord
- 36- Rattlesnake Canyon
- 37- Whitewater Canyon
- 39- Clark Mountain
- 40- Colton Hills
- 41- Crescent Peak
- 43- Granite Mountain
- 44- Gold Valley
- 45- Horsethief Springs
- 46- Kessler Springs
- 47- Lanfair Valley
- 49- Round Valley
- 50- Valley View
- 51- Valley Wells
- 53- Jean Lake

EPHEMERAL:
- 12- Antelope Valley
- 13- Bissel
- 14- Cantil Common
- 15- Monolith Cantil
- 22- Boron Sheep
- 23- Buckhorn Canyon
- 24- Goldstone
- 26- Gravel Hills
- 28- Lava Mountains
- 29- Pilot Knob
- 30- Shadow Mountains
- 31- Spangler Hills
- 32- Stoddard Mountain
- 33- Superior Valley
- 38- Afton Canyon
- 42- Cronese Lake
- 48- Piute Valley
- 52- Ford Dry Lake
- 54- Lazy Daisy (a) See text
- 55- Sheep Driveway

PROPOSED ALLOTMENTS

EPHEMERAL/PERENNIAL:
- 57- Rattlesnake Annex
- 60- Round Mountain
- 66- Death Valley Junction
- 69- Ord Mountain Extension
- 71- Whitewater Canyon Extension
- 80- Pahrump Extension

EPHEMERAL:
- 58- Johnson Valley
- 59- Ludlow
- 62- Rice Valley
- 63- Palen
- 64- Ford Dry Lake Annex
- 65- Homewood Canyon
- 73- Eureka Valley
- 74- Last Chance Extension
- 75- Superior Valley Extension

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

TABLE 7
LIVESTOCK GRAZING SUMMARY

EXISTING GRAZING ALLOTMENTS	Acres in Grazing Allotments	Current Use Based on 5 Yr Ave. (AUMs)	Perennial Carrying Capacity (AUMs)	Adjustments Made to Improve Condition Rating (AUMs)	Forage Allocation to Wildlife (AUMs)	Forage Allocation to Wild Horses & Burros (AUMs)	Forage Allocation to Livestock (AUMs)	Non-Allocated AUMs from Carrying Capacity[1]
Perennial Allotments	745,668	14,662 per	40,146	9,136	568	7,964	13,804	8,674
Ephemeral /Perennial Allotments	2,202,331	84,700 per 11,225 Eph	80,388	7,352	999	1,573	60,903	9,561
Ephemeral Allotments	1,610 699	34,024						
TOTALS FOR EXISTING GRAZING ALLOTMENTS	4,558,698	99,362 per 45,249 Eph	120,534	16,488	1,567	9,537	74,707	18,386
PROPOSED GRAZING ALLOTMENTS								
Ephemeral /Perennial Proposed Allotments	125,839		6,293			76	6,217	
Ephemeral Proposed Allotments	353,200							
TOTALS FOR PROPOSED ALLOTMENTS	479,039		6,293			76	6,217	

[1]See discussion under allocations in Livestock Grazing Element.

RECREATION ELEMENT

The California Desert attracts millions of visitors annually to its wide spectrum of recreational opportunities. Its diverse landscapes create a variety of physical and psychological settings which provide a "desert experience" of natural beauty, solitude, and freedom from the structure and regulations of the urban areas of southern California, where 85 percent of these visitors live.

With expanded leisure time and growing affluence of southern Californians, conflicts have arisen between those who use vehicles as a means of access and those who operate vehicles as a recreational activity. Access can be for a variety of purposes, including economic pursuits and for recreation such as hunting and rockhounding. In addition, recreationists compete for space with other resource users. While strongly advocating that recreational facilities and regulations remain minimal, desert recreationists increasingly demand the protection of the natural and cultural values which are essential to most desert recreation. Scenic values are often cited by the public as the Desert's most important resource.

The California Desert is already important as a reservoir of open space and as a place for outdoor recreation. While the BLM as an agency is not readily known, lands managed by the Bureau are especially significant to recreationists. The public lands will become increasingly important since they are closer to urban centers than most other recreation areas, such as Death Valley, and offer a wider variety of recreation experience.

A substantial increase in demand for facilities and services, especially educational and interpretive programs, will occur primarily because of increased population growth in southern California. Other factors include:

(1) An emerging awareness of desert resources and values,

(2) Saturation of other outdoor recreation areas in southern California,

(3) Energy shortages and economic stresses which will cause more people to come to the relatively close Desert and stay longer, and

(4) Technological innovation in recreational equipment which will influence user trends and consequently the demand for various resources.

The outline for this element is as follows:

GOALS
ACTIONS PLANNED
THE RECREATIONAL OPPORTUNITY SPECTRUM
Open Space Area
Recreation Activities
Nature Study and Resource-Oriented Recreation
Education and Research
Wilderness Opportunities
Motorized-Vehicle Play
Organized Competitive Vehicle Events
ACCESS
VISUAL RESOURCE MANAGEMENT PROGRAM
VISITOR SERVICES PROGRAM
Visitor Information
Visitor Protection and Assistance
VISITOR FACILITIES
IMPLEMENTATION
PRIORITY TASKS
MONITORING
LIMITATIONS DURING INTERIM MANAGEMENT

GOALS

The goals of the Recreation Element are to:

(1) Provide a wide range of opportunities within resource capabilities for engaging in recreational activities for all desert users.

(2) Provide recreational management and facilities consistent with sound visitor and resource protection practices, with emphasis on conserving desert resources that have special scenic, historic, scientific, or recreational values.

(3) Protect desert users and minimize conflicts among recreationists and between recreationists and users of other desert resources.

(4) Enhance the enjoyment of the recreation experience and aid resource protection by increasing understanding and knowledge of the California Desert's resources and uses. Pursue this goal through public involvement in volunteer efforts, interpretation and environmental education programs, community outreach efforts, and other programs.

(5) Monitor and evaluate visitor use and preferences and adjust Bureau programs to meet changing needs where appropriate.

(6) Provide for off-road-vehicle recreation use where appropriate in conformance with FLPMA, Section 601, and Executive Orders 11644 and 11989.

ACTIONS PLANNED

RECREATIONAL OPPORTUNITY SPECTRUM

The Desert provides the resources necessary for a variety of recreational experiences. The Bureau is committed to providing opportunities for the visitor to obtain various types of outdoor recreational experiences and benefits dependent upon a combination of (1) the kind of activity desired, (2) the physical or locational setting, and (3) the level of experiences (psychological and/or physiological). The planning tool used to consider these opportunities is called the Recreational Opportunity Spectrum and is outlined in Appendix V to the Proposed Plan (October 1980).

As addressed here, various recreational opportunities are considered in groups along a continuum of opportunities ranging from intensive motorized-vehicle-oriented activities at one end to resource-oriented activities at the

other. These activity groupings have been developed primarily for planning purposes and may address either specific types of activities or general recreational concerns. Area recreation opportunity maps are being prepared and will be distributed to the public through the California Desert District Office's visitor services program.

Open-Space Areas

The Desert provides outstanding opportunities for activities such as soaring, target shooting, hang gliding, model rocket and airplane flying, and land sailing. Open space, particularly that available on dry lakebeds, is a basic requirement for these activities.

Superior and Ivanpah Dry Lakes have been specifically designated for nonmotorized open-space recreational activities. (See also Table 8 in the Motorized Vehicle Element).

Recreation Activities

The California Desert's diversity of natural values provides a myriad of things for people to do in pursuing their recreational interests.

There is a wealth of geological areas to lure the rockhound and the hobby prospector. Hunters find the Desert a challenge for game species from quail to mule deer.

Sightseers, painters, and photographers have long known the recreational delights of spectacular spring wildflower displays and year-round birdwatching, as well as just "poking around" and soaking up the desert atmosphere.

Regardless of the methods available to participate in the desert recreation, provision to ensure that these opportunities will continue must be a constant concern of both management and desert users.

Where significant demand exists for recreation use immediately adjacent to desert communities, BLM will manage public lands to assist in meeting that demand.

Nature Study and Resource-Oriented Recreation

The emphasis of this opportunity is on the natural environment, as there is, to many, a close correlation between environmental quality and the quality of the recreational experience. Many activities, such as sightseeing, camping, and hiking, depend on an unspoiled natural setting for a rewarding experience. Public lands will be managed according to their specific multiple-use class designation to provide for a wide range of natural resource recreational opportunities.

Construction has been completed (in 1980) on 70 miles of the 160 miles of the Pacific Crest National Scenic Trail which traverses BLM-managed lands. Survey and construction activities are continuing on the remaining sections. A management plan is being completed for the entire BLM portion of the trail.

The Bureau is also proposing portions of the 139-mile Old Mojave Road and Butterfield Stage Route as a National Historic Trail. Portions of the road, which extend from the Colorado River to San Bernardino, are open to motorized-vehicle travel. The proposal is presently in the second phase of study.

In response to public comment urging the inclusion of a Desert Trail in the National Trails System, the Bureau will reconsider the Desert Trail concept and work toward its implementation if its feasibility appears positive.

Recreation Activity Management Plans will consider connector trails from urban centers to trail systems in the CDCA.

Education and Research

Scientific research and education on public lands, while not recreation in a strict sense, account for a quarter of a million visitor-use days annually.

Many college, university, and pre-college classes visit the Desert for educational purposes. A number of special areas have been set aside for in-depth study of desert ecology and the effect of human use on desert resources. Still other research areas are devoted to the study of rare or endangered plants and wildlife species. Many of the studies and research findings are incorporated into the Bureau's evaluation of its management programs and environmental studies and assessments. Some new areas will be established. All will be incorporated into BLM's on-going monitoring systems.

Wilderness Opportunities

Opportunities for solitude and primitive or unconfined forms of recreation are provided in the Desert. The Bureau has assured the public of opportunities for quality wilderness experiences by proposing wilderness areas which will protect many features unique to the desert and which will provide protection for a variety of ecosystems. (See Wilderness Element for specific information.)

Motorized-Vehicle Play

Motorized-vehicle play open areas are designated for the enjoyment and challenge of the vehicle operator. They posses a variety of terrain types, surface textures, and grade variations. Selections were based on the following considerations and criteria:

(1) Traditional, intense motorized-vehicle use has been recorded in the area.

(2) Boundaries of the area are easily recognizable in order to manage the activity.

(3) Soil characteristics are acceptable for such use.

(4) Sensitive and significant plants and wildlife are not present or can be avoided, or adverse impacts on them mitigated.

(5) Cultural and Native American resources can be

avoided or adverse impacts on them mitigated.

(6) Land-use patterns, access, and private and other public ownership conflicts can be resolved.

Recreation Activity Management Plans will be developed for each vehicle play open area.

The BLM is also currently working with the State of California Parks and Recreation Department personnel to provide a variety of motorized-vehicle use opportunities and facilities through the State Off-Highway Vehicle Grant Fund. The primary thrust of this program is to make areas suitable for motorized-vehicle recreation available to the public. Use of the State OHV funds in the CDCA will be consistent with the objectives of this element and of the multiple-use guidelines of the Plan.

Organized Competitive Vehicle Events

Organized competitive events will be allowed in Multiple-Use Class M and I areas and may be permitted to cross some Multiple-Use Class L areas on "approved vehicle routes of travel" (see Motorized Vehicle Access Element and Part 6, Appendix V to the Proposed Plan, October 1980). The Plan provides for long-distance, point-to-point events in the CDCA by delineating three competitive recreation routes (see Motorized Vehicle Access map). These three routes—Johnson Valley to Parker, Parker "400," and Stoddard Valley to Johnson Valley—reflect a combination of: (1) completion of environmental assessments, (2) minimal environmental impact resulting from past events, (3) variety of competitive challenge, and (4) previous usage. These routes are established exclusively for permitted competitive recreation use and are not for access or casual recreation unless specifically "approved" in later actions. Permits issued for the use of these routes will include stipulations consistent with the classes through which they pass. All competitive events will require permits and appropriate resource, safety, and management stipulations.

This management provision of events in Class L will allow for an appropriate number of events by carefully controlling, but not foreclosing, access across sensitive areas. Criteria for race events are contained in the multiple-use class guidelines. Because of potentially sensitive resources in Multiple-Use Class L areas, race routes through these areas must comply with the following additional requirements:

(1) All courses will remain on routes of travel that have been "approved" for motorized-vehicle use in Class L, except for the three routes named above.

(2) Pit and spectator areas will not be allowed. (Check points will be allowed for crews only.)

(3) Fragile and/or significant areas will be avoided.

(4) The BLM will require the event sponsors to mitigate potential negative impacts and may require rehabilitation where feasible.

(5) All racecourses are temporary and may not be used on a continual basis pending specific resource studies. (See Appendix V to the Proposed Plan, October 1980, for further clarification.)

(6) Long-term adverse impacts will not be allowed.

(7) Event participants may have to traverse Class L under controlled (yellow flag) conditions (e.g., no passing, timed speeds, maintained roads) as appropriate for resource protection and public safety.

(8) Length (mileage) of the event passing through Class L will be a key factor in determining use.

(9) Width of the course will be the minimum practicable for resource protection and public safety.

(10) All other alternative routes have been considered.

All criteria are in addition to those required by 43 CFR 8372 and BLM Manual 6260.

Until such time as "approved routes of travel" can be identified in Class L, the passage of vehicles under permit for a competitive event will be confined to paved or maintained roads. For purposes of the Plan, the term "maintained road" will be defined as "regularly or frequently maintained by continuous use (e.g., passage of vehicles) or machine maintenance." Final determination of regular or frequent maintenance will be by the California Desert District Manager.

ACCESS

To engage in most desert recreational activities outside of open areas, visitors must use motorized vehicles and usually travel on some previously used or marked motorized-vehicle route. Understandably, vehicle access is among the most important recreation issues in the Desert. A primary consideration of the recreation program, therefore, is to ensure that access routes necessary for recreation enjoyment are provided. Specific route identification, as outlined in the Motorized-Vehicle Access Element, will be initiated upon adoption of this Plan.

VISUAL RESOURCES MANAGEMENT PROGRAM

The CDCA has a superb variety of scenic values. The public considers these scenic values a significant resource. The Bureau recognizes these values as a definable resource and an important recreation experience. These visual resources will receive consideration in Bureau of Land Management resource management decisions.

Many management activities involve alteration of the natural character of the landscape to some degree, the Bureau will take the following actions to effectively manage for these activities:

(1) The appropriate levels of management, protection, and rehabilitation on all public lands in the CDCA will be identified, commensurate with visual resource management objectives in the multiple-use class guidelines.

(2) Proposed activities will be evaluated to determine the extent of change created in any given landscape and to specify appropriate design or mitigation measures

using the Bureau's contrast rating process.

The contrast rating process is a tool used to determine the extent of visual impact that proposed resource management activities would create in a landscape. It serves as a guide for reducing visual impacts to acceptable levels as defined by the visual management objectives and multiple-use class guidelines.

VISITOR SERVICES PROGRAM

Visitor Information

The Bureau recognizes the public's desire to easily obtain high-quality and correct information about the CDCA. The public's willingness to participate in BLM management decisions and their implementation is also apparent. Four basic components of visitor information are discussed below.

Environmental Awareness Program

Interpretation and environmental education programs will be employed throughout the Desert. Interpretation is defined as "creating understanding and awareness of the environment in the minds of on-site visitors." Environmental education is a more formal approach designed to meet the needs of schools and other institutions and organizations. These programs will focus upon providing practical and interesting information that will enhance desert recreational experiences. Where appropriate, BLM visitor services personnel will provide scheduled and informal programs on topics varying from discussion and exploration of natural areas to safe vehicle operation in motorized-vehicle play open areas.

Outreach Program

The Bureau will establish a public affairs information office in the Los Angeles metropolitan area. The office will provide information about the Desert to the public on a closer, more rapid basis than either District, State, or other field offices. Information on the CDCA will also be supplied through other agencies.

The feasibility of a cooperative effort with other resource agencies, both State and Federal, is being investigated.

Volunteer Program

Individuals and various citizens' groups will be asked to identify specific land-management activities in which they would like to participate. The BLM will identify projects and sites which could be appropriate for volunteer efforts for development, improvement, or maintenance. Legislation authorizing a volunteer program for BLM is pending in Congress—more details on use of volunteers are included in the Implementation section of this document.

Maps and Brochures

A series of maps and brochures will be developed for the Desert, ranging from general maps and theme brochures to suitable brochures and access maps for specific areas.

Visitor Protection and Assistance

Through regularly scheduled patrols, BLM Rangers and other visitor services personnel will provide the following services to aid the public in safe and enjoyable desert recreation. These services will generally be provided on the ground.

Information—Visitor services personnel will provide maps, brochures, and other information about the Desert to the public.

Vehicle Assistance—Visitor services personnel will assist desert users with vehicle problems. (Services will be limited to minimum needed to gain access to "regular" services.)

Emergency Medical Assistance—Visitor services personnel will respond to visitor medical emergencies and will provide immediate assistance. (All visitor services personnel will be trained as Emergency Medical Technicians.)

Search and Rescue—Visitor services personnel will respond to initial search and rescue situations and direct operations until relieved by a Sheriff. (Under California law, County Sheriffs have the responsibility for search and rescue operations.) Further assistance will be provided at the request of the Sheriff.

Enforcement—Visitor services personnel will be responsible for obtaining compliance with Federal laws and regulations. In doing so, they will obtain assistance as necessary from other personnel or local law enforcement officers. The BLM Rangers are delegated Federal law enforcement officers. Visitor services personnel may also be responsible for insuring compliance with stipulations associated with various use permits.

Posting Signs—Posting signs is necessary in some areas. The Plan establishes various types of resource designations and sign posting will be provided to promote visitor use of the various areas consistent with management objectives. Regulatory signs will be kept to a minimum; most signs will be informational and directional. Standardized letter and symbol signs will notify visitors of recreational and interpretive sites throughout the CDCA.

VISITOR FACILITIES

As previously cited, most desert recreationists desire a minimum of facilities and such facilities will be kept to a minimum in the Desert. Due to limiting environmental conditions, visitor safety, resource protection, requirements of certain recreation activities, and the trend toward fewer but longer visits in economy vehicles which are not

self-contained, some facility development may be necessary.

Campgrounds, trailheads, parking loops, and visitor information kiosks are examples of visitor facilities which may be developed. The location, type, and extent of facility development will be determined in Recreation Activity Management Plans, which will be developed for specific geographic regions of the CDCA, using the Plan as a management framework. These will be developed with public participation.

Detailed resource studies (on-site investigations) will be conducted as an integral part of each specific site development plan to assure compatibility of resource values and facility development. Special attention will be given to avoidance of impacts on riparian areas. Facility development and recreational use will be allowed in these areas only if the quality and quantity of the wetland areas are not impacted.

Specific consideration will be given to developing facilities to accommodate the elderly and the handicapped. Consideration will include interpretive facilities and services for all of the senses.

Development of facilities by BLM will be closely coordinated with local, State, and other Federal agencies, Indian reservations, and private land owners. Care will be taken not to duplicate or interfere with other facility suppliers.

IMPLEMENTATION

PRIORITY TASKS

With adoption of this Plan the various guidelines outlined above are immediately effective. The planned actions will be implemented primarily through the Recreation Activity Management Plan and Site Plan processes.

A public outdoor-recreation interagency coordinating group, composed of representatives from local governments within the CDCA and from State and Federal agencies, will be formed to insure communications with all concerned public agencies within the CDCA for efficient and responsive management of the recreation resources.

In conjunction with the interagency group, public input will be encouraged to determine specific actions to be intiated in a given fiscal year. This will assist BLM in developing a priority action plan which will guide visitor management activities.

Site-specific planning and management activity can be expected to occur first within areas containing sensitive and/or unique resources. Wilderness Study Areas will receive priority attention as suitability determinations are finalized.

An environmental awareness prospectus for guiding the development of visitor information material and facilities will be prepared by each Resource Area within the CDCA.

MONITORING

Monitoring will be conducted to assure that recreational needs are being met and to gauge impacts of recreation on resources. Visitor safety, resource protection, and provision of high-quality recreational experiences are equally important.

Periodic surveys will be conducted to determine changes in attitudes, preferences, and desires among all user types.

Visitor-use flights will continue to determine amount and fluctuations of use. Approximately seven to 10 flights will be conducted annually.

Additionally, traffic counters will be placed on the ground in high-intensity use areas (e.g., campgrounds, open areas) to collect additional data on recreational use.

In all Class L areas, washes which have an approved route of access, "open" dunes and lakebeds, and ACECs, recreation use will be continuously monitored to identify impacts resulting from increased recreation-use encroachment on natural, cultural, or scenic values. An example of such an area is Central Algodones Dunes.

There will be a continuous effort made to evaluate the progress of the Environmental Awareness Program, with monitoring of such factors as: (1) the rate and type of requests from the public for services; (2) the amount of public involvement in the decision-making process; (3) regular assessment of the rate of cumulative environmental impacts related to recreation activities; and (4) the extent to which people voluntarily conform to the various rules and regulations that apply to desert recreation.

LIMITATIONS DURING INTERIM MANAGEMENT

Motorized-vehicle play areas will not be constrained by the Interim Management Policy which protects land under wilderness review (WSA). None of these motorized-vehicle areas overlap lands under wilderness review. However, competitive events outside open areas could be limited by interim management.

Developed facilities for recreation are to be added incrementally and for the most part would be temporary, unobtrusive, and primitive in nature; the interim management is not expected to conflict with the recreation-facility development program.

While the final status of WSAs is being considered by Congress, the visual resources of lands located within Wilderness Study Areas will be managed in accordance with Multiple-Use Class L guidelines. Following Congressional action on the wilderness status of each WSA, those designated as wilderness will be subject to Multiple-Use Class C guidelines, while those not designated will become subject to the visual resource guidelines specified under the appropriate multiple-use designation.

MOTORIZED-VEHICLE ACCESS ELEMENT

Other than those who are simply crossing it, most desert users travel some of the time on its network of maintained gravel and dirt roads, ways, trails, and accessible desert washes. There are many of these "routes of travel" in the CDCA.

According to one study, the CDCA has 15,000 miles of paved and maintained roads, 21,000 miles of unmaintained dirt roads, and 7,000 miles of vehicle-accessible washes. However, these routes are not evenly distributed, and desert topography and vegetation do not prevent, and even encourage, cross-country travel in motorized vehicles. Desert soils and vegetation retain the marks of this kind of travel for many years, except in a few places where occasional rains, windstorms, and flash floods erase them. Thus, one vehicle traveling cross-country can create a new route of travel. The proliferation of roads and trails in the CDCA has resulted in a serious problem in many areas and provides the most difficult management issue for BLM and the public.

Many of the Desert's loveliest and most fragile resources can only be enjoyed by use of vehicle access routes, but these resources are quickly destroyed if vehicles travel everywhere. Most people who go to the Desert revel in its spaciousness and the feeling of solitude and freedom it provides. However, growing numbers of vehicles and expansion of this network of roads and trails damage this solitude, and heavy-handed regulations to control this traffic would certainly affect the sense of freedom.

The question of managing access to the Desert is especially sensitive because it is confused with the use of vehicles for play as well as for gaining access–dunebuggies, motorcycles, and some four-wheel-drive vehicles classified by some under the general heading of "ORVs." Public comments make it clear that motorized-vehicle access and off-highway vehicle play need to be clearly separated and managed differently.

While the Bureau is responsible for vehicle use on public lands, much of the control of vehicle travel in the Desert will be the responsibility of the user, whether the goal is recreational or commercial. The Bureau of Land Management does not and will not have the funds or staff to oversee vehicle use throughout the Desert at all times. Therefore, rules for vehicle use must be fair, understandable, easy to follow, and reasonable if they are to be publicly accepted. Only commitment by the public, the owners of these lands, will insure success of rules and guidelines.

The outline for this element is as follows:

GOALS
ACTIONS PLANNED
VEHICLE DESIGNATIONS
APPLICATIONS OF "LIMITED" DESIGNATION
STOPPING AND PARKING
ACCESS ON WASHES, DUNES, AND DRY LAKES
IMPLEMENTATION
PRIORITIES
DESIGNATION PROCESS
ON-THE-GROUND IMPLEMENTATION
DESIGNATION REVISIONS
VEHICLE ACCESS PENDING IMPLEMENTATION OF DESIGNATION
MONITORING
ENFORCEMENT, COMPLIANCE, AND COOPERATION
LIMITATIONS DURING INTERIM MANAGEMENT

GOALS

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

(1) To avoid or minimize damage or degradation of the natural, cultural, and aesthetic values of the Desert;

(2) To provide a reasonable network of "routes of travel" which meets the needs of desert users, including commercial users and BLM's "neighbors," the private landowners and other public-land-managing agencies in the CDCA;

(3) To reduce to the greatest possible degree conflicts among desert users;

(4) To provide an element that is understandable, easy to follow, acceptable, and supported and encouraged by most desert users;

(5) To implement and manage these programs efficiently, economically, and cooperatively; and

(6) To provide for "appropriate" use of off-road recreational vehicles as directed by FLPMA and in conformance with Executive Orders 11644 and 11989.

ACTIONS PLANNED

The goals of the element will be accomplished by establishing rules for managing motorized-vehicle access on public lands, designating areas for appropriate vehicle access, and implementing designations and monitoring programs.

VEHICLE DESIGNATIONS

In accordance with legislation and policy, all public land in the California Desert is designated "open," "closed," or "limited" for vehicle use.

These designations are made on the basis of multiple-use classes with certain site-specific designations and exceptions as set forth in this element.

Laws, executive orders, policies, and regulations which cover motorized-vehicle use on public lands are described in detail in Appendix VI to the Proposed Plan (October 1980).

The vehicle-access designation and their locations in the CDCA are established by the Plan as follows:

Open

Vehicles may travel anywhere within the area. This will apply to (1) those lands in Class I specifically designated "open" for vehicle travel, as shown on Map 10; and (2) certain sand dunes and dry lakebeds as listed in Table 8.

Closed

No vehicle travel is allowed. This will apply to: (1) all wilderness areas when established by Congress unless exempted; (2) land in ACECs where provided for in the management plan for that ACEC; (3) certain sand dunes and dry lakebeds as listed in Table 8, and areas listed in Table 9 which were closed under the Interim Critical Management Plan (ICMP) (1973) and will remain so.

Note: Although the Motorized-Vehicle Access map (Map 10) shows all of Class C as "closed," these areas are currently managed under "approved routes of travel" until such time as Congress acts on the wilderness recommendations. They are shown on the map to illustrate what areas would be "closed" to vehicle access if Congress designates these areas as wilderness. Portions of these areas which are listed as "closed" in Tables 8 and 9 of this element are closed now.

Limited

Vehicle access will be on "routes of travel" in accordance with the rules for each multiple-use class or Special Area as outlined in this element. This will apply to: (1) all lands in Classes L and M, with differences explained below; (2) any land in Class I that is not specifically designated "open"; (3) land in Class C prior to its establishment as wilderness by Congress; and (4) land in ACECs and Special Areas in accordance with the area's management plan.

APPLICATION OF "LIMITED" DESIGNATION

"Limited" designated vehicle access means that motorized-vehicle access is only allowed on certain "routes of travel," which include roads, ways, trails, and washes. Seasonal closures, speed limits, etc., may be applied (see Appendix VI to the Proposed Plan, October 1980). Designated vehicle access as it applies to Class L and Class M is as follows:

In *Class L* only those "routes of travel" that are specifically "approved" may be used by motor vehicles. Identification of these "approved" routes will be done by maps and signs. In recognition of the sensitivity of Class L areas, "approved" routes of access will be carefully chosen. However, these may include washes and other nonmaintained access routes. This will also apply to Class C prior to wilderness established by Congress and to ACECs where motorized-vehicle access is allowed in the management plan.

In *Class M* existing "routes of travel" may be used for motorized vehicle access, except those that are specifically identified as "closed." "Existing routes of travel" is defined as all routes established before December 31, 1978 (the date of full aerial photo coverage of the CDCA). This will also apply to any areas in Class I not designated as "open."

Both Class M and Class L routes will require immediate initiation of identification and/or mapping. Class M areas may be subject to proliferation of roads, ways, or trails either intentionally or unintentionally. This will necessitate rapid means of identifying the existing network of routes, monitoring use to see if impacts increase, and action to further limit or designate routes if this proliferation occurs.

STOPPING AND PARKING

Stopping and parking and/or vehicular camping along "routes of travel" will be limited to within 100 feet of the route. In some locations, specific parking or stopping areas may be signed "open" or "closed" to protect fragile or sensitive resource values adjacent to the route or to provide a safe place to stop. The intent of this policy is to curtail the uncontrolled widening and/or extension of access routes by vehicles stopping or parking along the route.

ACCESS ON WASHES, SAND DUNES, AND DRY LAKES

Washes

Vehicle access using desert washes will be governed by the designation for the area in which the wash is located. In areas designated "closed," vehicle access in desert washes will be prohibited. In areas designated "open," vehicle access in desert washes will be permitted. In all "limited" areas, vehicle use in desert washes will be restricted to "existing" (Class M) or "approved" (Class L) vehicle routes of travel. In addition, washes as access routes may have some type of travel limitation, e.g., speed limits, seasonal closure, etc., imposed to protect the resource values found in or along the wash.

Sand Dunes and Dry Lakes

Because of the unique geography of these areas, "routes of travel" cannot be readily delineated. Therefore, significant sand dunes and dry lakes within the California Desert are designated either "open" or "closed" to vehicular travel regardless of the multiple-use class in which the dune system or dry lake is located. The management objective for each dune system or dry lake will dictate the area's vehicle-use designation. Special monitoring requirements will be needed to protect the resource values in these areas, which are listed in Table 8.

TABLE 8

Designated Vehicle Access for Significant Dry Lakes and Sand Dunes in the CDCA

Dry Lakes	Class	Motor Vehicle Access
1. Salt Dry Lake	L	Closed
2. Mesquite Dry Lake	M	Closed
3. Ivanpah Dry Lake	L	Closed[1]
4. Silurian Dry Lake	I	Open
5. Superior Dry Lake	L	Closed[1]
6. Harper Dry Lake	L	Closed
7. El Mirage Dry Lake	I	Open
8. Soggy Dry Lake	I	Open
9. Melville Dry Lake	I	Open
10. Means Dry Lake	I	Open
11. Soda Dry Lake	L	Closed
12. Ford Dry Lake	M	Open
13. Panamint Dry Lake (south of Hwy. 190)	L	Open
14. Panamint Dry Lake	L	Closed
15. Silver Dry Lake	L	Closed[2]
16. Coyote Dry Lake	M	Closed
Sand Dunes		
1. Eureka Dunes	C	Closed
2. Saline Dunes	L	Closed
3. Panamint Dunes	C	Closed
4. Dumont Dunes	I	Open
5. Kelso Dunes	C	Closed
6. Cadiz Dunes	L	Closed
7. Imperial/Algodones/Dunes	C	Closed
	L	Open
	I	Open
8. Rice Valley Dunes	M	Open
9. Olancha Dunes	M	Open

[1]Open to non-motorized vehicles access (see Recreation Element).

[2]Except by permit.

IMPLEMENTATION

PRIORITIES

Priority for on-the-ground implementation of vehicle designations will be established based on the following considerations, in order of priority:

(1) Due to the sensitivity of the inventoried resource values, highest priority will be given to Multiple-Use Class C (WSA) and L areas and ACECs and Special Areas which are currently experiencing vehicle use inconsistent with the management objectives.

(2) Priority will be given to marking the boundaries of those open areas in Class I where high potential for confusion over boundaries exists and the boundaries of the military reservations.

(3) Vehicle-access designation will be implemented in Multiple-Use Class M areas which are currently experiencing vehicle use inconsistent with the management objectives.

(4) Vehicle-access designations will be implemented in Multiple-Use Class C and L areas in which there is little intensive vehicle use.

(5) Vehicle-access designations will be implemented in the remainder of Multiple-Use Class M areas and Multiple-Use Class I areas.

DESIGNATION PROCESS

Approval of the Plan constitutes the designation of all public lands in the CDCA. All "open" and "closed" areas identified on the Motorized-Vehicle Access Element map (Map 10) are designated and appropriate documentation actions are being initiated. (See Access and Routes of Travel Pending Implementation, below.)

ACCESS AND ROUTES OF TRAVEL PENDING IMPLEMENTATION

Since 1973 BLM has managed access and recreation and recreation-vehicle use under the Interim Critical Management Program (ICMP). An integral part of that program was the release of a series of 22 maps covering the entire CDCA. These maps illustrate the ICMP designations, through the use of a color code, and a network of access routes compiled from existing maps, public input, and field review. These maps show access in far greater detail than the small-scale desertwide map which simply showed designations.

With approval of the Desert Plan, the new designations have become effective. There are, however, major changes in designations from the ICMP, and BLM will not immediately be able to get on-the-ground signing or road approvals. For this reason, BLM will continue to use at least parts of the ICMP maps as they relate to access routes. These routes will apply in areas of Classes I, M, and L, which are not "open," "closed," or "preliminarily recommended (suitable or nonsuitable) wilderness areas." The color-coded designations on the ICMP maps *will not apply*.

For displaying vehicle-access areas, routes, and play areas on maps distributed to the public, a "zoning" system will be used. The designations will be based on the multiple-use classes in the Plan. They are as follows:

Zone A—Open

Vehicles may travel anywhere within the area. This will apply to: (1) areas specifically designated Class I "open," and (2) certain sand dunes and dry lakebeds.

Zone B—Limited Vehicular Access

Interim "existing routes of travel," based on the existing ICMP, will be used *only* until specific "routes of travel" can be identified. "Routes of travel" in this zone will be limited to the "existing routes of travel" as identified in the Interim Critical Management Plan on a temporary basis. In approximately two years, the permanent routes of travel in Zone B will be identified either as "approved" (Multiple-Use Class L) or "existing" (Multiple-Use Classes M and I), and these interim maps will be revised.

Zone C—Closed to Vehicular Access

No vehicle travel is allowed. This will apply to: (1) some land in ACECs where provided for in the ACEC Management Plan, (2) certain sand dunes and dry lakebeds and washes, (3) areas designated as "closed" on the list which follows in this section, and (4) wilderness areas when established by Congress unless exempted.

As on-the-ground implementation of the Plan is completed (by signing or other means) vehicle routes may be added or subtracted from this network in accordance with the procedures contained elsewhere in this element. Legitimate access needs not represented on the maps will be added on a case-by-case basis.

Areas in Classes I and M which are "open" or "limited to existing routes of travel" have become effective with approval of the Plan.

In Class C areas, vehicle use will occur as if the areas were Class L until such time as the area formally becomes wilderness, except in those cases where vehicle use could impair wilderness characteristics.

In lands under wilderness review, vehicle use will be managed in accordance with the underlying class and ICMP access routes, except for Class C, although the WSA Interim Management Policy regarding nonimpairment will apply. Several areas closed for access under the ICMP are proposed for continued closure or are preliminarily recommended as wilderness or restricted under ACEC Management Plans. Implementation may or may not involve boundary adjustments. To avoid a redesignation process and also to avoid misunderstanding in interpretation of the Plan maps, the areas listed in Table 9, designated as "closed" under the ICMP, will remain closed under the Plan regardless of underlying class, unless modified by subsequent implementing action.

In addition, the following areas which have been closed under interim actions, or are closed by virtue of nonwilderness protection items in this Plan, are:

Desert Tortoise Natural Area	L
Darwin Falls	M
Fossil Falls	L
Mecca Hills (NW half)	C
Squaw Spring	L

TABLE 9

Areas Designated "Closed" Under ICMP Which Remain Closed Under Desert Plan

ICMP Number	Area Name	Multiple-Use Class
1	Eureka Dunes	C
2	North Saline Valley	C
6a	Owens Peak	C
6b	El Paso Mountain	C
17	Amargosa Canyon	L
22	Clark Mountain	L
24	Kelso Dunes	C
33	Whipple Mountains	C
34	Turtle Mountains	C
43	Desert Lily	L
51	Orocopia Mountains	C
57	San Sebastian Marsh	L
62a	West and SW Areas of Davies Valley (In-Ko-Pah Mountains)	C
63	Crucifixion Thorn	L
64	Area Between Pinto Wash and International Boundary	L
66	Imperial Sand Dunes north of State Route 78	C

ON-THE-GROUND IMPLEMENTATION

The vehicle-management designations "open," "closed," and "limited" are commensurate with the multiple-use class management objectives for each area. While vehicle-access designations generally follow multiple-use class boundaries, there are several cases where the area's vehicle designation may be either more restrictive or less restrictive than that of the surrounding multiple-use class. Examples include ACECs, Special Areas, sand dunes, and dry lakes. Designated vehicle access as it generally will be applied is described below and will be referred to the District Multiple Use Advisory Council for review and advice.

Multiple-Use Class I

Generally three types of vehicular access needs fall into this multiple-use class: (1) access for motorized-recreation-vehicle play open areas, (2) access for intensive mining, and (3) access for intensive energy development. Public lands in Multiple-Use Class I will be either "open" or "limited to existing routes of travel." Vehicle use in open areas is restricted by the operating regulations and vehicle standards set forth in 43 CFR 8431 and 8343. "Open" area designations are effective with Plan approval. Other designations will be completed by 1987.

Motorized-recreation-vehicle play open areas will be signed and identified on maps for public distribution. Military land boundaries adjacent to motorized-vehicle play open areas will be signed, and maps will be noted, "Department of Defense Installation, NOT OPEN TO PUBLIC ACCESS." (See Recreation Element and Appendix V to the Proposed Plan, October 1980, for complete discussion of recreation-vehicle "play areas.")

In motorized-vehicle play open areas that abut private lands, BLM will provide information which will encourage recreationists to avoid unauthorized use. Signs and brochures will be used, as well as on-site personnel, trailers staffed with personnel during heavy-use periods, or the placement of permanent kiosks.

Multiple-Use Class M

Implementation of "existing routes of travel" will involve preparing a series of maps based on the aerial photos. These maps will be published and distributed. By basing the identified vehicle routes on the aerial photo coverage, continued proliferation of vehicle routes can be clearly documented and corrective action taken.

Maps will be produced and distributed as soon as possible after approval of the Plan and within two years of Plan approval. On-the-ground signing, primarily of "closed" areas, will be completed by December 1987. Wherever possible, natural and/or physical barriers will be used to close area routes rather than a multitude of signs.

Multiple-Use Class L

Access in Multiple-Use Class L is designated as "limited to approved routes of travel." Actual on-the-ground route designation for Class L will be completed within two years after approval of this Plan. Public participation will be a part of the "route approval" decision process.

In Multiple-Use Class L areas, vehicle access is limited to only those routes "approved" and marked as vehicle access routes. Routes not "approved" for vehicle access in most instances will be obliterated, barricaded, signed, or shown "closed" on maps. "Approved" routes will be signed or otherwise marked or mapped so that those routes of travel which are clearly open will be readily identifiable.

Route Designation Factors—Multiple-Use Class L

Decisions on approval of vehicle routes for Class L will be based on an analysis of each situation, using the following decision criteria:

(1) Is the route new or existing?
(2) Does the route provide access for resource use or enjoyment?
(3) Are there alternate access opportunities?
(4) Does the route cause considerable adverse impacts?
(5) Are there alternate access routes which do not cause considerable adverse impacts?

Multiple-Use Class C

All public lands in Multiple-Use Class C are recommended as suitable for wilderness (see Wilderness Element). Congressionally designated wilderness areas are, by law, closed to motorized-vehicle. Accordingly, as Congress acts and designates these or any other areas as wilderness, the public lands will be designated "closed" to vehicle use unless exempted. On-the-ground implementation will involve boundary signing and maps.

Vehicle use on lands preliminarily recommended as suitable for wilderness, but not yet designated by Congress as wilderness, will be managed as "limited to approved routes of travel," commensurate with Multiple-Use Class L (see Wilderness Element). Limitations on vehicle access are necessary to protect wilderness values as well as other significant resources.

Any vehicle access routes within the suitable WSA will be analyzed in management plan preparations.

DESIGNATION REVISIONS

Decisions on vehicle route designation are intended to meet present access needs as well as to protect sensitive resource values. Future access requirements will necessitate amendments to insure the management objectives are being realized. For mining operations, additional access needs will be considered in accordance with the Bureau's *Exploration and Mining—Wilderness Review Program* regulations (43 CFR 3802) and *Surface Management of Public Lands Under the U.S. Mining Laws* (43 CFR 3809). Access needs for other uses, such as roads to private lands, grazing developments, or communication sites, will be reviewed on an individual basis under the authority outlined in Title V of FLPMA. Each proposal will be evaluated for environmental effects and subjected to public review and comment. As present access needs become obsolete or as considerable adverse impacts are identified through the monitoring program, these designations will be revised.

MONITORING

A major component of the vehicle-access designation process is the monitoring of impacts resulting from these designations. The analysis of impacts and reassessment of management decisions is an integral part of the Bureau's response to the legislative mandate.

The primary objectives of the motorized-vehicle access monitoring program are to:

(1) Identify and document when unacceptable levels and kinds of impacts occur on natural, cultural, and historic values.

(2) Identify when impacts will preclude corrective or rehabilitative actions.

(3) Identify the type of vehicle equipment and/or related use which is causing, or likely to cause, impacts.

(4) Provide the information necessary to make immediate and long-range decisions on the use or prohibition of vehicles on designated or existing access routes.

Recommendations of monitoring efforts must be specific to each individual area, taking into consideration such issues as access needs, use levels, user conflicts, and impacts on resources. Monitoring efforts may vary. Monitoring techniques include field observations, remote sensing, ground photographs, and environmental study plots.

Options to designate or close specific travel routes within Class M areas and the continual updating of vehicle designations in Class L areas will be available to the manager. These options will be invoked when monitoring reveals that Plan objectives are not being met because of identified adverse effects resulting from vehicle travel.

ENFORCEMENT, COMPLIANCE, AND COOPERATION

Enforcement of these vehicle designations will rely heavily on indirect, cooperative actions, such as voluntary compliance, peer pressure, public information brochures and maps, educational/awareness programs, and access route signing. Access-designation planning will be done in close coordination with desert users so that all legitimate access needs can be incorporated into the designation. In sensitive areas or where these compliance methods are not successful, other methods will be employed. These methods include emergency closures, special access permits, issuance of right-of-way easements, or further restriction of the route(s) in question to provide additional use limitations (season of use, limitations on the number of types of vehicles permitted, speed limits, etc.). Direct law enforcement, either by contractual agreement with local law enforcement agencies, or by Bureau Desert Rangers and/or visitor services specialists, will be a last-resort option.

Vehicle access needs will be a high-priority project in the implementation of volunteer service projects. Tasks in these projects will include sign placement, obliteration of closed routes, and identification of access needs.

LIMITATIONS DURING INTERIM MANAGEMENT

The *Interim Management Policy and Guidelines for Lands Under Wilderness Review* states that no lands will be closed to vehicle use solely because they are under wilderness review and that, unless use by motorized vehicles is threatening to impair an area's wilderness suitability, vehicle use may be permitted on existing ways and trails. Vehicle designations may be more restrictive than existing vehicle routes if those designations are based on identified resource values other than wilderness. While wilderness interim management policy normally will preclude vehicle closures in Multiple-Use Class C areas, closures can be made for resource values other than wilderness.

Implementation of vehicle-management designations in Multiple-Use Classes I, M, and L will use this Interim Management Policy except where the access designation would be more restrictive. In those cases the more restrictive of either "route approval" or Interim Management Policy will prevail. The nonimpairment standard requires that the threshold levels for the determination of "considerable adverse impacts" will be more stringent for WSAs than those for non-WSA areas.

Route(s) will be appropriately approved to manage the type of vehicle impacts creating a threat to wilderness suitability. Monitoring and surveillance of vehicular use in WSAs will be a priority in Plan implementation.

CALIFORNIA DESERT CONSERVATION AREA

Motorized Vehicle Access

VEHICLE ACCESS DESIGNATIONS

- CLOSED
- LIMITED TO APPROVED ROUTES OF TRAVEL
- LIMITED TO EXISTING ROUTES OF TRAVEL
- OPEN
- * UNCLASSIFIED

* WHERE A HIGH PERCENTAGE OF PRIVATE AND STATE LANDS ARE INTERSPERSED WITH NATIONAL RESOURCE LANDS, AND THERE IS NO COLOR DESIGNATION, VEHICLE TRAVEL IS LIMITED TO PUBLIC ROADS.

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

GEOLOGY, ENERGY AND MINERAL (G-E-M) RESOURCES ELEMENT

The CDCA is one of the most diverse geologic regions of the United States. Remarkable resources exist within the area, including important mineral and energy resources. Some of these materials are vitally important in national and international economies.

In addition to the occurrence of energy and mineral resources which have been or are currently being developed, others are known to be present in the CDCA, and still others undoubtedly remain to be discovered.

The outline for this element is as follows:

GOALS
ACTIONS PLANNED
MAINTENANCE OF THE G-E-M DATA BASE
Construction and Analysis of the Data Base
Mineral Economics
Evaluation of Potential
PLAN GUIDELINES FOR MINERAL EXPLORATION AND DEVELOPMENT
IMPLEMENTATION
ROLES OF BLM
USER-INITIATED ACTION
BLM-INITIATED ACTIONS
LIMITATIONS DURING INTERIM MANAGEMENT

GOALS

The general goals of the G-E-M Resources Element are to:

(1) Involve BLM actively, within the multiple-use management framework, with the users of all resources in the development and use of techniques to simultaneously enhance the productive potential of G-E-M resources and the quality of the environment.

(2) Continue to recognize access to and availability of as much public land as possible for mineral exploration and development. The widespread availability of land and access is a crucial factor in maintaining the outstanding productive potential of G-E-M resources.

(3) Maintain the current data base and analysis of G-E-M resources, incorporating new and emerging resources, and use these data in the regular Plan amendments.

In addition, specific objectives of the element are to:

(1) Continue to recognize ways of access and opportunities for exploration and development on public lands which are assessed to have potential for critical mineral resources, those minerals of national defense importance, those of which the U.S. imports 50 percent or more, and those of which the U.S. is a net exporter.

(2) Continue to recognize ways of access and opportunities for exploration and development on public lands which are assessed to have potential for energy mineral resources. These are geothermal, oil, gas, uranium, and thorium, considered to be paramount priorities both nationally and within the State of California.

(3) Continue to recognize ways of access and opportunities for exploration and development on public lands which are assessed to have potential for mineral resources of local and State importance. These are sand and gravel, limestone, gypsum, iron, specialty clays, and zeolites. (Since this analysis was made in June 1980, zeolites have become of national importance.)

ACTIONS PLANNED

This element is not a technical report on the G-E-M resources of the CDCA. It does contain very brief descriptions of these resources, their economic importance, the potential for energy and minerals and management objectives.

MAINTENANCE OF THE G-E-M DATA BASE

Although many of the objectives of this element are responses to project proposals of mineral exploration and development and other related activities, the full accomplishment of the objectives of this element requires that the Bureau maintain an accurate and comprehensive information base of G-E-M resources in the CDCA. A brief discussion of the BLM G-E-M data-base methodology, its results, and planned future use follows.

Construction of the CDCA G-E-M Data Base

A thorough search and evaluation of the available geologic, paleontologic, structural, geochemical, geophysical, and mineral data on G-E-M resources in the CDCA demonstrated that the quantity and, occasionally, the quality, of the data were not satisfactory and that additional data were needed for a minimally adequate data base. To accomplish this, a program for the inventory, analysis, and evaluation of CDCA G-E-M resources was initiated. (Description of this program is provided in Appendix XIV to the Proposed Plan, October 1980.) Twelve projects done under contract for the BLM supplemented the staff's work (the list of contracts and their descriptions is contained in Appendix XIV to the Proposed Plan, October 1980). The final report of each contract is available for inspection and/or study by the public in the BLM California Desert District Office in Riverside, California.

To facilitate the analysis and interpretation of the data base, the CDCA was subdivided into 92 units based primarily on geology and mineral resources and secondarily on planning boundaries. Of these 92 units, 17 are within the National Park Service or military areas of jurisdiction and are not of direct concern to this Plan. The remaining 75 units, called G-E-M resources areas (GRA), enclose approximately 18.03 million acres of mainly Federal land managed by BLM, as well as private and State land. The G-E-M data were analyzed first on GRA basis and then integrated into a regional overview. The GRA reports are BLM administrative reports available in the California Desert District G-E-M Resources files. (Details on analysis methodology are provided in Appendix XIV to the Proposed Plan, October 1980.)

Analysis of the geologic data provided an understanding of the CDCA geologic environment, the geologic and paleontologic resources, and the potential for energy and mineral resources within these geologic environments.

Some of these resources are known to be significant in the CDCA. California is third in the Nation in value of mineral production. Excluding oil and gas, the CDCA produces 50 percent of the State's revenue from mineral resources (1979 figures).

Forty-six mineral commodities plus geothermal resources and carbon dioxide gas are known to exist in the CDCA. Of these, 19 are metallic, 18 are non-metallic, and nine are saline minerals.

Six of the 19 minerals of which the U.S. imports 50 percent or more are known to exist in the CDCA, and four of the six are being produced or have been produced in the CDCA (based on Bureau of Mines 1979 figures in *Mineral and Material/A Monthly Survey*, May 1980). Approximately 15 percent of U.S. talc, 10 percent of its crude gypsum, and 5 percent of its iron are produced in the CDCA. The CDCA also produces the majority of the U.S. borates and most of the world's rare earth elements.

Geothermal resources are associated with young, active areas of concurrent faulting and volcanism. The oil and gas potential of the CDCA falls in two categories. One is associated with marine Miocene-age sedimentary rocks of the Antelope and Imperial Valleys. The other is of Paleozoic age and is associated with the "Overthrust Belt" which begins in central Alberta, swings into Montana, Wyoming, Utah, Nevada, eastern CDCA, swings back into Arizona, and down into Mexico.

Mineral Economics

A mineral economic evaluation program was initiated as a preliminary study of the areas of major mineral production, reserves, and resources in the CDCA. (Definition of these terms is given in Appendix XIV to the Proposed Plan, October 1980.) All available data from past and present production, reserve, and resource quantities were compiled and a dollar value was assigned to each commodity based on the published average price of each commodity in Calendar Year 1978 (*Engineering and Mining Journal*, February 1979). All past production was converted to 1978 prices to allow for comparison of various areas in terms of values.

Of the 46 known mineral commodities in the CDCA, 25 were selected for evaluation. Each of these commodities is selected on the basis of one or more of the following four criteria: (1) the commodity is on the official strategic mineral stockpile list; (2) the United States imports 50 percent or more of this commodity; (3) the United States is a major exporter of the commodity in the international marketplace; (4) the commodity is of local or regional economic importance to the California or U.S. domestic economy. See the CDCA Mineral Economics Map (Map 11).

TABLE 10

Mineral Commodities of the CDCA
by Economic Group

	1980 Production Status in CDCA
Group I	
Strategic List	
Copper	Dormant
Lead	Dormant
Molybdenum	Dormant
Silver	Active
Talc	Active
Thorium	None
Tin	None
Tungsten	Active
Zinc	Active
Group II	
Greater Than 50% Import Dependence	
Gold	Active
Strontium	None
Group III	
Major Exports to World Market	
Borates	Active
Kyanite	None
Lithium	Dormant
Rare earths	Active
Soda Ash	Active
Uranium	Dormant
Group IV	
Local and Regional Economic Importance	
Geothermal	Active
Gypsum	Active
Iron	Active
Limestone	Active
Oil and Gas	None
Sand and Gravel	Active
Spec. Clay	Active
Zeolite	Active

The total known value of the 25 commodities chosen for study is in excess of 213 billion dollars (in 1978 commodity values).

These commodities are presented as four groups (see Table 10).

Of the Group I commodities, the major resources are in molybdenum, tungsten, and silver. Of the Group II commodities, strontium is the most abundant of the CDCA. In Group III, the CDCA is the major source of the western world's supply and mineral reserves of borates, rare earths, and soda ash (sodium carbonate). In Group IV

commodities, the CDCA is producing, and has large extractable reserves of, gypsum, limestone, iron ore, zeolites, sand and gravel, and potential geothermal energy. Further details appear in Appendix XIV to the Proposed Plan (October 1980).

The CDCA is a past producer of a wide variety of mineral commodities, is currently producing a substantial amount from several locations, and has an excellent potential for future production of mineral commodities. The future importance of energy and minerals from the CDCA is expected to increase for at least eight commodities (see Appendix XIV to the Proposed Plan, October 1980). Recent developments in new exploration techniques and concepts and in field investigations have revealed the existence of several previously unsuspected mineral environments which have resulted in several discoveries of economic significance. These are disseminated and sedimentary copper deposits, porphyry molybdenum deposits, a possible cobalt zone, uranium deposits, and important deposits of zeolite. A more detailed evaluation of the mineral economic potential of the CDCA, the methodology, and individual commodity reports is provided in Appendix XIV to the Proposed Plan, October 1980.

Evaluation of Potential

Using the G-E-M resources mineral data and respective analysis and interpretation, each of the 29 GRAs was evaluated as to its potential for energy and mineral resources. A classification scheme which takes into consideration past and present production, known geologic environment, and importance of the respective commodity was used. The classification is included in each GRA report with the rationale for the classification and a map at 1:250,000 scale for the respective area. (See Appendix XIV to the Proposed Plan, October 1980, for details.)

As part of a BLM contract, an independent panel of 10 geologists and mining engineers specializing in all types of energy and mineral resources, and who have considerable experience in the California Desert, have evaluated effectively the same data base, but only for a three-day period. During this review, they produced maps of the CDCA showing classification of the land as to its potential for different groups of energy and mineral resources. The results of this work were used in BLM's classification.

The results of the classification of potential for the 29 GRAs analyzed, which totalled 7.59 million acres, were integrated in a CDCA-wide map at 1:250,000 scale showing potential for locatable and saleable mineral resources. For leasable mineral resources the classification of potential provided by the U.S. Geological Survey's Conservation Division was used (see USGS Admin. Report in Appendix XIV to the Proposed Plan, October 1980). However, the true potential has not been appraised by the Bureau. The energy mineral resources map is a combination of geothermal resources, the oil and gas classification, and the classification for uranium from the locatable mineral resources. These maps, at 1:250,000 scale, are available for inspection in the California Desert District Office in Riverside.

The maps presented with this element (located at the end of the element narrative) are simplified maps prepared first at the 1:250,000 scale and then photographically reduced. The simplification consisted of first consolidating the 11 mineral classes into five classes (for locatable minerals) and then, on the original classification maps, aggregating in the same way the areas of the respective classes. The description of the simplified classification is provided in Appendix XIV to the Proposed Plan (October 1980) and is also shown in the legend of each G-E-M resources map at the end of this element (Maps 12–15). Summaries of mineral potential in the CDCA appear on Tables 11–13.

Locatable Minerals

For locatable minerals (Map 12), 7.59 million acres were classified. Within these, slightly over 5.9 million acres have different levels of potential, while the balance of 1.6 million acres was not classified as the potential is as yet unknown (shown as Class 5 on the map). As mentioned previously, zeolite minerals, which during our classification were considered to be only of local and State importance, have since become of national importance.

Leasable Minerals

For leasable minerals (Map 13), as was previously mentioned, the USGS Conservation Division classification was used. A total of 2.6 million acres are considered to have different levels of potential for sodium and potassium minerals, 2.4 million acres are considered to have some potential for oil and gas, and over 1.67 million acres are considered to have potential for geothermal resources. The 118,720 acres classified as Known Geothermal Resource Area (KGRA) are included. However, the oil and gas figures include only parts of what may be potential within the eastern CDCA area known as the Overthrust Belt; the actual potential is not fully evaluated.

Saleable Minerals

For saleable minerals (Map 14), which are most important in the CDCA, the BLM staff's survey is very conservative due to insufficient data. Nevertheless, over 2.1 million acres were classified as having potential for these resources.

Energy Georesources

A map (15) aggregating the classification for energy georesources has been prepared to define areas within the CDCA which may have potential for energy re-

TABLE 11

Distribution of Mineral Potential by Land-Use Category (all figures in thousands of acres)

Group		Land Within Multiple Use Classes[a]				Other			
		C	L	M	I	Military	Nat'l Parks	State Parks	Total
LOCATABLE MINERALS									
Class 1[b]		33.59	159.06	222.41	77.00	0.00	0.77	0.00	492.83
Class 2[c]		253.62	538.23	243.24	34.10	4.92	0.00	0.00	1056.61
Class 3[d]		402.17	775.70	416.66	93.70	0.00	6.45	0.00	1694.68
Class 4[e]		516.44	1509.11	569.21	93.28	365.45	600.05	79.85	3733.39
LEASABLE MINERALS									
Sodium	Known	0.00	17.82	9.22	17.82	0.00	145.31	0.00	190.17
	High Potential	199.30	1145.57	996.91	146.07	836.51	758.17	2.15	4084.68
Potassium	Known	0.00	0.00	0.00	25.19	0.00	0.00	0.00	25.19
	Withdrawn	0.00	30.41	3.38	7.83	7.37	0.00	0.00	48.99
Sodium & Potassium	Medium Potential	0.00	15.36	4.30	4.30	0.00	0.00	0.00	19.66
Oil & Gas	Possible	144.54	903.59	1197.59	155.75	880.43	714.55	2.92	3999.32
Geothermal									
KGRA		8.88	15.56	85.71	8.60	71.88	0.00	0.00	190.60
PGRA		179.71	780.13	516.40	79.87	169.88	175.41	121.65	2023.05
Uranium		198.12	455.07	194.33	13.42	----[f]	----	----	860.94
SALEABLE MINERALS		212.61	899.35	984.26	102.39	----	----	60.87	2259.48

[a]May include private or State land.

[b]This class includes areas interpreted on the basis of known mineral deposits (and their associated geologic environments) of Category I commodities. Also included in this class are present producing mines of any locatable mineral commodity.

[c]This class includes areas containing known mineral deposits with reserves and/or resources of Category II commodities. Also included are areas with known occurrences and, based on geologic, geophysical, and/or geochemical data, inferred occurrences of Category I commodities.

[d]This class includes areas interpreted to be favorable for future discovery of locatable mineral deposits. Based on evaluation of geologic, geophysical, and/or geochemical data, the interpretation utilizes current geological knowledge and best professional judgment of the investigating team.

[e]This class includes areas for which the potential for locatable mineral resources is interpreted on the basis of preliminary evaluation of geologic, mineral occurrence, and limited field verification data only. No further analysis has been done.

[f]----, No data collected or analyzed.

TABLE 12

Percent of Lands Classified for
Mineral Potential by Land-Use Category[a]
(all figures in percent)

Group		Multiple-Use Classes				Other		
		C	L	M	I	Nat'l Parks	State Parks	Total
LOCATABLE MINERALS								
Class 1[b]		0.13	0.62	0.87	0.30	0.003	0.00	1.92
Class 2[c]		0.92	2.11	0.95	0.13	0.00	0.00	4.13
Class 3[d]		1.57	3.03	1.63	0.37	0.03	0.00	6.63
Class 4[e]		2.02	5.90	2.23	0.36	2.34	0.31	14.59
LEASABLE MINERALS								
Sodium	Known	0.00	0.07	0.04	0.07	0.57	0.00	0.75
	High Potential	0.78	4.48	3.90	0.57	2.97	0.01	0.75
Potassium	Known	0.00	0.00	0.00	0.10	0.00	0.00	0.10
	Withdrawn	0.00	0.12	0.01	0.03	0.00	0.00	0.08
Sodium & Potassium	Medium Potential	0.00	0.06	0.02	0.00	0.00	0.00	0.08
Oil & Gas	Potential	0.57	3.53	4.68	0.61	2.80	0.01	15.64
Geothermal								
KGRA		0.03	0.06	0.34	0.03	0.00	0.00	0.74
PGRA		0.70	3.05	2.02	0.31	0.68	0.48	7.90
Uranium		0.78	1.78	0.76	0.05	----	----	3.37
SALEABLE MINERALS		0.83	3.52	3.85	0.40	----	0.24	8.84

[a]Figures are percentage of total CDCA area: 25,562,000 acres.

[b]See footnote b on Table 11.

[c]See footnote c on Table 11.

[d]See footnote d on Table 11.

[e]See footnote e on Table 11.

TABLE 13

Percent of Available Lands Classified for Mineral Potential
(all figures in percent)

Group		Land Within Multiple-Use Classes				Total of Lands Open to Mining[a]	Total Closed to Mineral Operations[b]
		C	L	M	I		
LOCATABLE MINERALS							
Class 1[c]		0.18	0.85	1.20	0.41	2.64	0.01
Class 2[d]		1.27	2.90	1.31	0.18	5.66	0.07
Class 3[e]		2.16	4.17	2.24	0.50	9.07	0.09
Class 4[f]		2.78	8.11	3.06	0.50	14.45	9.78
LEASEABLE MINERALS							
Sodium	Known	0.00	0.10	0.05	0.10	0.25	2.09
	High Potential	1.07	6.16	5.36	0.79	13.38	22.96
Potassium	Known	0.00	0.00	0.00	0.14	0.14	0.00
	Withdrawn	0.00	0.16	0.02	0.04	0.24	0.11
Sodium & Potassium	Medium Potential	0.00	0.08	0.02	0.00	0.10	0.00
Oil & Gas	Potential	0.78	4.86	6.44	0.84	12.92	22.97
Geothermal							
KGRA		0.5	0.08	0.46	0.05	0.64	0.01
PGRA		0.97	4.19	2.77	0.43	8.36	6.71
Uranium		1.06	2.45	1.04	0.07	4.62	----[g]
SALEABLE MINERALS		1.14	4.83	5.29	0.55	11.81	0.87

[a]18,607,000 acres available for mineral operations including private lands.
[b]6,955,000 acres not open to mineral operations.
[c]See footnote b on Table 11.
[d]See footnote c on Table 11.
[e]See footnote d on Table 11.
[f]See footnote e on Table 11.
[g]See footnote f on Table 11.

sources. Included in this map are areas with possible oil and gas potential, the portion of the Overthrust Belt which falls in the CDCA, areas of known and possible geothermal resource potential, areas considered anomalous for uranium and thorium on the basis of airborne gamma-ray surveys, and point data (occurrences, geochemical samples, and water samples) of interest also for uranium and thorium. Acreage for uranium was measured to be 860,940 acres.

PLAN GUIDELINES FOR MINERAL EXPLORATION AND DEVELOPMENT

Multiple-Use Class Provisions

All mineral exploration and mining operations on public lands under BLM surface administration in Multiple-Use Classes C, L, M, and I will be subject to the Bureau's surface-mining regulations under 43 CFR 3802 and 43 CFR 3809. Under the 43 CFR 3809 regulations, surface-disturbing mining operations will be regulated to prevent "undue degradation" of the public lands and to provide adequate environmental safeguards in the conducting of surface-disturbing operations. The existing 43 CFR 3802 regulations apply to Wilderness Study Areas and prohibit permanent impairment of wilderness suitability.

Additional consideration will be given to significant surface-disturbing operations in Class L and in Areas of Critical Environmental Concern (ACEC) where an environmental assessment will be prepared on proposed operations and 60-day public review period will be utilized to provide the interested public adequate time to comment on the proposed operation.

The regulations incorporate three distinct levels of operations. Two of the levels require varying degrees of information to be submitted to the Bureau, but at all three levels unnecessary or undue degradation must be prevented and reclamation must be completed. The three levels are as follows:

Casual Use—No Notice or Plan Required—This level is designed for part-time miners or weekend prospectors who cause only negligible disturbance. Mechanized earth-moving equipment and explosives are not allowed under casual use. Operators need not contact the Bureau.

Surface Disturbance of Less than 5 Acres—Notice Required—When operators propose to conduct exploration or mining activities which cause surface disturbance of five acres or less per year (except on special-category lands), they must only submit a written letter or "Notice" to the Bureau 15 days prior to starting operations. The Notice must describe the operations and their location and must contain a statement that the lands will be reclaimed to the standards spelled out in these regulations. No approval or bonding is required, but the Bureau may request a meeting with the operator when road construction exceeds a certain level. This consultation is designed to select the best possible location for access to the area of operations. Further, the 15 days is designed to give the Bureau adequate time to inform the operator about other resource values that may be in the area and those which, if possible, should be avoided. The operator must notify the Bureau when reclamation is complete so that an inspection can be made of the reclaimed area by the Bureau.

Disturbance of More than 5 Acres Due to Mining in Special Areas—Plan of Operations Required—A plan of operations must be submitted if surface disturbance exceeds five acres per year, or if the operations are proposed in:

—California Desert Conservation Area
—Wild and Scenic River Areas
—Areas of Critical Environmental Concern
—National Wilderness Preservation System
—Off-road-vehicle "closures" or "limited" areas
—Areas withdrawn from mining where valid existing rights are being exercised.

The Plan must describe the entire operation, including equipment, location of access, support facilities, drill sites (to the extent possible), measures to prevent unnecessary or undue degradation, and reclamation of the land involved.

Under these regulations, lands affected by all operations, whether casual use, under a Notice, or under a plan of operation, shall be reclaimed as required by these regulations (43 CFR 3809.1-1). In the California Desert Conservation Area, only two levels of operations are currently authorized. These are casual use and operations conducted under an approved plan of operations. The Notice procedures currently do not apply to the CDCA. It is the Bureau's intention to request of the Secretary that the Notice procedures be implemented in Classes M and I, as mining operations in these classes are compatible uses and do not need to be as closely regulated as in Classes L and C. The reclamation requirements of these regulations are given in 43 CFR 3809.1-3(d) and are stated as follows:

"(1) Access routes shall be planned for only the minimum width needed for operations and shall follow natural contours, where practicable to minimize cut and fill.

"(2) All tailings, dumps, deleterious materials or substances, and other waste produced by the operations shall be disposed of so as to prevent unnecessary or undue degradation and in accordance with applicable Federal and State laws.

"(3) At the earliest feasible time, the operator shall reclaim the area disturbed, except to the extent necessary to preserve evidence of mineralization, by taking reasonable measures to prevent or control on-site and off-site damage of the federal lands.

"(4) Reclamation shall include, but shall not be limited to:

"(i) Saving of topsoil for final application after re-

shaping of disturbed areas have [sic] been completed;

"(ii) Measures to control erosion, landslides, and water runoff;

"(iii) Measures to isolate, remove, or control toxic materials;

"(iv) Reshaping the area disturbed, application of the topsoil, and revegetation of disturbed areas, where reasonably practicable; and

"(v) Rehabilitation of fisheries and wildlife habitat.

"(5) When reclamation of the disturbed area has been completed, except to the extent necessary to preserve evidence of mineralization, the authorized officer shall be notified so that an inspection of the area can be made.

"(e) Operations conducted pursuant to this subpart are subject to monitoring by the authorized officer to ensure that operators are conducting operations in a manner which will not cause unnecessary or undue degradation.

"(f) Failure of the operator to complete reclamation to the standards described in this subpart may cause the operator to be subject to a notice of noncompliance as described at §3809.3-2 of this Part."

A plan of operation currently must be filed in the CDCA if the operator exceeds the activity level under the casual-use provisions. The requirements of a plan of operations are given in 43 CFR 3809.1-5 and are as follows:

"(a) A plan of operations must be filed in the District Office of the Bureau of Land Management having jurisdiction over the federal lands in which the claim(s) or project area is located.

"(b) No special form is required for filing a plan.

"(c) The plan shall include:

"(1) The name and mailing address of the operator (and claimant if not the operator). Any change of operator or change in the mailing address shall be promptly reported to the authorized officer;

"(2) A map, preferably a topographic map, or sketch showing existing and/or proposed routes of access, aircraft landing areas, or other means of access, and size of each area where surface disturbance will occur;

"(3) When applicable, the name of the mining claim(s) and mining claim serial numbers assigned to the mining claim(s) recorded pursuant to subpart 3833 of this title;

"(4) Information sufficient to describe or identify the type of operations proposed, how they will be conducted, and the period during which the proposed activity will take place;

"(5) Measures to be taken to prevent unnecessary or undue degradation and measures to reclaim disturbed areas resulting from the proposed operations, including the standards listed in §3809.1-3(d) of this Part. Where an operator advises the authorized officer that he/she does not have the necessary technical resources to develop such measures the authorized officer will assist the operator in developing such measures. If an operator submits reclamation measures, the authorized officer will ensure the operator's plan is sufficient to prevent unnecessary or undue degradation. All reclamation measures developed by the operator, or by the authorized officer in conjunction with the operator, shall become a part of the plan of operations;

"(6) Measures to be taken during extended periods of nonoperation to maintain the area in a safe and clean manner and to reclaim the land to avoid erosion and other adverse impacts. If not filed at the time of plan submittal, this information shall be filed with the authorized officer whenever the operator anticipates a period of nonoperation."

Any expansion of a grandfather operation that exceeds the "manner and degree" clause of 43 CFR 3802 is subject to these regulations.

An environmental analysis (EA) is required to be completed on each plan of operation submitted. The EA will focus only on the proposed operation and the mitigation requirements necessary to prevent unnecessary or undue degradation of the area of operations. Site-specific inventories are required and, if necessary, Section 7 consultation procedures for rare, threatened, or endangered species; and Section 106 compliance procedures for cultural resources will be followed. With the possible exception of receiving a jeopardy opinion from the U.S. Fish and Wildlife Service on federally listed species, no mining operation under these regulations may be denied unless a proven case of noncompliance with these regulations is demonstrated.

Bonding of a plan of operations is discretionary and is based on the actual cost of reclamation, on a per-acre basis. Cases of operator noncompliance will be handled in Federal District Court as a civil proceeding with the operator liable for actual damages for his noncompliance and subject to a probable enjoinment of his activities until he has corrected his activities and brought them back into compliance.

Mineral leasing in Multiple-Use Class L will be subject to an EIS procedure if the "significance" criterion is exceeded, unless exempted by the Department of the Interior's guidance on categorical exclusions under NEPA (*Federal Register*, vol. 46, no. 15, p. 7492–7496, Jan. 23, 1981). All other leasing activities in Classes L, M, and I will be processed in accordance with the Bureau's existing EA process as provided for in 40 CFR 1500 and 43 CFR 3100, 3200, and 3500.

Mineral material sales in Classes L, M, and I will be processed under 43 CFR 23 and 3600. In addition, in Class L, only existing extraction areas can be used. If a new extraction area in Class L larger than 5 acres is required, then it will be handled as a programmatic EIS covering the entire area of potential extraction, not one specific site. The EIS procedures would follow the "tiering" procedures specified in 40 CFR 1508.28.

Special Provisions for Salton Sea

While the area surroundiing the Salton Sea has been excluded from the multiple-use classification (See Map 1,

"CDCA Plan," back cover pocket), due to the sensitive nature of the Salton Sea, which is potential habitat for some federally listed rare and endangered wildlife species, the guidelines for Class L will apply to all mineral leasing activities (oil, gas, geothermal, sodium, and potash) on public land in and under the Salton Sea.

State Mining and Reclamation Act of 1975 (SMRA)

The Bureau's surface management regulations covering activities in Wilderness Study Areas (43 CFR 3802) and for establishing proper reclamation of the public lands (43 CFR 3809) are now final. The 43 CFR 3802 regulations became effective April 2, 1980, and the 43 CFR 3809 regulations became effective date on January 1, 1981. In February 1979, the State Resources Agency and the Bureau of Land Management entered into an agreement to coordinate reclamation activities on mining operations on the public lands, but due to the lack of Federal authority, the State could not implement its Surface Mining and Reclamation Act (SMRA) on the public lands in California.

An October 1980 memorandum from the Department of the Interior Solicitor's Office, which analyzed the applicability of State environmental and reclamation laws to the public lands, concluded that under the provisions of the General Mining Law of May 10, 1872, Congress had not pre-empted the right of a State to regulate mining activities on the public lands, as long as the State laws are not inconsistent with Federal laws and regulations. Therefore, SMRA does apply to the public lands, including the CDCA.

It is the intention of the Bureau in California to modify its existing agreement with the State Resources Agency to allow the State of California, through the counties which are the lead agencies under SMRA, to jointly administer the Bureau's surface-mining regulations on the public lands. The combined Bureau and SMRA requirements, whichever are stricter in terms of required mitigation measures, will be the requirements that the operator will eventually have to meet. It is expected that this transition will be completed by the beginning of Fiscal Year 1982 (October 1, 1981). While the State of California may administer much of the permitting process, BLM recognizes its responsibility to monitor mining activities and will do so.

IMPLEMENTATION

ROLE OF BLM

The Bureau of Land Management makes lands available for the development of Federal mineral resources, consistent with Section 2 of the Mining and Mineral Policy Act of 1970, and Section 102(a)(7), (8), and (12) of FLPMA. In addition, consistent with the above laws and regulations, the Bureau must make certain that reclamation of disturbed lands takes place. The Bureau has a further role in that it accepts, analyzes, and refines data concerning mineral resources of public lands and, to the extent appropriate, makes that data available to the public.

USER-INITIATED ACTIONS

Requests such as mining plans and mineral lease applications will be processed within the shortest possible time. Users will be promptly informed of management decisions. The BLM will work closely with users to develop mutually acceptable plans when conflicts arise. Prompt processing of public-demand requests will avoid costly delays in possible resource development.

BLM-INITIATED ACTIONS

Geology-Energy-Minerals inventories and analyses by BLM will be ongoing within the CDCA. If data indicate the need, BLM will initiate Plan amendments.

LIMITATIONS DURING INTERIM MANAGEMENT

All mineral-exploration and surface-mining operations that are not grandfathered under Section 603 of FLPMA are subject to the Bureau's surface-mining mandate that all surface-mining and exploration operations conducted within a Wilderness Study Area (WSA) must be conducted in such a manner as not to impair the suitability of the area for wilderness. The two main criteria involved are the reclamation potential of the disturbed area and how the disturbed site affects the WSA as a unit, not on a localized basis.

Specific activities in WSAs are exempt from these restrictions and are specified under 43 CFR 3802.1–2.

Mining and exploration plans will be required in WSAs as specified in 43 CFR 3802.1–1 for the following activities:

"(a) Any mining operations which involve construction of means of access, including bridges, landing areas for aircraft, or improving or maintaining such access facilities in a way that alters the alignment, width, gradient [sic] size, or character of such facilities;

"(b) Any mining operations which destroy trees 2 or more inches in diameter at the base;

"(c) Mining operations using tracked vehicles or mechanized earth moving equipment, such as bulldozers or backhoes;

"(d) Any operations using motorized vehicles over other than 'open use areas and trails' as defined in Subpart 6292 of this title, *off-road vehicles*, unless the use of a motorized vehicle can be covered by a temporary use permit issued under Subpart 8372 of this title;

"(e) The construction or placing of any mobile, portable or fixed structure on public land for more than 30 days;

"(f) On mining operations requiring the use of explosives; or

"(g) Any operation which may cause changes in a water course."

Any expansion of a grandfathered mining activity that falls within the "manner and degree" category of 43 CFR 3802.0–5(j) is exempt from the filing requirements of these regulations but may still be regulated under 43 CFR 3809 to prevent "undue degradation" of the public lands as specified in 43 CFR 3809.0–5(k).

If an area is designated as wilderness by Congress, then mining and exploration provisions appropriate to the designation will apply, as outlined by Congress.

If Congress does not designate a recommended area a formal wilderness, the area will revert to another multiple-use class (L, M, or I). All operations in these classes will be subject to 43 CFR 3809.

All mineral leasing and sales activity in WSAs will be subject to the BLM's published Interim Management Policy of December 12, 1979 (excerpts of which appear in Addendum B to this document). Mineral leases and material sales sites permits may be issued subject to meeting the nonimpairment and reclamation suitability criteria.

CALIFORNIA DESERT CONSERVATION AREA

Economic Mineral Resources

LEASEABLE - Energy, Geothermal, Oil and Gas

Oil and Gas = OG
- A Good
- B Moderate
- C Poor

Geothermal = GT
- A Capable of Power Generation ( ) MWe*
- B Good Potential for Power Generation
- C Direct Heat Only
- D Potential not as yet determined

LOCATABLE - Energy, Uranium, Thorium and Lithium

Uranium = U

Lithium = Li
- A > 100,000,000 (st)*
- B 10,000,000 – 100,000,000
- C 1,000,000 – 10,000,000
- D < 1,000,000

Thorium = Th
- A > 100,000,000 (lb)*
- B 10,000,000 – 100,000,000
- C 1,000,000 – 10,000,000
- D < 1,000,000

METALLIC MINERALS

Gold = Au

Silver = Ag
- A > 10,000,000 (oz)*
- B 1,000,000 – 10,000,000
- C 100,000 – 1,000,000
- D < 100,000

Copper = Cu

Lead = Pb

Zinc = Zn

Molybdenum = Mo

Tin = SN
- A > 100,000,000 (lb)*
- B 10,000,000 – 100,000,000
- C 1,000,000 – 10,000,000
- D < 1,000,000

Iron = Fe
- A > 50,000,000 (lt)*
- B 30,000,000 – 50,000,000
- C 10,000,000 – 30,000,000
- D < 10,000,000

Tungsten = W
- A > 10,000,000 (stu)*
- B 1,000,000 – 10,000,000
- C 100,000 – 1,000,000
- D < 100,000

NON-METALLIC MINERALS

Gypsum = GY

Limestone = LS

Sodium Carbonate = Na_2CO_3
- A > 1,000,000,000 (st)*
- B 100,000,000 – 1,000,000,000
- C 50,000,000 – 100,000,000
- D < 50,000,000

Montmorillonite = MM

Bentonite = BN

Hectorite = HC

Zeolite = ZL

Borates = BO

Talc = TC

Kyanite = KY

Strontium = Sr
- A > 100,000,000 (st)*
- B 10,000,000 – 100,000,000
- C 1,000,000 – 10,000,000
- D < 1,000,000

Rare Earths = RE
- A > 100,000,000 (lb)*
- B 10,000,000 – 100,000,000
- C 1,000,000 – 10,000,000
- D < 1,000,000

SAND AND GRAVEL = SG
- A > 10,000,000 (yd^3)*
- B 1,000,000 – 10,000,000
- C 100,000 – 1,000,000
- D < 100,000

Note: Lands within military bases are withdrawn from mineral entry. This means that all forms of mineral exploration and development are prohibited.

yd^3* = cubic yards
st* = short ton
lt* = long ton
lb* = pound
stu* = short ton unit
MWe* = megawatts of electric power
oz* = ounces

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CALIFORNIA DESERT CONSERVATION AREA

Potential For Locatable Minerals

1. This class includes areas interpreted on the basis of known mineral deposits (and their associated geologic environments) of Category I commodities. Also included in this class are present producing mines of ANY locatable mineral commodity.

2. This class includes areas containing known mineral deposits with reserves and/or resources of Category II commodities (b). Also included are areas with known occurrences and, based on geologic, geophysical and/or geochemical data, inferred occurrences of Category I commodities. (a)

3. This class includes areas interpreted to be favorable for future discovery of locatable mineral deposits. Based on evaluation of geologic, geophysical and/or geochemical data, the interpretation utilizes current geological knowledge and best professional judgement of the investigating team.

UNQUALIFIED POTENTIAL (c)

4. This class includes areas for which the potential for locatable mineral resources is interpreted on the basis of preliminary evaluation of geologic, mineral occurrence, and limited field verification data ONLY. No further analysis has been done.

UNKNOWN POTENTIAL

5. This class includes areas which could not be classified due to insufficient data, and areas where known surficial geology is considered unfavorable for most locatable types of mineral deposits.

Note:
Although the definition of these classes may not have to be changed in the immediate future, the areas included in one class or another will have to be changed due to two major reasons:
(a) reinterpretation based on additional data and/or on new geologic knowledge; and
(b) changes in the categories due to national, regional, and/or local importance of agiven mineral commodity. Therefoe the land classification as to its potential for mineral resources, in order to be useful should be considered a dynamic and continuous process.

(a): CATEGORY I MINERALS
includes: most of the strategic and energy related mineral resources; minerals imported 50 percent or more and those minerals of which the U.S. is a net exporter, both existing in significant quantities in the CDCA; other mineral and/or energy resources of local, national, and/or regional importance and of which the CDCA is a source.

(b): CATEGORY II MINERALS
Includes: strategic and/or imported, and/or nationally important minerals which occur in the CDCA, but so far are not known in significant quantities; other minerals which although known in significant quantities in the CDCA, have not enough demand yet.

(c): The importance of the potential for mineral resources in this class should not be considered as less than any of the classes above it. Analysis and interpretation of data available for all areas in this class would permit including most of these areas in the classes above it, and a small portion in the unknown potential class.

Note: Lands within military bases are withdrawn from mineral entry. This means that all forms of mineral exploration and development are prohibited.

United States
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DESERT PLANNING STAFF

CALIFORNIA DESERT CONSERVATION AREA

Potential For Leaseable Minerals

	Prospectively Valuable	Known Valuable
GEOTHERMAL		
OIL AND GAS		
SODIUM		
POTASSIUM		
LANDS WITHDRAWN FOR POTASSIUM		

From: USGS Conservation Division Administrative Report-reference number 843 in appendix 4;

"Prospectively valuable" determination identifies areas having similar geologic conditions to other areas where minerals have been extracted; the inference being that similar deposits are probably present. This determination also includes those areas where there is information that the resource is present, but information as to the extent and quality cannot be ascertained. Under both conditions there should be a reasonable expectation that the deposit will meet at least the minimum characteristics for a valuable deposit.

"Known valuable" indicates that there is factual knowledge that the deposit exists, and the extent and quality are known or may be rèsonably inferred from the geologic information available.

Note: Lands within military bases are withdrawn from mineral entry. This means that all forms of mineral exploration and development are prohibited.

AREAS OF KNOWN LEASABLE COMMODITIES

Known Geothermal Resource Areas (KGRA)

1. Saline Valley
2. Coso
3. Randsburg
4. Ford Dry Lake
5. Salton Sea
6. Brawley
7. Glamis
8. East Mesa
9. Dunes
10. Heber

Known Valuable for Sodium and Potassium

11. Saline Valley
12. Koehn Lake
13. Searles Lake
14. Death Valley
15. Boron
16. Bristol Lake
17. Cadiz Lake
18. Danby Lake
19. Dale Lake

Lands Withdrawn for Potassium

20. Panamint Lake
21. Searles Lake

Undefined Known Geologic Structure

22. Imperial Carbon Dioxide Field

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DESERT PLANNING STAFF

CALIFORNIA DESERT CONSERVATION AREA

Potential For Saleable Minerals

Areas of past or present production, including Caltrans materials sites and Caltrans sites held in reserve.(a) Also includes adjacent favorable environment. (b)

Areas of prospects and/or occurrences including adjacent favorable geologic environment. Production unknown, but might have taken place. (b)

Areas of favorable lithology as interpreted from the geologic map. (b)

Areas with identified potential for sand and gravel only, as identified from the California Desert Landform Classification. (c) Included are:
Sand-covered Plains
Riverwashes
Sand Dunes
Sand-covered Alluvial Fans (d)

UNCLASSIFIED:
No data or insufficient data at the time of classification (June, 1980). May be important in the future.

Saleable Commodities shown on this map:
SG= Sand and Gravel
CI= Cinders
CX= Clay
DS= Dimension Stone
RK= Rock
PU= Pumice
RG= Roofing Granules
LS= Limestone

(a): State of California - Department of Transportation

(b): Proximity to transportation generally considered for sand and gravel only.

(c): Landforms of the California Desert, report by Zvika Brenner and Glenn Thomas; see the soil appendices for details

(d): Proximity to transportation has not been considered.

Note: Lands within military bases are withdrawn from mineral entry. This means that all forms of mineral exploration and development are prohibited.

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Bureau of Land Management
DESERT PLANNING STAFF

ENERGY PRODUCTION AND UTILITY CORRIDORS ELEMENT

The passage of the 1972 coastal initiative, adoption of air-quality standards, and existing regulatory policy severely limiting the siting of nuclear powerplants in seismically active or heavily populated areas have encouraged utilities to look to the Desert and places east of California as major siting areas for energy production facilities and utility corridors. While this direction is being taken to provide California consumers with the benefits of reliable and economical utility services, the potential exists for significant impacts from such facilities.

The outline for this element is as follows:

GOALS
ACTIONS PLANNED
DECISION CRITERIA
ELEMENT COMPONENTS
Planning Corridors
Contingent Corridors
Communication Sites
Powerplant Sites
Alternative Energy Sources
IMPLEMENTATION

GOALS

The goals of the Energy Production and Utility Corridors Element are:

(1) To establish a network of joint-use planning corridors capable of meeting projected utility service needs to the year 2000.

(2) To identify and establish future communication-site locations and to establish powerplant sites.

(3) To establish and identify potential geothermal and wind siting regions.

ACTIONS PLANNED

DECISION CRITERIA

The following criteria were used in determining decisions contained in this element. These criteria also will be used when evaluating future applications. The California Energy Commission's current demand forecasts and advice and information offered by the Joint Utility Advisory Committee were fundamental to criteria formulation. The Committee was composed of representatives of utility companies and government agencies which have existing utility rights-of-way in the California Desert. Specific electrical and natural gas right-of-way or powerplant site applications made under the provisions of this element should be consistent with adopted California Energy Commission forecasts, which are reviewed biennially.

Decision criteria are to:

(1) Minimize the number of separate rights-of-way by utliizing existing rights-of-way as a basis for planning corridors;

(2) Encourage joint use of corridors for transmission lines, canals, pipelines, and cables;

(3) Provide alternative corridors to be considered during processing of applications;

(4) Avoid sensitive resources wherever possible;

(5) Conform to local plans whenever possible;

(6) Consider wilderness values and be consistent with final wilderness recommendations;

(7) Complete the delivery-systems network;

(8) Consider ongoing projects for which decisions have been made, for example, the Intermountain Power Project; and

(9) Consider corridor networks which take into account power needs and alternative fuel resources.

ELEMENT COMPONENTS

Planning Corridors

Sixteen planning corridors have been identified and are shown on Map 16. Information on the map describes the width of each corridor and existing facilities within it.

Planning corridors are a tool for guiding the necessary detailed planning and environmental assessment work which will continue to be required when a right-of-way is requested. The establishment of a planning corridor is not an automatic grant of a new right-of-way. Utility needs which do not conform to the adopted corridor system will be processed by means of a Plan Amendment in conjunction with necessary permit hearings required by other agencies. The scope of the Desert Plan allows the designation of corridors which address the following types of utility facilities:

(1) New electrical transmission towers and cables of 161 kV (kilovolt) or above;

(2) All pipelines with diameters greater than 12 inches;

(3) Coaxial cables for interstate communications; and

(4) Major aqueducts or canals for interbasin transfers of water.

The joint-use planning corridors vary in width from two to five miles. (These two distance standards describe the width of the planning corridor). There is an acceptable two-mile standard for separation of existing facilities. A two-mile width generally provides sufficient flexibility in selecting alternative routes for a right-of-way. Also, a two-mile width generally provides sufficient space for evaluating a number of possible alternate routes.

The five-mile standard is selected where there is no existing facility and, therefore, little or no engineering and environmental data to define a narrower corridor alignment. It is also selected in those cases where there are so many facilities or merging corridors that a five-mile width

is needed to ensure sufficient space for system integrity and flexibility.

The planning corridors across public lands are shown as a solid line on Map 16. Where private, State, or Native American land ownership predominates, the corridors are depicted as dashed lines. In these locations right-of-way alignments will be a joint responsibility of Federal, State, local, or Native American organizations.

The predominant orientation of proposed utility corridors is east-west, with a number of entry points to the Desert along the Nevada-Arizona border and a number of exit points into the Los Angeles basin or the San Joaquin Valley. A combination of topography, military bases, Native American concerns, wildlife management areas, National Monuments, and city boundaries limits the number of new entry and exit points for utility corridors.

It should be noted that the utility planning corridors specifically address the expansion of utility facilities constructed for the purpose of telecommunications and bulk transfers of electricity, gas, water, petroleum, and other commodities. "Expansion" is defined in this element as "the addition, construction, or major modification of a tower, pipe, canal, or cable to accommodate the transfer of additional products." Expansion does not include some types of minor facility changes which increase the utilization of existing rights-of-way or which reduce the overall impact of the facilities on an existing right-of-way.

Approximately 5,000 Mw of southern California's electrical energy crosses the Desert. An estimate provided by the Joint Utility Advisory Committee indicates that by the year 2000 a total of 20,000 Mw could be transferred in bulk from within or across the California Desert. Such factors as restrictions on coastal construction and air-quality issues in the Los Angeles basin area account for this dramatic increase.

This 20,000 Mw figure cannot easily be used to project facility siting because the location of power sources or the method of transfer have not been finally determined. Power may be produced in the CDCA or in Nevada, Utah, Arizona, or New Mexico; it may come from geothermal, wind, or conventional technology; and it may be transferred by 230 kV, 500 kV, or 765 kV lines. It may be on single or double circuits, and be alternating or direct current.

Contingent Corridors

The Draft Plan Alternatives identified a maximum of 28 planning corridors which were shown on the Use Alternative (see Draft Plan, p. 103). The draft Protection Alternative recommended 15 corridors. In December 1979, Secretary of the Interior Cecil Andrus designated an additional corridor, Corridor BB, along Interstate 15, for the Intermountain Power Project. Nine more corridors (P, Q, R, S, T, AA, W, Y, Z) have been identified as having some potential for use in the future should project status associated with the proposed 16 corridors change. These nine are referred to as "contingent corridors" and are mapped in Appendix XV to the Proposed Plan (October 1980).

Contingent corridors may be brought forward into the Plan after successfully completing the Plan Amendment process. A contingent corridor, however, will not become a planning corridor unless the identified project has successfully been processed through the complete State and Federal regulatory and environmental review processes.

A proposed project which is located in a contingent corridor may be considered simultaneously with a Plan Amendment to make the contingent corridor a part of the Plan. The combined processing of both the project and the amendment will be considered as a "Category 2" Plan Amendment (see Plan Amendment Process).

A Plan Amendment is not required to study a possible utility alignment within a contingent corridor. If the contingent corridor is found undesirable with respect to a particular project, it would remain in "contingent" status.

However, a Plan Amendment will be required if a particular contingent utility corridor is found to be a more desirable route than the corridors in the Plan. Additionally, prior to commencement of such a study, the project sponsor will notify the State Director of his intention to conduct an environmental review process to analyze a right-of-way within a contingent corridor.

Communication Sites

Five microwave tower sites are depicted on Map 16. This element intends not only to accommodate the immediate site of the tower but also to provide space for associated infrastructure such as access roads. The construction of new towers is permitted in Multiple-Use Classes L, M, and I.

Powerplant Sites

The locations of the two powerplant sites which have been given "Notice of Intent" approval by the California Energy Commission are also shown on Map 16. A typical powerplant occupies approximately 2,500–3,000 acres. It is presently impossible to estimate the number of powerplants which can be sited in the CDCA (CDCA powerplant carrying capacity) without evaluating mutual plume reinforcement and resultant acceptability of cumulative air-quality degradation. The BLM would participate with the Department of Defense, Environmental Protection Agency, National Park Service, Air Resources Boards, California Public Utilities Commission, California Energy Commission, and others in undertaking creation of a regional air-quality model and utilities' existing plume prediction capability to identify the acceptable number of powerplants for the CDCA. Proposed powerplant sites in the CDCA will be subject to complete State and Federal regulatory and environmental review. A Plan Amendment will be required for fossil-fuel and nuclear powerplants proposed in a Class L area.

CALIFORNIA DESERT CONSERVATION AREA

Potential For Energy Georesources

Area "potentially valuable" for Oil and Gas (a)(b)

Areas "known valuable" for Geothermal resource (a) - KGRA

Area "potentially valuable" for Geothermal resource (a) - PGRA

1 Identification number of KGRA (see list below)

Western boundary of Overthrust Belt (c)

Occurrence of Uranium (U) and/or Thorium (Th) mineralization from 12 published and unpublished sources

Drainage sediment geochemical sample with U values greater than 320 ppm (d) and/or Th values greater than 220 ppm

Water samples from test holes drilled by USGS Conservation Division with U_3O_8 values greater than 20 ppb (e)

Gamma-ray anomalous (f) area for Uranium and/or Thorium interpreted from airborne survey data

KNOWN GEOTHERMAL RESOURCE AREAS (KGRA)

1- Saline Valley
2- Coso
3- Randsburg
4- Ford Dry Lake
5- Salton Sea
6- Brawley
7- Glamis
8- East Mesa
9- Dunes
10- Heber

(a): These areas were adapted from the USGS Conservation Division classification as per Administrative Report. "Leasable Mineral Resources of the California Desert Conservation" - January, 1979. Definitions of "known valuable" and "potentially valuable" are given in the same report, as well as in G-E-M Resources Appendix, and in the Legend of the Leasables Minerals Map.

(b): There are no areas identified as "known valuable" for Oil and Gas (fossil fuel).

(c): Overthrust Belt: the Overthrust Belt is a sinuous continental geologic structure extending from Canada to Mexico. It is a broad zone of generally similar geology and shallow-angle faults along which rocks on the west side were thrust over those on the east, thus forming geologic environments favorable for the formation and entrapment of oil and gas. It is better understood in its northern part (Idaho, Wyoming, Utah) where exploration efforts resulted in oil and gas discoveries. Its southern extension (Nevada, California, Arizona) is not yet well defined and its potential not well understood. For these reasons, the boundary shown on this map is very general.

(d): ppm=parts per million; that is, one gram in one metric ton

(e): ppb=parts per billion; that is, one gram in 1000 metric tons

(f): Anomalous= a minimum of two adjacent data points each with two or more standard deviations above the mean.

Note: Lands within military bases are withdrawn from mineral entry. This means that all forms of mineral exploration and development are prohibited.

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DESERT PLANNING STAFF

CALIFORNIA DESERT CONSERVATION AREA

Energy Production & Utility Corridors

EXISTING FACILITIES

TRANSMISSION LINE, PIPELINE, AQUEDUCT AND CANAL, TELEPHONE LINE AND CABLE

COMMUNICATIONS SITE

POWER PLANT SITE

PROPOSED JOINT USE PLANNING CORRIDORS

CORRIDOR

CORRIDOR PRIMARILY ON PRIVATE LAND

JOINT RESPONSIBILITY OF LOCAL GOVERNMENT AND BLM

COMMUNICATIONS SITE

POWER PLANT SITE (CEC CERTIFIED)

Corridor	Width	Existing Facilities
A	2 miles	230-kv power line 800-dc power line
B	2 miles	2 / 230-kv power lines
C	2 miles	500-kv power line
D	2 miles	2 / 287-kv power lines 500-kv power line
E	3 miles	2 / 230-kv power lines Telephone pole line
F	2 miles 5 miles	None
G	2 miles	30-in. pipeline
H	2 miles	34-in. pipeline
I	2 miles	230-kv power line
J	2 miles	161-kv power line
K	2 to 4 miles	2 / 30-in. pipelines Coaxial cable Telephone pole line
L	2 miles	161-kv power line canal
M	2 miles	None
N	2 to 5 miles	None
O	2 miles	12-in. pipeline
BB	3 miles	Coaxial cable Pipeline 131-kv power line

Note: See Imperial County General plan for proposed corridors in this area

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

Siting of all powerplants over 50 Mw in California falls primarily under the jurisdiction of the State of California Energy Commission. Because of the extensive nature of total Federal government holdings within the CDCA (18.6 million acres of the 25.7-million-acre total), the potential for widespread dispersion of plumes over Federal government lands, and the Congressional mandate to look after air quality of the entire area, BLM will participate to the maximum extent possible in State Energy Commission hearings on powerplants proposed for siting in the CDCA. As proposals for electrical plants evolve, the State takes lead responsibility in determining need and consistency with the Commission's forecasts before any State permit to build is issued. The Bureau of Land Management will focus on the same factors affecting the public lands and their resources as those used by the Energy Commission. They are:

(1) Consistency with the Desert Plan, including designated and proposed planning corridors;
(2) Protection of air quality;
(3) Impact on adjacent wilderness and sensitive resources;
(4) Visual quality;
(5) Fuel sources and delivery systems;
(6) Cooling-water source(s);
(7) Waste disposal;
(8) Seismic hazards; and
(9) Regional equity.

Alternative Energy Sources

The Energy Production and Utility Corridors Element has recognized the power source technologies being developed in the next 20 years and provides sufficient utility corridors to accommodate expected development in these fields.

The prime areas for geothermal energy are in Imperial County, with an estimated generating capacity of 6,800 Mw (USGS Circular No. 790), and Coso, estimated at 725 Mw. Other regions of the Desert have been classified as noncompetitive geothermal interest areas. These sites of exploratory drilling are managed within the context of the multiple-use class guidelines and are depicted on Map 13, "Potential for Leasable Minerals" in the G-E-M Element. New data on these sites may result in their redesignation as a KGRA or a geothermal site by USGS, perhaps warranting a Plan Amendment. A 50-Mw geothermal plant uses about 110 acres in the best geothermal areas.

California has established long-term goals for solar and wind energy. The statewide programs are described in the California Energy Commission's Final Environmental Impact Report (State Clearinghouse Document No. 78111406, May 1980). The involvement expected to be required of lands in the CDCA is described in the California Energy Commission's 1979 Biennial Report, and in comments made by the Commission regarding BLM's Draft Desert Plan Alternatives and EIS (February 1980).

In coordination with other agencies, a comprehensive wind-energy data-acquisition program will be developed for the CDCA. Extensive meteorological studies will be required, to be funded and carried out by agencies other than BLM. A few major sites are already known, portions of which are well-enough investigated to begin environmental consideration of siting proposals in the near future. Other areas of apparent commercial potential will require detailed feasibility studies before site-specific plans can be prepared. Plan Amendment procedures will adequately provide for the coordination needed for assuring rapid implementation of these important fuel-replacement alternative energy programs in an environmentally sound manner.

Further discussion of energy sources and development is found in the Geology-Energy-Minerals Element, above.

IMPLEMENTATION

This element serves as a guide for future decision-making.

Applications for utility rights-of-way will be encouraged by BLM management to use designated corridors. Compliance with the Plan should speed the BLM approval process and all environmental impact reviews. Managers will first look to contingent corridors for possible solution to requests for developing rights-of-way outside of designated corridors.

Sites associated with power generation or transmission not identified in the Plan will be considered through the Plan Amendment process.

Amendments to this element will generally follow the process contained in the Plan Amendment section. Future projects requiring Plan Amendments will be coordinated with local governments, the Public Utilities Commission, the California Energy Commission, and affected utility companies in accordance with the National Environmental Policy Act and the President's Council on Environmental Quality regulations.

The BLM will continually coordinate with agencies of State and local governments.

Full implementation of this element is not possible as long as Wilderness Study Areas (WSAs) remain in the CDCA. The boundaries of many Wilderness Study Areas are next to right-of-way boundaries. To establish planning corridors, Congress must act on wilderness boundaries and release the public land found nonsuitable for wilderness designation.

LAND-TENURE ADJUSTMENT ELEMENT

Intermingled land ownership patterns in much of the CDCA make management difficult for BLM and other Federal agencies, as well as State and local agencies, Indian reservations, and private landowners. Selected land exchanges and boundary adjustments will be required to improve the opportunities for use or protection of all lands in the Desert, and to promote effective management of public lands administered by the Bureau of Land Management. Participants in these exchanges and boundary adjustments could include private, non-Federal, and Federal government agencies.

The outine for this element is as follows:

GOALS
ACTIONS PLANNED
STATE OF CALIFORNIA
SOUTHERN PACIFIC LAND COMPANY
NEEDS OF DESERT COMMUNITIES
BOUNDARY ADJUSTMENTS WITH OTHER AGENCIES
MANAGEMENT OF UNCLASSIFIED LAND IN THE CDCA
IMPLEMENTATION

GOALS

The Land-Tenure Adjustment Element is designed to direct the acquisition and disposal of public lands to maximize the efficiency and consistency of public land management. Such actions will be taken in accordance with the Federal Land Policy and Management Act and other applicable Federal laws and regulations. Specific programs of land-tenure adjustment will incorporate a broad spectrum of lands, including State land grants, railroad lands, small tract inholdings, and other properties. The objectives for implementation of the Land-Tenure Adjustment Program in the California Desert are to:

(1) Establish a program that complements the objectives of other Desert Plan elements by providing a land-tenure program consistent with resource-management objectives, including adjustments of the CDCA boundaries for more efficient BLM land management, as described in the Plan Amendment Process portion of the Implementation Section of this Plan;

(2) Establish a program for land conveyance that will provide for stable and beneficial patterns of public and private land use;

(3) Acquire lands which are needed to provide for effective BLM management of existing public lands and resources in the California Desert; and

(4) Cooperate with other public agencies at all levels of government in the management of adjacent and interspersed public and private lands, and assure that land-adjustment plans are consistent with locally adopted land-use plans.

ACTIONS PLANNED

Land exchanges, acquisitions, and disposals are necessary for effective and efficient land management in the CDCA. Private or State-owned parcels within areas designated in the Plan as sensitive or unique will require acquisition through exchange or purchase, unless the management of those resources is assured by another appropriate agency or entity. Additionally, BLM-managed land mixed in with mostly private land is difficult to manage due to access problems, lack of identified boundaries, and cost efficiency. These isolated and scattered parcels (where they do not contain legally protected species of plants or animals and cultural artifacts or affect Native American cultural values) will eventually be disposed of. Normally, first consideration will be given to State indemnity selection; second to exchanges. Ultimately, these parcels may be offered for sale or lease.

Specific land-adjustment proposals are not addressed in the Plan and should be directed to the District Manager, California Desert District Office, 1695 Spruce Street, Riverside, California 92507.

Aspects of the Land-Tenure Adjustment Program are discussed below.

STATE OF CALIFORNIA

There are a significant number of State School Land Sections scattered throughout the California Desert. The State Lands Commission had indicated a desire to exchange these sections, particularly many of the sections in Classes C and L, for BLM-managed lands elsewhere in California and elsewhere in the CDCA.

This exchange program, both within the CDCA and outside, would have as its primary objective the maintenance or establishment of manageable tracts of land for the State and Federal governments which would provide ease of administration and cost-efficiency in management.

Therefore, the rapid development of and agreement on a plan for the completion of an exchange with the State is clearly in the public interest and will be assigned a high priority in implementation.

This plan should be developed under a Memorandum of Understanding between BLM and the State Lands Commission as a priority action item, and it should incorporate these concepts:

(1) The State lands in the CDCA to be exchanged should be identified and handled as a package if possible, with all the BLM-managed lands for exchange being considered at once also.

(2) The criteria for identifying selected lands for exchange should be developed early and might include: identifying manageable tracts of land; meeting various State mandates, including economic production; and expanding or blocking up management units for parks, forests, wildlife areas, or recreation-vehicle areas.

(3) The State's mandates for environmental, cultural, and historical protection are the same as, or similar to, the Federal government's; therefore, reviewing and processing these aspects of the exchange can be handled expeditiously.

(4) The State government, local government, and public review of the exchange for public participation and public-interest determination may be handled on a one-time, total-exchange basis and will not have to wait for planning efforts scheduled some years in the future.

(5) Where State land inholdings in areas of Classes C and L have mineral resources, the entire fee estates will be considered for and may be exchanged for similar estates elsewhere when the inholdings are acquired by BLM.

Lieu selection rights of the State must be accommodated. The BLM will work with the State to complete the selections, including access to such lands within the general guidelines mentioned in the multiple-use class guidelines section.

SOUTHERN PACIFIC LAND COMPANY

An exchange program specifically designed to deal with BLM management problems encountered adjacent to Southern Pacific land will be prepared.

Approximately 819,000 acres of checkerboard and scattered Southern Pacific land is commingled with BLM-managed land (approximately 40 percent of the land in this pattern belongs to Southern Pacific). This land pattern is of little benefit to the public or the Southern Pacific Land Company; management is difficult and inefficient. The BLM's land-management policies in this location directly affect Southern Pacific lands, and company activities have impacts upon public lands. Joint management of this area would not prove meaningful to either Southern Pacific or BLM because management goals and objectives of each are not necessarily the same for a similar area.

The BLM will discuss a mutually beneficial land-exchange program with the Southern Pacific Land Company. This program will detail which Southern Pacific lands the BLM wishes to acquire and which lands the BLM will be willing to offer in exchange. The magnitude of this program will depend upon management and the program funding of both BLM and the Southern Pacific Land Company.

NEEDS OF DESERT COMMUNITIES

The BLM will consider the special needs of desert communities for land for public services or the need for key public parcels within communities adjacent to developing areas. The BLM will consider transfer of ownership to the appropriate local government based upon the community's general plan and future public service requirements. In areas adjacent to other State and federally administered lands, where adjustments are being considered, the pertinent authorities will be consulted in the planning of adjustments.

BOUNDARY ADJUSTMENTS WITH OTHER AGENCIES

Boundary adjustments with other agencies such as the U.S. Forest Service and the National Park Service will improve management of Federal lands. These adjustments will be minor but will nevertheless provide for more efficient land management for the agencies involved. For example, boundary adjustments might be made between the U.S. Forest Service and the BLM where the forest boundary meets the BLM desert boundary. Portions of the existing boundary are not necessarily a straight line or the most management-efficient boundary.

Public lands withdrawn for military purposes in the CDCA are undergoing review as part of the withdrawal review process established by FLPMA. This must be completed by 1991. Some boundary changes may be found necessary during that process.

MANAGEMENT OF UNCLASSIFIED LAND IN THE CDCA

A total of 300,000 acres of scattered and isolated public-land parcels in the CDCA which have not been placed within one of the multiple-use classes are considered unclassified land. These parcels are shown in white on Map 1, "CDCA Plan," in the back cover pocket of this document. Some of these parcels are known to contain significant resources such as the Coachella Valley fringe-toed lizard; many other parcels have not yet been inventoried.

The BLM will retain or transfer to other appropriate managing agencies those unclassified parcels containing sensitive resources. Parcels with known mineral resources will be selectively retained. Parcels which are found not to contain sensitive resources and would be better used for development purposes will be considered for disposal after appropriate inventories and consultation with local governments are completed. The most common form of disposal for smaller parcels is competitive bid (sale) at fair-market value. However, exchanges, or even leases and permits, may be considered for these smaller tracts of land if an economically sound proposal in the public interest can be developed. Public roads should be used to gain access to these isolated parcels. Otherwise, access to these tracts would require obtaining a road easement over private property.

IMPLEMENTATION

General guidelines for land-tenure adjustments are based upon the land-acquisition requirements for resource management and protection detailed in the var-

ious elements, especially Wildlife, Vegetation, Cultural Resources, Native American, Recreation, and Wilderness, and in the Areas of Critical Environmental Concern section. Therefore, an important part of Plan implementation is the acquisition of owned parcels adjacent to sensitive areas, as well as within motorized-vehicle recreation areas.

It is important to recognize that a land-exchange program which specifically deals with sensitive-resource protection and enhancement of recreation opportunities is an essential action program for desert resource management. Without such a program the BLM will continue to be at a disadvantage concerning the management of recreation and sensitive resources adjacent to private or State-owned property, and access and trespass may be difficult or nearly impossible to control to protect both BLM resources and private or State-owned property. These acquisition requirements will be given priority ratings and programmed for implementation beginning in 1981. Likewise, a State School Lands exchange will be given a priority rating and funds programmed for implementation from the Lands and Realty Program budget. The BLM has already initiated discussions on the larger land exchange programs with the State of California and Southern Pacific Land Company. These overall exchange programs are in initial stages of development.

The ownership status of land in the CDCA is shown in Table 14.

TABLE 14

CDCA Land Ownership/Administration

	Acres (000)	%
FEDERAL	18,551	
BLM Public Lands (12,131)		47.2
National Monuments (2,497)		9.7
Military (3,172)		12.4
Other (751)		2.9
STATE OF CALIFORNIA	885	3.4
PRIVATE	6,237	
Southern Pacific (819)		3.2
Other (5,418)		21.2
TOTAL	25,673	100.0

CHAPTER 4

Areas of Critical Environmental Concern and Special Areas

The vastness of the California Desert contains many areas endowed by nature or Man with characteristics that set them apart. These areas may be special because of unusual diversity of plant or animal life, unique geologic features or fossil deposits, rare concentrations of the remains of historic or prehistoric use and occupation, or other significant values. Two management programs address these areas: Areas of Critical Environmental Concern and Special Areas.

The Federal Land Policy and Management Act (FLPMA), in Section 103(a), defines an Area of Critical Environmental Concern (ACEC) as an area ". . . within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards."

The ACEC designation is more than a recognition program; it is a process for determining what special management certain important environmental resources or hazards require, and making a commitment to provide this management. Management prescriptions are developed for each area proposed for ACEC designation prior to designation. The requirements are site-specific and may include actions which BLM has authority to carry out, including posting signs, patrolling, and fencing, and recommendations for actions which BLM does not have direct authority to implement, such as cooperative agreements with other agencies and mineral withdrawals.

By definition, "prescription" means direction. Thus, these management prescriptions provide direction for managing ACECs.

Other areas which possess rare, unique, or unusual qualities of scientific, educational, cultural, or recreational significance may have one of 11 types of "Special Area" designations applied to them. In conjunction with ACECs, Special Areas are important management tools which complement the broad regional management of the multiple-use classes and the resource and activity-specific perspective of the Plan Elements.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

GOALS

The goals of the Areas of Critical Environmental Concern Program are to:

(1) Identify and protect the significant natural and cultural resources requiring special management attention found on the BLM-administered lands in the CDCA;

(2) Provide for other uses in the designated areas, compatible with the protection and enhancement of the significant natural and cultural resources; and

(3) Systematically monitor the preservation of the significant natural and cultural resources on BLM-administered lands, and the compatibility of other allowed uses with these resources.

FROM "POTENTIAL" TO "DESIGNATED"

Based upon public review of the Proposed Plan, the Assistant Secretary of Interior's approval of the CDCA Plan, and publication of the list in the *Federal Register*, the ACECs listed herein become officially designated. Seventy-two of the 73 potential ACECs, plus three additional areas of outstanding values, are a part of that process. The areas are shown on the Multiple-Use Class Map of the CDCA Plan (back pocket of this document).

Table 15 describes the ACECs. Names of ACECs are intended to represent a well-known feature in, or near, the area. A documentation summary describing resources involved, location, and rationale for nomination and decisions is provided in Appendix IV to the Proposed Plan (October 1980). The special management prescriptions identified for each recommended area are included in that Appendix. These are also briefly summarized in Table 15. Using the reference numbers from this table, the locations of ACECs in the CDCA can be found on the Map 17 (this map also shows Special Areas, described the next section).

NOMINATION OF NEW AREAS

Requests for consideration of a new ACEC or special area may be submitted to BLM offices at any time. Mem-

bers of the public, including representatives of State and local government, may nominate an environmental or cultural value to be considered for ACEC identification. Such nominations should be accompanied by maps and descriptions, together with available evidence on each area's relevance and importance, as described in the August 1980 *Final Guidelines for Areas of Critical Environmental Concern*. Designation of new ACECs will require Plan Amendments that are subject to public review.

ACTIONS PLANNED

As a result of Plan approval, several actions will be taken: the list of designated ACECs and their legal descriptions will be published in the *Federal Register*; special management prescriptions described for each area (Appendix IV to the Proposed Plan, October 1980) will be reviewed further. These management prescriptions identify the kinds of actions likely to be needed to manage each ACEC. Specific management prescriptions will be developed during preparation of the ACEC activity plans. There will be opportunities for interested and impacted groups and individuals to participate in development of ACEC activity plans. These plans will also include opportunities for the public to assist BLM in implementing specific actions.

The listing of ACECs in the *Federal Register* will complete the final step in the formal designation process. The ACECs will also be included on the Master Title Plats.

An activity plan prepared for each ACEC is the vehicle for translating the special management prescription into ongoing on-the-ground implementation actions. The activity plans will vary in size and complexity depending on the nature of the resources and resources/uses within the ACEC.

The activity plan will clearly identify the ongoing management objectives of the ACEC. The activity plan will include a description of types of future uses, activities, or management practices considered compatible with the purposes of the ACEC, as well as a description of any existing incompatible uses, activities, or practices within the area and a schedule for implementation. The activity plan will also include the "details" of implementing the special management requirements, e.g., patrol schedules, specifications for facilities, etc. These plans will be prepared by, and in combination with, all relevant resource disciplines to properly consider all resources and uses present. The plans will involve public review and environmental analysis.

IMPLEMENTATION

SCHEDULE

The management prescriptions presented generally as Table 15, and in detail as Appendix IV to the Proposed Plan (October 1980), will be implemented upon Plan approval. These prescriptions are subject to amendment as additional knowledge of individual areas becomes available.

The listing and legal descriptions of ACECs will be published in the *Federal Register* within two months of Plan approval.

Activity plans will be prepared on a priority basis for all ACECs, and priority will be given to ACECs where the critical resources are most threatened. Activity plans for ACECs will be prepared within two years of Plan adoption. Interim management under BLM authority will be conducted until activity plans are completed.

MONITORING

Requirements for monitoring will be included in the activity plans. Monitoring is a continual check of the ACEC to identify any modification of existing conditions. Not all ACECs, or features within these areas, require monitoring with the same frequency or detail. Monitoring data will be analyzed to detect change and its cause(s) and to recommend corrective action.

Information on the status of ACECs will be included annually in the BLM's report to Congress.

SUMMARY OF MANAGEMENT PRESCRIPTIONS

A detailed set of management prescriptions for each recommended ACEC is presented in Appendix IV to the Proposed Plan (October 1980). The activity plans which will be prepared during the first two years of Plan implementation will identify the long-term management directives for each ACEC.

The special management prescriptions identified for each area are hand-crafted and site-specific. They are designed to meet the immediate management needs for each area: to alleviate threats to critical resource values by communicating to visitors the existence of sensitive sites and the need for caution; to protect specific sites by constructing barriers to prevent surface damage; and to provide other measures that result in protection of the most environmentally important and fragile resources.

While the primary management focus for ACECs is the protection of important cultural and natural resources and human life and property from natural hazards, every effort is made to accomplish such protection without unnecessarily or unreasonably restricting users of public lands from uses that are compatible with that protection. An ACEC is not an area in which no development can occur. Quite often development, when wisely planned and properly managed, will take place in these areas if the basic intent of protection of historic, cultural, scenic, or natural values is assured.

In the case of certain wildlife and cultural resources, surface disturbances from mining, motorized-vehicle access, and grazing or other uses will have to be controlled. For many areas, signs may have to be posted soliciting

TABLE 15
AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Area Number	Name	Acres	Resource Values	General Management Requirements: Control and Sign User/Vehicle Access	Increase Field Presence	Control Grazing Use	Control Feral Horses and Burros	Restrict Mineral Exploration and Development	Monitor/Limit Water Development	Develop Additional Habitat/Water Sources	Regulate Collection of Resources/Firewood	Conduct Intensive Resource Inventory	Control Exotic Species/ Introduce Native Species	Stabilize/Rehabilitate/ Salvage Features	Develop Cooperative Agreement	Develop Complementary Activity Plan	Accelerate Implementation of Existing Plan	Exchange or Purchase Private Lands	Develop/Designate Visitor Use Areas/Facilities	Develop and Implement Interpretive Program	Establish Baselines/ Monitor Resource Conditions
1	White Mountain City	832	prehistoric and historic values	X	X																
2	Western Rand Mountains	16,400	wildlife and habitat	X										X	X			X		X	
3	Eureka Valley Dunes	5,164	rare and endemic flora and fauna; outstanding scenic quality	X	X		X		X									X			
4	Saline Valley	3,602	wildlife habitat	X			X			X				X	X	X	X	X			
5	Cerro Gordo	9,990	prehistoric and historic values; vegetation	X			X	X				X		X							
6	Darwin Falls/ Canyon	3,148	wildlife habitat; outstanding scenic quality	X	X		X		X			X									
7	Rose Spring	902	prehistoric values	X	X							X		X							X
8	Surprise Canyon	13,168	historic mining; outstanding scenic quality; wildlife habitats; vegetation; prehistoric values	X	X		X				X	X	X					X	X	X	X
9	Greenwater Canyon	3,067	prehistoric and Native American values	X	X															X	
10	Fossil Falls	1,547	prehistoric values																	X	
11	Sand Canyon	2,338	wildlife habitat	X	X												X				
12	Great Falls Basin/ Argus Range	9,723	wildlife habitat; outstanding scenic quality	X	X		X		X						X			X	X		
13	Amargosa River/ Grimshaw Lake	13,675	wildlife habitat; vegetation; outstanding scenic quality; riparian area	X	X			X	X				X			X	X			X	
14	Kingston Range	14,452	wildlife habitat			X	X			X										X	
15	Mesquite Lake	7,251	prehistoric values	X	X									X							
16	Trona Pinnacles	6,360	outstanding scenic quality; unique geologic formations	X	X									X						X	X
17	Denning Spring	416	prehistoric and historic values	X	X									X	X						
18	Salt Creek (Dumont)	2,009	wildlife habitat; prehistoric values	X	X				X				X	X		X				X	
19	Clark Mountain	17,826	prehistoric and historic values; wildlife habitat; outstanding scenic quality	X			X			X		X									X
20	Jawbone/Butterbread Area	155,435	wildlife; Native American values	X	X	X								X							
21	Last Chance Canyon	5,274	prehistoric and historic values	X	X							X									X
22	Desert Tortoise Research Natural Area	15,870	wildlife												X			X	X	X	X
23	Christmas Canyon	8,540	prehistoric values	X	X																
24	Bedrock Spring	784	prehistoric values	X	X									X							X
25	Steam Well	40	prehistoric and historic values	X	X																X
26	Squaw Spring	661	prehistoric and historic values	X	X									X							X
27	Goldstone	2,597	historic values	X	X									X						X	X
28	Camp Irwin Boundary	2,020	prehistoric values	X	X										X						X
29	Halloran Wash	734	prehistoric values	X	X							X									
30	Mountain Pass Dinosaur Trackway	2,268	historic mining area; paleontological values	X	X			X				X		X						X	X
31	New York Mountains	54,750	wildlife habitat; outstanding scenic quality	X			X									X		X			X
32	Camp Rock Spring	663	prehistoric and historic values		X									X		X					X
33	Fort Piute	4,175	wildlife habitat; prehistoric and historic values; outstanding scenic quality; riparian area	X	X	X				X	X		X			X		X	X	X	
34	Dead Mountains	21,853	Native American values	X	X									X	X						
35	Black Mountain	5,304	prehistoric and Native American values	X	X									X	X						

Table 15 (cont.)

General Management Requirements

Area Number	Name	Acres	Resource Values	Control and Sign Use/Vehicle Access	Increase Field Presence	Control Grazing Use	Control Feral Horses and Burros	Restrict Mineral Exploration and Development	Monitor/Limit Water Development	Develop Additional Habitat/Water Sources	Regulate Collection of Resources/Firewood	Conduct Intensive Resource Inventory	Control Exotic Species/ Introduce Native Species	Stabilize/Rehabilitate/ Salvage Features	Develop Cooperative Agreement	Develop Complementary Activity Plan	Accelerate Implementation of Existing Plan	Exchange or Purchase Private Lands	Develop/Designate Visitor Use Areas/Facilities	Develop and Implement Interpretive Program	Establish Baseline/ Monitor Resource Conditions
36	North Harper Dry Lake	400	vegetation	X													X		X		
37	Harper Dry Lake	1,760	wildlife habitat and riparian area				X	X			X	X	X	X			X		X	X	
38	Kramer Hills	960	prehistoric values	X	X					X			X	X			X				
39	Rainbow Basin/ Owl Canyon	2,158	outstanding scenic quality; unique geologic and paleontologic features; prehistoric values	X	X								X	X			X				
40	Calico Early Man Site	930	prehistoric human occupation										X								
41	Fort Soda Mojave Chub	6,770	prehistoric and wildlife values	X		X											X		X	X	
42	Mesquite Hills/Crucero	5,640	prehistoric values	X	X							X				X	X				
43	Afton Canyon	4,904	vegetation; wildlife habitat; outstanding scenic quality; riparian area	X	X						X	X		X		X			X	X	
44	Silver Mountain Vicinity	1,802	historic mining and occupation area	X	X								X	X						X	
45	Juniper Flats	3,107	prehistoric occupation; historic mining	X	X	X															
46	Upper Johnson Valley Yucca Rings	260	unique vegetation formation	X	X														X	X	
47	Soggy Dry Lake Creosote Rings	278	unique vegetation formation	X	X												X		X	X	
48	Marble Mountain Fossil Bed	289	paleontological values		X		X											X			
49	Whitewater Canyon	12,145	wildlife habitat and Native American values	X	X						X						X	X		X	
50	Big Morongo Canyon	2,176	wildlife habitat				X		X	X	X						X	X	X		
51	Dale Lake	2,380	prehistoric values	X	X													X	X		
52	Patton's Iron Mountain Divisional Camp	3,606	historic military camp	X	X						X		X	X					X		
53	Whipple Mountains	3,431	Native American values	X	X					X				X							
54	Sidewinder Well	4,940	prehistoric values	X	X																
55	Palen Dry Lake	3,386	prehistoric values	X	X	X				X			X						X	X	
56	Corn Spring	5,540	prehistoric and historic values; outstanding scenic quality; vegetation; wildlife habitat	X	X						X	X	X	X					X	X	
57	Chuckwalla Valley Dune Thicket	3,126	wildlife habitat	X										X	X	X	X	X			
58	Mule Mountains	3,886	prehistoric values																X	X	
59	Chuckwalla Bench	52,749	wildlife habitat	X	X									X	X				X		
60	Salt Creek Pupfish/Rail Habitat	2,053	wildlife	X						X		X	X	X	X						
61	San Sebastian Marsh/San Felipe Creek	6,337	prehistoric, historic, and Native American values; riparian area; wildlife	X	X					X		X		X	X				X	X	
62	Coyote Mountains Fossil Site	640	paleontological values		X		X												X		
63	Coyote Mountains	1,357	prehistoric values	X	X							X		X						X	
64	Yuha Basin	40,622	prehistoric and historic values; wildlife habitat	X	X							X							X		
65	Lake Cahuilla #2	1,214	prehistoric values	X	X		X					X							X		
66	Lake Cahuilla #3	2,554	prehistoric values	X	X		X					X		X					X		
67	Gold Basin-Rand Intaglios	1,253	prehistoric values	X	X		X					X									
68	Indian Pass	1,920	prehistoric values	X	X					X											
69	Lake Cahuilla #5	5,412	prehistoric values	X	X		X					X									
70	East Mesa Flat-tailed Horned Lizard Habitat	40,712	prehistoric values; wildlife habitat	X			X					X		X	X				X		
71	Lake Cahuilla #6	4,483	prehistoric values	X	X		X					X		X					X		
72	Plank Road	283	unique historic road	X	X							X		X			X				
73	Pilot Knob	2,095	prehistoric and Native American values	X	X		X														
74	Cronese Basin	7,760	cultural resources and wildlife habitat	X	X	X		X				X	X	X							X
75	Mopah Spring	1,320	outstanding scenic quality and cultural resources	X	X		X					X		X					X	X	X

the cooperation of visitors. In some cases, fencing may be utilized to prevent unintentional impacts. Some valuable wildlife resources will require assistance in the way of reducing or eliminating competition for water sources or forage.

The cooperation of adjacent landowners may be necessary to assure the protection of some resources and cooperative agreements will be sought. Sometimes private inholdings occur within critical resource areas, and exchange or fee acquisition for these areas will be pursued. If additional knowledge is necessary to help protect some critical species or features, more intensive inventories will be conducted. The good will and cooperation of the many visitors to the public lands will be absolutely essential to the protection of many critical resource values. To encourage this cooperation, directional signs and visitor use areas will be developed and designated, and informational facilities and interpretive programs will be instituted to increase visitors' knowledge of and sensitivity to the protective needs of important natural and cultural resource values. Consultation with the adjacent land owners will be conducted when ACECs and their management may conflict with adjacent owners' land uses and requirements. Such owners will be included in implementation and management of ACECs.

SPECIAL AREAS

GOALS

The goals of the Special Areas Program are to:

(1) Recognize significant natural and cultural resources found on BLM-administered lands in the CDCA;

(2) Provide for other uses in the designated Special Areas, compatible with the protection and enhancement of the significant natural and cultural resources; and

(3) Systematically monitor the qualities of the significant natural and cultural resources on BLM-administered lands and the compatibility of other allowed uses with these resources.

ACTIONS PLANNED

The multiple-use class guidelines for the class in which the area is located will provide the basic management direction for each Special Area. Where appropriate, activity plans will be prepared for Special Areas, and these plans will establish site-specific management directives.

Eleven Federal "Special Area" designation categories have been or will be used in this Plan for the California Desert. They are:

—Research Natural Areas
—Outstanding Natural Areas
—Other Natural Areas
—National Natural Landmarks
—National Historical Landmarks
—*National Register of Historic Places*
—Historic American Engineering Record
—National Scenic Trails
—National Historic Trails
—Man and the Biosphere Reserve
—Recreation Lands

These Special Area designations are described in detail in Appendix IV to the Proposed Plan (October 1980).

Fourteen specific geographic areas in the CDCA are identified as Special Areas in this Plan. These are shown on Map 17, "Areas of Critical Environmental Concern." These areas were evaluated for recognition and are designated or nominated under one or more of the categories above. Evaluation factors considered were resource values, appropriate special designations proposed, and public comments. These Special Areas and their designation categories are:

Panamint City
National Historic Landmark
National Register of Historic Places
Historic American Engineering Record

Zinc Hill
National Register of Historic Places
Historic American Engineering Record
California Historic Landmark

Goldstone
National Register of Historic Places

Western Mojave Saltbush
Research Natural Area

Mojave Road
National Historic Trail
National Historic Landmark

Cima Dome
National Natural Landmark

Kelso Dunes
National Natural Landmark

Granite Mountains
Research Natural Area
Man and the Biosphere Reserve

Pisgah Lava Flow
Research Natural Area

Butterfield Stage Route
National Historic Trail

Coachella Valley Fringe-toed Lizard
Research Natural Area

Stoddard Valley
Recreation Vehicle Area

East Mojave
National Scenic Area

Amboy Crater
National Natural Landmark

Some of these designations become official with Plan approval; others require approval and/or action by other agencies, or legislative action.

Prior to approval of the Plan, there were 35 special areas in the California Desert (see Appendix IV to the Proposed Plan, October 1980). These Special Areas will

be evaluated during Plan implementation. The areas will be reviewed for approriateness of existing designations, and designations will be adjusted as required.

EAST MOJAVE

The East Mojave region of the CDCA has long been recognized as containing numerous unique natural, cultural, scenic, and recreational values. To judiciously identify the area, yet not threaten the values through overuse, the Secretary of the Interior designated the region as the "East Mojave National Scenic Area" (NSA).

A management philosophy statement will be prepared in advance of specific activity plans with the NSA. This statement will be developed with public participation and the advice of the District Multiple-Use Advisory Council. Generally, resources will be managed and new uses allowed with full consideration given to mitigating any adverse effects on the scenery and current activity levels within the region.

The management philosophy will then provide guidance during development of management plans for the following Special Areas within the NSA:

ACECs
- Clark Mountain
- New York Mountains
- Piute Creek/Fort Piute
- Fort Soda

Preliminary Recommendations for Wilderness
- Castle Peaks
- Cinder Cones
- Piute Range
- Providence Mountains
- South Providence Mountains
- Kelso Dunes
- Granite Mountains

National Natural Landmarks
- Kelso Dunes
- Cima Dome
- Mojave Road

National Historic Trail
- Mojave Road

Research Natural Area
- Granite Mountains

Man and the Biosphere Reserve
- Granite Mountains

Other Activity Plans
- Allotment Management Plans
- Habitat Management Plans
- Herd Management Area Plans
- Etc.

Special Areas Proposed by Government Agencies and Private Interests

NOMINATION OF NEW AREAS

Requests for consideration of new Special Areas may be submitted to BLM offices at any time. Members of the public, including representatives of State and local government, may nominate an environmental or cultural natural area to be considered for Special Area designation.

Designation of additional Special Areas may not require Plan Amendments. These designations are primarily recognition-oriented. Special Area activity plans will be prepared where appropriate, according to schedules developed under the elements in which they fall.

CALIFORNIA DESERT CONSERVATION AREA

Areas Of Critical Environmental Concern and Special Areas

ACEC DESIGNATIONS

Map Number	Name
1-	WHITE MOUNTAIN CITY
2-	WEST RAND MOUNTAINS
3-	EUREKA VALLEY DUNES
4-	SALINE VALLEY
5-	CERRO GORDO
6-	DARWIN FALLS
7-	ROSE SPRINGS
8-	SURPRISE CANYON
9-	GREENWATER CANYON
10-	FOSSIL FALLS
11-	SAND CANYON
12-	GREAT FALLS BASIN / ARGUS RANGE
13-	AMARGOSA RIVER / GRIMSHAW LAKE
14-	KINGSTON RANGE
15-	MESQUITE LAKE
16-	TRONA PINNACLES
17-	DENNING SPRINGS
18-	SALT CREEK (Dumont)
19-	CLARK MOUNTAIN
20-	JAWBONE / BUTTERBREAD AREA
21-	LAST CHANCE CANYON
22-	DESERT TORTOISE Research Natural Area
23-	CHRISTMAS CANYON
24-	BEDROCK SPRINGS
25-	STEAM WELL
26-	SQUAW SPRING
27-	GOLDSTONE
28-	CAMP IRWIN MILITARY BOUNDARY
29-	HALLORAN WASH
30-	MOUNTAIN PASS Dinosaur Trackway
31-	NEW YORK MOUNTAINS
32-	CAMP ROCK SPRING
33-	FORT PIUTE
34-	DEAD MOUNTAINS
35-	BLACK MOUNTAIN
36-	NORTH HARPER DRY LAKE
37-	SOUTH HARPER DRY LAKE
38-	KRAMER HILLS
39-	RAINBOW BASIN / OWL CANYON
40-	CALICO EARLY MAN SITE
41-	FORT SODA Mohave Chub
42-	MESQUITE HILLS / CRUCERO
43-	AFTON CANYON
44-	SILVER MOUNTAIN VICINITY
45-	JUNIPER FLATS
46-	UPPER JOHNSON VALLEY Yucca Rings
47-	SOGGY DRY LAKE Creosote Rings
48-	MARBLE MOUNTAINS Fossil Bed
49-	WHITEWATER CANYON
50-	BIG MORONGO CANYON
51-	DALE LAKE
52-	PATTON'S IRON MOUNTAIN Divisional Camp
53-	WHIPPLE MOUNTAINS
54-	SIDEWINDER WELL
55-	PALEN DRY LAKE
57-	CHUCKWALLA VALLEY Dune Thicket
58-	MULE MOUNTAINS
59-	CHUCKWALLA BENCH
60-	SALT CREEK Pupfish / Rail Habitat
61-	SAN SEBASTIAN MARSH / SAN FELIPE CREEK
62-	COYOTE MOUNTAINS Fossil Site
63-	COYOTE MOUNTAINS
64-	YUHA BASIN
65-	LAKE CAHUILLA NO. 2
66-	LAKE CAHUILLA NO. 3
67-	GOLD BASIN / RAND Intaglios
68-	INDIAN PASS
69-	LAKE CAHUILLA NO. 5
70-	EAST MESA Flat-tailed Horned Lizard Habitat
71-	LAKE CAHUILLA NO. 6
72-	PLANK ROAD
73-	PILOT KNOB
74-	CRONESE LAKE
75-	MOPAH SPRINGS

SPECIAL AREA DESIGNATIONS

Name and Designation

A-	ZINC HILL National Register of Historic Places Historic American Engineering Record California Historic Landmark
B-	PANAMINT CITY National Historic Landmark National Register of Historic Places Historic American Engineering Record
C-	WESTERN MOJAVE SALTBUSH Research Natural Area
D-	GOLDSTONE (ACEC) National Register of HIstoric Places
E-	PISGAH LAVA FLOW Research Natural Area
F-	KELSO DUNES National Landmark Area
G-	GRANITE MOUNTAINS Research Natural Area
H-	CIMA DOME National Natural Landmark
I-	MOJAVE ROAD National Historic Trail
J-	AMBOY CRATER National Natural Landmark
K-	BUTTERFIELD STAGE ROUTE National Historic Trail
L-	COACHELLA VALLEY Fringe-toed Lizard Research Natural Area
M-	EAST MOJAVE National Scenic Area
N-	STODDARD VALLEY Recreation Vehicle Area

NOTE: Some of these become official with Plan Approval; others require approval and/or action by non-Bureau or Interior agencies or legislative action.

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

PART II

Implementation

OF THE PLAN

CHAPTER 5

Implementation Process

The California Desert Plan, established by law, carries a long-term commitment for the Bureau of Land Management to establish and maintain programs for comprehensive management of the California Desert and the public lands in the CDCA.

The Plan is a management guide which will provide directions to land-use managers in developing subsequent resource management plans during the implementation phase.

Implementation is more than a promise. It is a contract with the public as to exactly how this Plan will be carried out and what methods BLM will use over the coming years to assure that public needs, desires, and values will be met and protected on the public lands in the California Desert.

The BLM has developed this implementation process to cover several very important areas. The first is the methodology for responding to formal recommendations from the California Desert Conservation Area Advisory Committee. The second is the pattern for coordination with all levels of government—Federal, State, and local—not just with those governments having jurisdiction and responsibility for lands or actions within the CDCA, but also with agencies who may affect, or be affected by, BLM actions in the Desert.

In order to implement a land-use management plan over any area, from backyard landscaping to the 25 million acres of the Desert, it is necessary to monitor actions and their results, to measure effectiveness of any action, and to determine need for subsequent amendment or revision. Implementation includes a process for monitoring the Plan and for evaluating the results and taking corrective measures when necessary.

No Plan can be cast in concrete and this one certainly is not. If changes need to be made, or there is a better way to do things, then the Plan will have to be amended. The BLM's implementation approach outlines how this will be done: how changes can be initiated by individuals, organizations, government agencies, and the Bureau itself, and how those requests for amendment will be analyzed and decided upon through public involvement and participation.

It takes money to implement a plan. It takes money to follow recommendations, to cooperate with others, to monitor, and to change. It takes money to manage, to recruit and maintain an adequate personnel force, and to provide the public with answers and service. Budgetary requirements are the hardrock foundation for implementation of this Plan.

CDCA ADVISORY COMMITTEE RECOMMENDATIONS

To assist the Bureau in designing long-range implementation goals for the California Desert Plan, the Advisory Committee established a special Committee Task Force to study the Plan and submit recommendations for its implementation. The CDCA Advisory Committee recommended certain goals (1–7) and approved of the Final Plan.

1. *Establish an organizational structure that treats the CDCA as a single management unit.*

   Response—This recommendation was implemented on October 1, 1980, with the establishment of a single California Desert District to manage the public lands in the CDCA, rather than splitting the responsibility between the Riverside and Bakersfield Districts, as was formerly the case.

2. *Institute personnel practices that (a) insure the hiring of qualified staff committed to the goals of the Plan; (b) provide career incentives to retain CDCA-trained staff for more than the short term; and (c) specify orientation and training of staff on a periodic basis.*

   Response—Qualified individuals who have an interest in and a desire to contribute professionally to the management of the Desert will be diligently sought out under the required Federal personnel regulations.

3. *Authorize the use of volunteers to aid in establishing a BLM "presence" within areas needing protection.*

CDCA Advisory Committee

Established under Section 601(g)(1) in accordance with the provisions of Section 309(a) of the Federal Land Policy and Management Act of 1976, to advise the Secretary of the Department of the Interior with respect to the preparation and implementation of the comprehensive, long-range plan required for the management, use, development, and protection of the public lands within the California Desert Conservation Area.

Standing:
(Left to right)

LAURENCE W. LANE, Jr.
Public Affairs

RICHARD VOGL
Botanical Resources

WILBUR W. MAYHEW
Wildlife Resources

HARVEY PERLOFF
Social Science

FRANK De VORE
Energy-Utilities

WILLIE PINK
General Public
(Native Americans)

JAMES W. BURNS
State Government

RICHARD H. JAHNS
Earth Science

E. DEAN LEMON
Mining-Minerals

Seated:
(Left to right)

CLAYTON A. RECORD, Jr.
Adv. Comm. Chairman
Elected General-Purpose Government

RUTH SIMPSON
Archaeology

RONALD J. SLOAN
Outdoor Recreation

GENNY SMITH
Outdoor Recreation

W. LEON HUNTER
Environmental Science

ERNA SCHUILING
General Public

Response—The success of volunteer assistance in other agencies should serve as a model for the Bureau. There are numerous organizations and individuals who would support and participate in an auxiliary patrol or special surveillance program to prevent overuse, unauthorized collecting, and vandalism on the public lands. In some cases the use of a volunteer resident caretaker may provide a means to help protect resources. Although some of this can be done today, BLM is pursuing legislation to authorize fuller use of volunteer services.

4. *Institute long-range programs to educate desert users, in order to minimize the use of enforcement procedures.*
   Response—Investments in environmental education will result in a more enlightened and self-policing desert user. This program will include education packages for schools, special interpretive facilities, desert classrooms, and field trips for organized groups.

5. *Establish explicit long-range provisions to continue (a) monitoring cumulative results of impacts on sensitive resources; (b) evaluating Plan manageability; and (c) assessing changes that affect Plan relevance and fitness.*

   Response—Monitoring, evaluation, and assessment are continuing processes and the Plan Amendment process provides the flexibility to accommodate change.

6. *Establish methods for regularly amending the Plan within the mandates of the law (FLPMA, Section 601), rather than reacting to "put-out-the-fire" crisis changes.*

   Response—This procedure is outlined in the Plan Amendment Process subsection.

7. *Appoint a high-level citizens' advisory committee (not the present CDCA Advisory Committee) to monitor use of the CDCA lands and resources.*

   Response—The BLM Districts are authorized to establish advisory councils made up of citizen representatives of the major interest groups in the Desert. Such a council will be established for the California Desert District.

ADVISORY COMMITTEE INPUT DURING FINAL PLAN DEVELOPMENT

At their November 21, 1980, meeting, committee members commented on the then-remaining issues and provided other information which was considered in preparing the Plan. In every case where there was unanimity or consensus on one issue, the committee's advice was incorporated in the Plan decisions. The committee did not reach consensus on one issue, the crossing of Class L lands by competitive events.

In addition, those members present passed the following resolution:

> *Resolution*
>
> Considered by the Advisory Committee for the California Desert Conservation Area, November 21, 1980, in regular session at Fort Soda, California:
>
> "The Desert Advisory Committee has carefully considered the Proposed Plan and Final EIS for the California Desert Conservation Area and offers appropriate revisions and ideas for improvement, knowing that the Secretary of the Interior will consider the advice of the Committee carefully in making his final decisions. We ask that he implement the California Desert Conservation Area Plan as a first step in a continuing process for the management of this important area."

The resolution passed by a roll-call vote of those present, 13–0.

INTERGOVERNMENTAL COORDINATION

During the planning process for the development of this Plan, many governmental agencies were contacted to obtain suggestions as well as the details of other governmental plans and programs that would be relevant to the CDCA. This included other Federal agencies, State agencies, and local counties and cities. In addition, contacts have been established with a number of Native American tribes who have cultural interests in the CDCA and their own forms of tribal government.

Specific coordination mechanisms will be developed to assure complete coordination throughout the implementation process.

Additionally, the need for public land for public purposes near local communities is an ongoing concern of local governments. This must be recognized and responded to in a cooperative manner. The use of public lands administered by BLM for public purposes requires consistency with county and city general land-use plans for their individual communities. The Bureau's involvement and coordination in the local governmental planning process will be required.

The BLM will also have to maintain close coordination with the Department of Defense and with local military bases in the CDCA to insure that implementation of the California Desert Plan will be as consistent as possible with the missions and purposes of these bases.

The BLM will also work toward encouraging assistance

from these military bases in managing public uses on public lands within the vicinity of the bases.

Additional areas of intergovernmental coordination will include: State and local air- and water-quality programs; BLM land-exchange programs; the process for amending the Plan; cultural resource management programs, especially with respect to local Native American concerns; energy projects; wildlife management; land management in areas adjacent to the boundaries of military bases and National Monuments; and the issuance of BLM grants or permits for access to State or privately owned lands and to public lands where authorized developments, such as mining claims, may take place.

Intergovernmental coordination will be an intensive, continuing, and participatory process of managing the public lands and resources in the CDCA and of implementing the California Desert Plan goals and objectives.

In order to facilitate effective intergovernmental coordination, an interagency coordination group will be proposed. This group would be patterned after the highly successful Owens Valley Interagency Committee. Active membership will be sought from appropriate county, State, and Federal agencies.

This group will be able to develop independent specific coordination objectives and undertake (sponsor) objectives consistent with the Desert Plan. This group would actively interface with the District Multiple-Use Advisory Council.

CHAPTER 6

Support Requirements

MONITORING

Within two years of final adoption of a California Desert Plan, BLM will have an additional monitoring program designed and implemented to measure the Plan's effectiveness and to specify needs for subsequent amendment or revision. The design, the measurement intervals, and the standards for revision will be based on the estimated sensitivity of desert resources to management decisions which are a part of the Plan. This program will supplement BLM's routine monitoring measures of on-the-ground management, surveillance and use supervision of grazing leases, and other public land uses.

Monitoring and evaluation intervals will not exceed five years. Where and when necessary, the intervals will be more frequent. Threshold levels will be established and monitored for key resource components in the CDCA such as threatened, endangered, rare, or sensitive plant and animal species and their critical habitats. When such levels are found to be met, or exceeded, corrective actions will be undertaken, including amendments to the Plan, if necessary.

Similarly, plans of other Federal agencies, State and local governments, and Native American tribal governments will be followed to monitor changes having a bearing on the CDCA and the California Desert Plan. Other sources of new data will also be tracked. All monitoring and evaluation reports will be made available for public review.

Monitoring a large comprehensive resource and land-use plan can present a large, complex, and expensive task. For the California Desert Plan it will be necessary to select only significant items with high sensitivity to planning decisions. Within these, key indicators will be selected that can be practically monitored. For tracking wide-spreading resource trends, a sound baseline of data will have to be selected from the extremely large amount of resource information collected in the planning process and, in some cases, further augmented. Statistically valid sampling systems will be designed.

Monitoring will employ two perspectives: measurement of impacts and measurement of mitigations. The principal perspective will cover broad areas such as common vegetation types or ecosystems. It will focus on the resources impacted from cumulative sources, with analyses for trends. Extreme variability in local area annual precipitation could make trend verification difficult. Usually, several interrelated resource conditions will be monitored by coordinated data gathering and analysis (e.g., for soil erosion, vegetation, and wildlife populations.)

A second monitoring perspective will focus on the measurement of impacts and mitigation effectiveness of one particular action on all the resources it is anticipated to significantly affect, e.g., effects of grazing on cultural and wildlife values. Such selected monitoring targets would be very limited but intensively followed where information is needed for a particular class of action on a particular type of site (e.g., a producing hardrock mine in a sensitive environmental zone or off-road-vehicle open-play area inhabited by a sensitive wildlife species).

More specific information on planned monitoring efforts is given in a number of the various Plan elements. Most give only the items of significance in terms of actions, conditions, and trends targeted for monitoring. General monitoring approaches are given in some cases, but specific designs and standards are left to be determined through the necessary analyses needed during the two-year period following Plan adoption.

OTHER SUPPORT REQUIREMENTS

Soil, water, and air are the three most essential resource components of the California Desert Conservation Area. Management of these resources is interrelated with management of all other resources in the Desert. To successfully implement a Plan for the CDCA, it is necessary to develop and integrate methods for providing these resources with the special treatment and attention that will be necessary to assure good quality for maintenance and improvement of other resources in an ongoing program.

Soil Resources—The soil resource is the foundation of the Desert. All activities—human or other—affect this resource in various ways, creating impacts that range from minimal to major.

The BLM has conducted soil inventories at different detail levels over approximately 35 percent of the public lands in the CDCA. In addition, estimations have been made from aerial photographs of the total area of soils which have been greatly impacted by human uses, including mining, motorized-vehicle use, and livestock grazing.

There is a need for a better understanding of the interrelationships between activities occurring within the CDCA and the soil resources of the land. Only by accomplishing this objective can environmental quality be maintained or enhanced where necessary.

Air Quality—Good air quality is one of the characteristic traits of the California Desert. In fact, many of the present residents in the CDCA have moved to the desert to avoid air pollution in towns and cities. Also, some of the military bases which have been established in what is now the CDCA were located there because of the good air quality needed for military training and operations.

The Federal Land Policy and Management Act of 1976 and the Clean Air Act Amendments of 1977, along with Executive Order 12088 of 1978, "Federal Compliance with Pollution Control Standards," require the BLM and other Federal land-management agencies to preserve and protect air quality related to values on Federal lands.

Water Resources—Water resources within the CDCA are limited, as in any Desert or arid ecosystem. Where significant quantities of surface water do occur, unique and rare riparian and aquatic habitats are often found. More information concerning these surface-water sources must be collected as a basis for management direction and decision. Development of water supplies within the CDCA is necessary for maintenance and enhancement of various natural resources and improved management opportunities.

Potentially usable ground-water supplies are believed to be relatively plentiful; however, present knowledge is limited and much more detailed data will be required. More information on the occurrence and quality of available ground-water supplies and sources must be collected and evaluated before long-term management decisions can be effective.

Two other BLM programs are important in the support of resource protection and the maintenance of environmental quality:

Unauthorized Use—Unauthorized use is the unlawful use of public resources and public lands. It is a problem which affects legitimate users of public lands, affects the natural and cultural resources available on those lands, and affects the ability of responsible land managers to manage properly for the general public welfare.

Unauthorized use directly or indirectly has an impact on the Bureau's ability to manage the public lands, whether it occurs in the CDCA or in other areas under the administration of BLM. Unauthorized use, for example, results in lost revenues to the public as a result of uncollected fees; in adverse impacts on the environment; and in costs incurred when corrective action is taken to terminate the unauthorized use. Even local governments may be monetarily affected by unauthorized use as a result of lost revenues from uncollected taxes.

Unauthorized use diminishes everything it touches—natural resources, cultural and human values, budget, tax bases—even the person who, through unauthorized use, has broken the law.

Cadastral Survey—Historically, cadastral survey needs in the CDCA have received low priority because of such management and administrative requirements elsewhere in the State of California as energy needs, timber requirements, and unauthorized use.

Cadastral surveys are required to resolve boundary locations in areas of extreme obliteration of survey evidence, or in areas which have a gross misalignment of boundaries due to hiatus and overlapping survey performed by contract in the late 1800s. In many areas, fewer than 20 percent of the original survey corners can still be located, and new ones must be established to determine land ownership and jurisdiction.

The following section discusses how these programs will proceed in the CDCA.

SOIL RESOURCES

The BLM has conducted studies to understand better the effects of soil impacts. Investigations were made of soil compaction and its relation to plant growth, Valley fever fungus in ORV activity areas, wind erosion threshold velocities, nitrogen fixation in various activity areas, and fugitive dust from motorized-vehicle races and other motorized-vehicle activities.

The ongoing soils program within the California Desert District will continue the following activities: (1) soil studies to better understand impacts on the soil; (2) soil inventories to determine areas where uses will be best suited; and (3) monitoring to determine the extent of impacts and long-term trends.

SOIL STUDIES

Reclamation of motorized-vehicle-use open areas (particularly hillclimbs) is a possibility that will be investigated. This would not be done to restore the area to its original condition, but to keep hillclimbs or other motorized-vehicle use areas in such a condition that they can be continuously used in the future and to reduce spreading of the use to new areas. Restoring soil to eroded hillclimb areas such as gullies and smoothing the surface should be attempted in "open" areas such as Dove Springs to determine the feasibility of routinely rehabilitating disturbed soils.

Wind erosion depends not only on soil properties, but also on a number of other variables including erosion fetch (length of disturbance of eroding area). With decreasing distance of disturbance, a maximum rate of erosion per unit area will be reached. Thus areas of tracks with loose soil interrupted by stabilized, untracked soil may have much lower rates of wind erosion than areas with longer, continuous disturbances such as pit areas, campsites, or roads. To determine the relation between

lengths of erosion fetch and rate of wind erosion per unit area, studies should be done both with a wind tunnel and under natural wind conditions. The wind tunnel studies could be done in a limited time, whereas field studies may require several years. The data would be useful for estimating wind erosion potential of various dimensions of disturbances in desert soils.

A question which continually arises concerns longevity of visible soil disturbances, such as tracks from a race. A study on duration of tracks on different types of desert surfaces is an inventory need. This would involve periodic observation of tracks on various types of surfaces over a period of years. The cost and total time required for such a study would be relatively low.

Nitrogen fixation by soil microorganisms may be an important input for desert plant nutrition. Skujins (1979) studied effects of cattle, off-road vehicles, and utility corridors on desert nitrogen fixation. While useful preliminary results were obtained the studies were not sufficiently comprehensive to be conclusive. Further studies lasting several years are needed to investigate the relationship between human and livestock impacts on desert soils and nitrogen fixation.

A study of soil impacts from mining should be done in greater detail, primarily with the use of aerial photographs. Calculations could be made of total areas which have lost a substantial part or all of the soil profile. This should be done desert-wide and could make use of existing Desert Plan aerial photographs.

The off-road-vehicle impact study test sites should be continued. Periodic evaluation of these test sites to determine longevity of impacts from these vehicles and the analysis of these impacts will be a continuous program.

Studies will be continued with landsat as a tool in aiding the soil scientist to properly evaluate the soils as they occur on the landscape. Much has been done with the Jet Propulsion Laboratory in establishing the basic framework, but more time and effort are needed to expand the data base and experiment with spectral data from other overflights.

SOIL INVENTORIES

A map of potential arable lands in the CDCA has been prepared by the Water and Power Resources Service (formerly the Bureau of Reclamation). Soil inventories will be most useful in these potential arable lands for the future prospect of agriculture.

Soil inventories will be useful in planning for other uses, such as right-of-way corridors and motorized-vehicle race routes. These inventories can be used to provide estimates of soil sensitivity to impacts but should not be confused with monitoring which measures actual soil impacts. Soil inventories of different levels of detail (Orders 3, 2, and 1) should be conducted in areas throughout the CDCA where appropriate. (See Appendix XI to the Proposed Plan, October 1980, for list of soil inventories conducted throughout the CDCA).

MONITORING

Aerial photographs and field checks will be used as a basis for monitoring soil impacts. Areas of very high soil impact from motorized-vehicle use have been calculated for many use areas throughout the CDCA, as shown in Appendix XI to the Proposed Plan (October 1980). The uses and limitations of the data are also discussed in that appendix. This method could be used as a monitoring system by updating aerial photographs of these areas and comparing the high soil impact areas. The same types of comparisons can be made for heavily grazed sites and mining locations. Additional 1:1000 aerial photographs and on-the-ground investigations should also be included in the monitoring program. Better methods of evaluating erosion conditions should be established using low-level (1:1000) aerial photographs as a base. A system of updating these low-level aerial photographs will be needed to establish erosion trends.

AIR QUALITY

In the CDCA much of the air pollution that affects Federal lands originates in the Los Angeles basin and is transported onto BLM-managed lands by the prevailing winds. The BLM has no control over these "imported" pollutants. However, sources of pollutants originating in the CDCA are becoming increasingly significant. These "local" sources include fugitive dust from agriculture, mineral extraction, vehicle activity, industrial sources such as powerplants and ore processing and refining facilities, and "urban" sources such as residential heating, automobiles, etc.

Goals of the air-quality program are:

(1) To encourage maintenance of air quality as needed for Department of Defense operations.

(2) To ensure that proposed major stationary sources are located at optimum locations to minimize future air-quality degradation in the CDCA.

(3) To establish an active Bureau program for cooperating with the California Air Resources Board (ARB), and all other agencies responsible for air quality in the CDCA, in the implementation of the air-quality management plan.

There are certain actions that BLM can and will undertake to minimize and reduce air-quality degradation from sources on Federal lands. These include coordination with and full support of State and local government air-quality planning efforts, conducting in-house planning to minimize air-pollution sources on public lands, and field studies to determine the impact of BLM management activities and those from outside sources on BLM lands. Air-quality data are very limited for the CDCA. The spe-

cific elements of the air-quality program are outlined below.

STUDIES

A concern of the BLM is dust generated by vehicles. In planning for and managing open areas and access routes, BLM's soil and air quality scientists will continue field tests to determine which areas generate the minimum amount of dust. These tests include monitoring of actual events and the use of a portable wind tunnel to determine wind erosion potential of various soil types.

Also, the Bureau is taking an aggressive role in visibility protection, along with the National Park Service, by establishing visibility monitoring stations in the CDCA. These stations will provide baseline meteorological data, visibility along with two site paths at each station location. A computer analysis and visual prediction capability is being developed by the U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Las Vegas, Nevada, so that the data gathered can be used to predict the impacts of our future management activities. Although most of the BLM's monitoring efforts have been initiated "in-house," the BLM is anxious to work with other Federal, State, and local air-quality agencies on air-quality monitoring studies of mutual interest in an effort to obtain the maximum amount of data with the available resources.

COORDINATION

Currently, the BLM through its intergovernmental planning effort is in contact with State and local air-pollution agencies with respect to nonattainment and air-quality maintenance planning. The Clean Air Act Amendments of 1977, which mandated these planning efforts, stipulated that local government be responsible for preparation of these air-quality plans. Therefore BLM's role is to fully integrate these plans into its own planning efforts. The BLM will continue to coordinate with and provide full support to these local planning efforts. Also, due to the large amounts of federally managed lands, the Bureau has joined with the other land managers and is a member of a Tri-Agency Air Quality Task Force with the National Park Service and Forest Service. Coordination between the Federal land managers, the military, and the Environmental Protection Agency have been major thrusts of the Bureau's Air-Quality Program and these efforts shall continue in the future.

IMPLEMENTATION

(1) Utilizing the data provided from the monitoring network, the Bureau will develop an air-quality management plan for lands under its jurisdiction within the CDCA. This plan will be closely coordinated with other landowners in the CDCA and with the ARB, Southeast Desert Air Basin, South Coast Air Quality Management District, and the Great Basin Unified Air Pollution Control District air-quality maintenance plans.

(2) The Bureau will actively participate in hearings and proceedings for siting of major stationary sources proposed within the CDCA. The management goals will be to minimize emissions from such sources and to select a most suitable site for the overall air-quality benefit of the CDCA, if such a site exists.

(3) The Bureau will actively participate in rulemaking proceedings of air-pollution control districts that have responsibility within the CDCA. The purpose will be to ensure that proposed rules and regulations are consistent and supportive of the air-quality management plan for BLM lands.

(4) The Bureau will actively participate in the preparation of air-quality maintenance plans developed by the responsible air-management authorities in the CDCA. The purpose will be to maintain consistency between all such plans and programs in the CDCA.

(5) For regions within the CDCA which have air quality that is cleaner than existing standards, the Bureau may determine through a public process which areas should be submitted to the State for redesignation to Class I status. This will provide greater protection for those regions in the CDCA that merit it.

WATER RESOURCES

Obviously, the water resources of the CDCA must be wisely managed. Demands on the water resource, however, result from a wide range of Bureau programs, non-Bureau-initiated projects, as well as activities on the private lands within the CDCA. This fact, coupled with such regulatory concerns as water quality, safe drinking water, and floodplain management, and with the necessity for establishing certainty of water rights, will require a multifaceted approach to water-resources management. The involvement of several Bureau programs and cooperation with other government agencies and private concerns will be required.

The Water Resources Program management approach is outlined below and in Table 16 and in the following section, which presents the authorities and objectives of water-resource management. Table 16 defines the various required tasks and identifies the authorities and objectives which are met through implementation of specific tasks.

OBJECTIVES AND/OR AUTHORITIES OF CDCA WATER-RESOURCES PROGRAM

(1) *Clean Water Act*—The purpose of Bureau implementation of this Act is to prevent water-quality deterioration and to improve water quality where it has already been degraded. In addition to the act itself, further direction is given by Executive Order 12088, which instructs

TABLE 16

Tasks of the CDCA Water Resources Program

Task	Definition	Objectives And/Or Authorities
Water Rights Compliance	The acquisition and protection of water rights necessary for fulfilling Bureau management programs. Conducted under the substantive requirements of state law, with recognition of Federal water uses and water rights and in accordance with Bureau of Land Management Water Rights Procedures.	4
Water Use and Needs Inventory	The collection of adequate information for acquiring water rights and documenting Federal reserved water rights.	4
Regional Water Resource Inventories	The collection of data on surface and ground water quantity and quality on a regional basis. The data may be obtained within the framework of the Bureau planning system and utilized for a variety of specific purposes including background data for site specific water development, and in environmental impact analyses.	5
Water Development Investigations	The site specific investigation of water quantity and quality and other physical data required to properly locate wells and catchments and to construct wells, catchments and spring developments.	5
Water Quality Monitoring	The collection of data required to monitor baseline water quality, and the water quality impacts of activities. The data is utilized to avoid adverse impacts in accordance with the 208 Water Quality Management Report (California BLM, 1979).	1
Environmental Impact Analysis	The analysis of the impacts of various activities on water resources, including the collection of sufficient data to conduct adequate analysis and the formulation of recommendations for avoiding or mitigating impacts.	NEPA
Drinking Water Monitoring	Monitoring of chemical and bacteriological quality of public drinking water supplies and the implementation of appropriate treatment measures.	2
Floodplain Delineations	The determination of the magnitude of flood frequencies and floodplain mapping required for the floodplain management program.	3
Special Studies	Studies may be required where impact analysis, need for water development, or other management objectives warrant a more detailed or analytical investigation than is routinely required.	1, 2, 3, 4,
Non-Bureau Initiated Projects	The construction of water development, storage or conveyance facilities. Applications for projects will be processed under appropriate regulations and within the applicable multiple-use class guidelines and corridor designations within the CDCA Plan.	

the Federal Government to comply with water-pollution-control regulations, and by the 208 Water-Quality Management Report (California BLM, 1979).

(2) *Safe Drinking Water Act*—The purpose of complying with this act is to insure safe drinking water in accordance with applicable drinking-water standards. Executive Order 12088 instructs Federal agencies to implement the act.

(3) *Floodplain Management*—The purpose of floodplain management is the avoidance of adverse impacts resulting from the occupancy and modification of floodplains.

(4) *Water Rights*—Presidential messages of June 6 and July 12, 1978, provided the initiative for establishing certainty in regard to Federal and State relations in water rights. The Department of the Interior Solicitor's Opinion #M-36914 of June 25, 1979, was an initial step in clarifying Federal and State roles. Ultimately, however, Federal water rights must be identified and quantified. This will be accomplished through an inventory of existing Bureau water uses and needs, in relation to existing or needed water rights. Procedures for Bureau compliance with State water-right laws will be identified in Bureau Manual 7154, "Water Rights," (reserved). This manual will be used in complying with acceptable State procedures to obtain water rights for Bureau management programs, wherever possible. This effort will be undertaken in close coordination with the State of California.

(5) *Water Development*—Several Bureau management programs specified in the Federal Land Policy and Management Act require the use of developed water supplies to insure the availability of water. In addition to obtaining and protecting water rights, adequate data concerning the occurrence of surface and ground water must be available to facilitate the location of developments.

(6) *Water Storage Project*—A number of water conservation projects are being investigated by the Metropolitan Water District of Southern California (MWD) with encouragement and support from the U.S. Water and Power Resources Service, State Resources Agency, and State Lands Commission. These projects may include spreading facilities near the Colorado River Aqueduct and retrieval and pump-back facilities within storage basin areas. The MWD is presently investigating two such basins for underground storage—Shavers and Hayfield.

The Bureau recognizes the importance of these future projects and the present uncertainty associated with the location of facilities. These facilities may be allowed on public land but will be considered on a case-by-case basis in Classes L, M, and I with appropriate environmental assessment, i.e., EA or EIS.

UNAUTHORIZED USE

There are several types of unauthorized use: occupancy and enclosures, such as an unauthorized cabin in a recreation area; mining claim occupancy—the use of a mining claim to perform activities which are not in good faith with the general mining laws; rights-of-way—roads, powerlines, and/or pipelines; agricultural—the use of public lands for crop production; and the use of timber, mineral, grazing, and cultural resources. Miscellaneous types of unauthorized use include advertising displays, warehousing, stockpiling of material, and motion-picture filming.

The number of suspected annual unauthorized uses which have occurred or are continuing to occur in the CDCA is estimated to be in excess of 500. If an unauthorized use is not corrected, there is a loss of public resources; public landowners are denied the use or enjoyment of their land; and disrespect for the law and the authorization process, with which most users of public lands comply, results.

The personnel required to eliminate an unauthorized use depends upon the type of unauthorized use. The most effective unauthorized use program is a strong prevention program. Such a program includes the following steps:

(1) Prevention: Surveillance, especially for misuse of the Mining Law of 1872 by illegal occupancy. Cooperative agreements with State agencies and local governments and public utilities. Public information and education.

(2) Detection: By Bureau personnel, field reconnaissance, State and local governments, informal reports from the general public.

(3) Proper-Use Management: Correction by authorization of legitimate use by permit, sale, exchange, if appropriate.

(4) Removal: Notices, appraisal of damages, collection of damages, and removal of unauthorized use.

CADASTRAL SURVEY

Due to increasing use of public lands within the CDCA, specific survey needs must be met to permit knowledgeable and proper management of public lands.

Programs which require immediate survey support are scheduled in the next five years and include energy (geothermal leasing), abatement of unauthorized use (agriculture and occupancy), realty, and recreation. Those survey projects are listed in priority order in the five-year plan on file in the Desert District Office.

Additional survey requirements have been identified as priority needs within the 1981–85 program. These consist of 45 separate survey projects which average 2,000 or more acres in size. These surveys are required to permit various realty actions such as acquisition, easements, and abatement of unauthorized use to proceed. The projects are in areas of mingled Federal/private ownership where original surveys are not clearly definable. High priorities also exist in the Helendale and Granite Mountain areas south and west of Barstow.

Protraction diagrams cover more than 200,000 acres of unsurveyed lands within the CDCA. Boundaries of many State School sections and mineral leases are not monumented on the ground, which prevents total management of the adjacent public lands. These lands will likely be surveyed under private contracts as priorities are determined.

CHAPTER 7

Plan Amendment Process

The California Desert Plan has been designed to provide a guide for management over a long-term period. In order to do this, a process must be provided that will be flexible enough to permit changes in the face of unanticipated demands or response to future events that, as yet, cannot be foreseen.

PLAN INTERPRETATION AND CLARIFICATION

Due to the fact that the California Desert Plan is the first of its kind, covers such a large region, and deals with so many programs, it is anticipated that immediately after Plan approval a number of requests may be received which will require interpretation and/or clarification of the Plan to determine how the Plan affects a particular proposed use or activity. In some cases it may be necessary to clarify the meaning of statements in the Plan pertaining to guidelines, goals, and actions proposed.

The precise locations of designated boundaries may have to be determined in relationship to a particular existing activity. An activity or use may have been omitted from consideration in the Plan, and a determination may be needed as to how that activity is affected.

Request for Plan interpretation may be filed with the Desert District Office and will be responded to within 30 days of receipt of the request. The response will describe the interpretation made by the BLM authorized official and/or establish additional time needed to consider interpretation.

GENERAL PROCEDURES FOR PLAN AMENDMENTS

A Plan Amendment may be initiated at any time by the BLM District Manager, Desert District, in response to new findings under the continuing monitoring, review, and revision procedures.

Individuals and public or private organizations desiring to have the Plan or any of its elements amended may submit requests for amendment to the District Manager of the BLM California Desert District. The District Manager will respond in writing within 30 days, acknowledging receipt of the request and informing the applicant of the process to be followed in studying and deciding upon the amendment. Processes will be consistent with Bureau procedures.

The general categories of Plan amendments anticipated are described below:

Category 1—The proposed changes (based on previous analysis) will not involve significant environmental impact, and/or EIS documentation is not required. Such changes would not cause significant changes in the geographic location and extent of a multiple-use class designation, multiple-use class guidelines, or significant changes in the goals and policies expressed in the Plan elements or in ACECs or Special Areas.

Category 2—The proposed change, based on preliminary analysis, will require a significant change in the location of a multiple-use class designation or the geographic location or extent of that designation, a significant change in a multiple-use class guideline, or in a Plan element, goals, policies, or the process as prescribed in that element.

Such changes based on preliminary analysis are likely to or are known to have a significant environmental impact and an EIS is required.

Category 3—The proposed change is submitted to accomodate a request for a specific use or activity which will require additional analysis and decision beyond the Plan Amendment decision.

Category 1 amendments will be considered at least on a semi-annual schedule and Plan amendments in Categories 2 and 3 will be considered on an annual schedule, beginning one year from the date of Plan approval. Specific Category 3 amendments may be considered at any time where the State Director determines that the proposed project is of such significance to the public interest that deviation from the annual schedule is justified.

BLM-INITIATED AMENDMENTS

The Bureau will monitor implementation of the Plan, as well as new internal data, and will review the need for a general revision at the end of one year after approval of the Plan. Amendments will be considered once a year for the next four years. The District Multiple-Use Advisory Council will play a major role in determining amendments.

Proposals for revision of the boundaries of the California Desert Conservation Area, or requests for changes in the Federal Land Policy and Management Act will be referred to the U.S. Congress for review and decision.

During the planning process, the need for one boundary adjustment and concurrent BLM study of the administrative organization best suited to implement the Plan was identified. The McCain Valley area, encompassing approximately 150,000 acres of BLM-administered public lands along the present southwest boundary of the CDCA, has been determined to be an area that should be included in the California Desert Conservation Area and managed under the framework of the Plan, from both ecological and resource management perspectives.

A precise determination of boundary adjustment in McCain Valley will be made, existing Resource Management Plans for the area will be reconciled to overall Plan guidelines, and the proposed revision, with appropriate environmental assessment, will be processed under the standard Plan Amendment procedures and referred to Congress in the form of a draft boundary adjustment amendment to the Federal Land Policy and Management Act of 1976.

Proposed revisions of the multiple-use classifications or their boundaries, guidelines, objectives, or decision criteria and major revisions of Plan elements, including significant changes in use levels or facility locations will be decided by the BLM California State Director under the amendment procedures outlined in this section.

INFORMATION REQUIRED FROM INDIVIDUALS AND ORGANIZATIONS

All requests for amendment must be submitted to the District Manager of the California Desert District. Any requests from individuals or private groups or organizations for amendments to or changes in the California Desert Plan must contain the following information:

(1) Reasons for the request.

(2) An explanation of how the individual, group, or organization is being adversely affected by existing requirements or management objectives in the Plan.

INFORMATION REQUIRED FROM GOVERNMENTAL AGENCIES

Federal, State, and local governmental units (including special districts) may file applications and petitions with the Bureau for land and resource uses in accordance with established regulations. These applications and petitions will be reviewed in light of the Plan data and conclusions. In the event such applications or petitions are denied, on the basis of the Plan or its supportive data, rights of appeal will be in accordance with established regulations for the type of application or petition involved. If the proposal has merit, in light of the presented circumstances, the Bureau will simultaneously consider the proposal and a related Plan amendment. Special priority will be given to requests of State and local governments and other Federal agencies.

CITIES AND SPECIAL DISTRICTS

If the request for an amendment to change the Plan is being submitted by an incorporated city or special district, the following information must be provided:

(1) The request must have been approved by vote of the City Council or Board of Directors.

(2) The city must show how it has been, is being, or will be adversely affected by the Plan, or parts thereof.

(3) The city must show how its proposed amendment is necessary for consistency with the officially adopted city general plan.

COUNTY

If the request for amendment is submitted by a county or county service area, the following information must be submitted:

(1) The request must have been approved by vote of the County Board of Supervisors.

(2) The county must show how it has been, is, or will be adversely affected by the Plan, or parts thereof.

(3) The county must show how the proposed amendment is necessary for consistency with the officially adopted county general plan.

STATE

If request for amendment is submitted by the Legislature or Executive Branch of the State of California, the following process must be followed:

(1) The request must have been approved by the Executive Director or Secretary of the submitting agency after indication of coordination with other potentially affected State agencies.

(2) The State must show how it has been, is, or will be adversely affected by the Plan, or parts thereof.

(3) The State must show how the proposed amendment is necessary for consistency with adopted State plans or programs.

FEDERAL AGENCY

If the request for amendment is submitted by a department, office, or bureau of the Executive Branch of the U.S. Government other than the BLM, these steps will be necessary:

(1) The request must have been approved by the director of the submitting department, office, or bureau.

(2) The agency must show how it has been, is, or will be adversely affected by the Plan, or parts thereof.

(3) The agency must show how the proposed amendment is necessary for consistency with officially adopted plans or programs.

PLAN AMENDMENT PROCESS

Upon receipt of a request to consider a Plan amendment, the Desert District Manager shall decide:

(1) To consider the Plan amendment, in which case he shall determine the category of amendment to be assigned;

(2) Not to consider the Plan amendment, in which case he shall notify the requestor stating the reasons for his decision.

Any decision to consider or not to consider a Plan amendment is subject to protest to the State Director.

AMENDMENT DECISIONS

Category 1 Amendments

(a) The Desert District Manager recommends an amendment to the State Director. If the State Director concurs, the District Manager makes a decision and a public notice of the amendment decision is given. This notice should clearly explain how the existing Desert Plan is changed.

(b) Protests will be received for 30 days following the public notice.

(c) An amendment may be implemented after protests are resolved and at least 30 days after the public notice.

Category 2 Amendments

(a) The Desert District Manager recommends a preferred alternative to the State Director. If the State Director concurs, the results of the above steps are published as a draft Desert Plan amendment and draft EIS for public review.

(b) The Desert District Manager evaluates comments received, then selects and recommends an amendment decision to the State Director for review and concurrence.

(c) Upon receipt of concurrence, a proposed Plan amendment and final EIS are prepared and published.

(d) Protests will be received for 30 days following the filing of the final EIS.

(e) An amendment may be approved and implemented after protests are resolved and at least 30 days after filing the final EIS.

Category 3 Amendments

(a) Based on additional analysis, the Desert District Manager recommends an amendment to the State Director. If the State Director concurs, the District Manager makes a decision and a public notice of the amendment decision is given. This notice should clearly explain how the existing Plan is to be changed.

(b) Protests will be received for 30 days following the notice.

(c) An amendment may be approved after protests are resolved and at least 30 days after public notice.

ANALYSIS OF PROPOSED AMENDMENTS

In analyzing any applicant's request for amending or changing the Plan, the BLM District Manager, Desert District, will:

(1) Determine if the request has been properly submitted and if any law or regulation prohibits granting the requested amendment.

(2) Determine if alternative locations within the CDCA are available which would meet the applicant's needs without requiring a change in the Plan's classification, or an amendment to any Plan element.

(3) Determine the environmental effects of granting and/or implementing the applicant's request.

(4) Consider the economic and social impacts of granting and/or implementing the applicant's request.

(5) Provide opportunities for and consideration of public comment on the proposed amendment, including input from the public and from Federal, State, and local government agencies.

(6) Evaluate the effect of the proposed amendment on BLM management's desert-wide obligation to achieve and maintain a balance between resource use and resource protection.

DECISION CRITERIA FOR APPROVAL OR DISAPPROVAL

Before submitting a recommendation for a Plan amendment, the BLM Desert District Manager must determine that the proposed amendment is in accordance with applicable laws and regulations and will provide for the immediate and future management, use, development, and protection of the public lands within the CDCA. The BLM Desert District Manager will base his rationale for such determination on the principles of multiple use, sustained yield, and maintenance of environmental quality, as required in the Federal Land Policy and Management Act of 1976.

PUBLIC NOTIFICATION

Notification of proposed amendments to or changes in the California Desert Plan will be published in the *Federal Register*. In addition, notices will also be published in a newspaper, or newspapers, of general circulation in the area which would be affected by the proposed amendment(s). Further, a Plan amendment mailing list will be developed by BLM and will include appropriate publications which publish material of interest to people concerned about public lands of the California Desert. All individuals, organizations, and other public agencies requesting notices of Plan amendment proposals or decisions will receive such notices. All notices and information will be published in this manner no later than 30 days prior

to the first or subsequent public hearing, if one is to be held.

All county boards of supervisors and all city councils located where incorporated limits and spheres of influence encompass the land area which might be affected by a proposed amendment to the Plan will be notified of such application to amend no later than 30 days prior to any scheduled public hearings.

PUBLIC HEARINGS

Before the BLM Desert District Manager makes final decision(s) on proposed amendment(s), he may hold one or more public hearings to consider these proposals.

CHAPTER 8

Budgetary Requirements

The California Desert Plan represents a long-term commitment by the Bureau to provide comprehensive management of the Desert and its resources. Increases in funding and manpower for Fiscal Year 1981 were not significant. However, substantial budgetary increases will be required over the next 10 years to effectively implement programs and planning decisions set out in the Plan. Approval of the Plan by the Secretary of Interior in December 1980 carried with it the Department's commitment to adequate funding and support for the implementation of the Plan subject to annual budget considerations.

In passing the Federal Land Policy and Management Act of 1976 (FLPMA), Congress recognized the fragility of California desert resources and the pressures on them. Congress, therefore, directed BLM to complete a comprehensive land-use management plan for the CDCA by September 30, 1980. The Federal Land Policy and Management Act also mandates that *implementation* of the CDCA Plan must be initiated on or before September 30, 1980. Section 601(a)(2)(d) reads as follows:

> (d) The Secretary, in accordance with Section 202 of this Act, shall prepare and implement a comprehensive, long-range plan for the management, use, development, and protection of the public lands within the California Desert Conservation Area. Such plan shall take into account the principles of multiple use and sustained yield in providing for resource use and development, including, but not limited to, maintenance of environmental quality, right-of-way, and mineral development. Such plan shall be completed and *implementation* thereof *initiated* on or before September 30, 1980 [emphasis added].

The Desert Plan was developed as the framework guide for the management of the CDCA over the next 20 years. Implementation in this section is used in two contexts: (1) in a general context, covering all BLM management activities occurring in the CDCA after Plan approval; and (2) in a specific context, covering those on-the-ground management actions that result from specific requirements of the Plan, such as construction of range improvements as designed in Allotment Management Plans.

The purpose of this section is to translate and schedule the identified needs into dollar and personnel requirements. If the level of funding described in this section is authorized and appropriated by Congress, on-the-ground actions, with the exception of land-tenure adjustments, should be fully implemented by 1990. Details for the first 10 years are presented later in this section.

MANAGEMENT SYSTEMS

A brief explanation of the BLM management system and budget process, as applied to the CDCA, is presented to facilitate understanding of the implementation process. The Bureau's management system is composed of four interlocking components:

—Inventory and Resource Management Planning
—Activity Planning
—Implementation
—Service, Operations, and Maintenance

The first three components of the management system are sequential. Service, operations, and maintenance are continual but acquire increased emphasis after implementation of a management plan.

INVENTORY AND RESOURCE MANAGEMENT PLANNING

This component covers three steps: (1) management planning analyses; (2) inventory data collection; and, (3) resource management plan development.

The initial step has been completed for the CDCA. Through public input, significant issues and needs have been identified. Intensive resource, environmental, social, economic, and institutional data have been inventoried and gathered. The Plan and Final EIS have been prepared.

Inventory and resource management planning are a continuing process, and will be further used in revising and/or updating the Plan through the Plan Amendment Process.

ACTIVITY PLANNING

After approval of a Plan for the CDCA, specific resource activity plans will be individually prepared to translate a land-use management plan into on-the-ground, site-

specific guidance, such as recreational facilities, fences, wells, trails, and other management investments that are a fundamental responsibility of the Bureau. The elements detail a variety of resource-specific activity plans, such as Habitat Management Plans and Cultural Resource Management Plans. When these proposed plans cover the same area on the ground they will be consolidated into coordinated resource activity plans to ensure efficient use of personnel and dollars and compatible recommendations.

The activity plans prepared immediately after Plan approval will be working prototypes—models to be followed and refined as Plan implementation proceeds. Site-specific environmental assessments will also be prepared at this time.

IMPLEMENTATION

Activity plans are not required for all implementation activities. Patrol and surveillance are ongoing and will continue at an increased level. Activity plans implemented in the past will continue in force as long as they are consistent with the Plan.

Upon the completion and adoption of resource activity plans, on-the-ground implementation is initiated. Facilities are constructed, educational and visitor assistance programs become functional, maps are printed and distributed, and monitoring systems are in full operation. The time required to implement an activity plan varies with the nature of the resource involved and the availability of staff and funding.

SERVICE, OPERATIONS, AND MAINTENANCE

All activities on public lands do not cease while inventory and planning, activity planning, and implementation are being accomplished. There are existing facilities and improvements to maintain, day-to-day requests for information, and requests for specific use authorizations to review, grant, and monitor.

While the Plan was being prepared, these kinds of activities took place as "interim management actions." The nature and relative importance of this component varies as changes occur in the demand for specific BLM services, and as resouce management plans are implemented or amended. As an example, when new range improvements are constructed, it is essential that funding be available to cover the increased maintenance costs. Similarly, when geothermal resources are leased, staff must be available to monitor compliance with the BLM use stipulations. Monitoring of resources is also a function of this component. The Service, Operations, and Maintenance component is continual and will acquire increased emphasis after the completion and implementation of activity plans.

PROCESS USED TO DEVELOP BUDGET FOR A 10-YEAR TIMEFRAME

To implement comprehensive management for public lands, a long-term budget process is needed. The Bureau's four-year authorization process established by Congress meets this need. Under this process, the Secretary of the Interior must submit to Congress a funding authorization request detailing work for a four-year period of time, including an examination of alternative levels of funding which can be efficiently and effectively used in managing the public lands and resources.

Development of the four-year authorization process, like other BLM management actions, includes public involvement. It is an opportunity for Congress to evaluate BLM programs and progress. It also allows BLM itself, agencies of State and local government, and the interested public to take a look at how far the BLM has come, where it has succeeded, and where it has fallen short; to define its priorities and goals; and, to define its direction to shape the future of public lands.

The next four-year funding authorization, when approved by Congress, will set the maximum funding levels for the BLM for Fiscal Years 1982 through 1985. The authorization establishes an upper limit on spending. After funds are authorized every four years, Congress then annually appropriates funds for BLM, establishing the actual budget for each fiscal year. The appropriation cannot exceed the authorization and rarely do the two coincide, as demonstrated in the CDCA funding. The Federal Land Policy and Management Act authorized an expenditure of $40 million for planning and interim management of CDCA from Fiscal Years 1977 through 1981; however, Congress actually appropriated only $29.5 million for that same period.

Of the $29.5 million appropriated for the CDCA, $8.6 million was for preparation of a CDCA Plan and $20.9 million was for "interim" management (the service, operations, and maintenance functions and ongoing new actions, such as geothermal development).

In FY-81, the BLM will shift from the management planning component to the activity planning and implementation components, while maintaining or slightly increasing levels of service, operations, and maintenance.

PRIORITIES FOR IMPLEMENTATION

Tables 17 and 18 show cost estimates for implementation of the Plan by element and for the five management system components.

Implementation actions were analyzed and evaluated so that the most important work items could be accomplished first.

Action items were listed in priority order within the respective elements. Specialists participated and assisted in the priority rating of actions in other related elements (e.g., wildlife participated in the development of allotment

TABLE 17

Funding Level By Element

Plan Elements	FY-81 $ (000)	FY-82 $ (000)	FY-83 $ (000)	FY-84 $ (000)	FY-85 $ (000)	FY-86–FY-90 $ (000)
Cultural Resources	175	250	600	900	1,100	5,250
Native American	100	100	100	100	100	500
Recreation[a]	1,100	2,600	3,975	5,835	5,690	35,000
Wilderness	400	425	115	115	115	1,350
Wildlife	250	350	750	1,050	1,250	7,200
Wild Horse & Burro	550	500	650	650	650	850
Mineral Exploration and Development	350	700	750	800	800	10,250
Grazing	300	800	1,425	1,425	1,425	5,400
Land Tenure	150	300	400	400	800	7,500
Energy and Utilities	400	850	1,000	1,050	1,250	11,300
Access	600	500	500	500	500	2,800
Vegetation	75	100	100	100	100	600
ACEC	550	1,000	350	350	350	1,250
Other Requirements[b]	1,500	2,625	3,585	3,825	4,570	25,750
Totals	6,500	11,100	14,300	17,100	18,700	115,000
Wilderness Mineral Inventory[c]	3,000	5,000				

[a]Includes: visitor contact program—operating visitor centers and contact stations: information and education program—brochures and pamphlets: ORV permit program: construction and maintenance of recreation facilities: managing special recreation areas such as Rand and Mecca Hills areas.
[b]Includes: soil, air, water; fire management; automated data processing; realty, cadastral survey.
[c]Cost of mineral inventories conducted by the Bureau of Mines and Geological Survey.

TABLE 18

Costs by Management Category

	FY-81 ($000)	FY-82 ($000)	FY-83 ($000)	FY-84 ($000)	FY-85 ($000)	FY-86–90 ($000)	5-Year Aver. ($000)
Inventory	250	650	850	1,050	1,200	7,500	1,500
Planning	150	200	300	350	800	1,800	360
Activity Planning	1,480	1,800	700	650	575	2,575	515
Implementation	1,420	3,615	5,850	5,450	5,165	24,125	5,825
Monitoring and Compliance	1,200	1,800	2,800	3,900	4,400	28,000	5,600
Service Operations, Maintenance	2,000	2,985	3,000	4,640	6,435	51,000	10,200
Total	6,500	11,050	13,500	16,040	18,575	115,000	

management plan priorities and burro removal priorities because both have potential impacts on wildlife).

To look at implementation of the Plan as a whole, a system of priority rating of work across elements was essential. The following factors were established in developing desert-wide priorities:

(1) Legal mandates (e.g., endangered-species protection)
(2) National priorities and policies (e.g., energy development)
(3) Public demand (e.g., motorized-vehicle-route approval)
(4) Critical need for action (e.g., Areas of Critical Environmental Concern [ACEC] protection)
(5) Condition of resource (e.g., burro population)

Because of the complexity of the CDCA and the interrelationship of implementation actions, some identified priorities overlap. The highest priorities, those items that should become first upon Plan approval, are summarized below. The order of listing does *not* indicate order or priority. All of these actions are of reasonably equivalent priority.

—ACEC protection and management
—Endangered wildlife and vegetation protection

—Removal of excess wild burros
—Motorized-vehicle route approval—in Class L
—Mineral-surface management
—Development of interpretive materials and educational programs
—Implementation of grazing decisions
—Preparation of wilderness study reports
—Initiation of major land-tenure adjustments
—Completion of Native American coordination procedures
—Preparation and implementation of the most critical activity plans for recreation, cultural resources, wildlife, livestock, and wild horses and burros
—Development and implementation of monitoring programs (refer to each element for specific details.)

The following ongoing service, operations, and maintenance activities are high-priority action items:

—Surveillance and patrol
—Energy—issuance of oil and gas and geothermal leases and processing right-of-way applications
—Minerals—processing mining plans and mineral sales, leases, and permits
—Maintenance of FY-81 level of basic functions (e.g., withdrawal review, realty actions, fire management)
—Abatement of unauthorized use

Cost estimates were developed for accomplishing all work items including Plan completion, additional needed inventories, Plan amendments, activity-plan development, implementation, and the service, operations, and maintenance functions. The cost estimates were based on the best information available. Staff specialists provided data, historical information was used, and input was obtained from other sources, such as industry and other government agencies.

IMPLEMENTATION DETAILS FOR A 10-YEAR TIMEFRAME

GENERAL COST ESTIMATES

The estimated implementation costs by element are depicted annually for Fiscal Years 1981 through 1985 and as a lump sum for Fiscal Years 1986 through 1990 on Table 17. Cost estimates for the first five years increase three-fold over current-year funding. The rate of increase would allow for effective utilization of funds and a balanced program of growth. The greatest percentage increase (57 percent) occurs between Fiscal Year 1981 and 1982. Level of funding for FY-81 has been set by Congress. Fiscal Year 1981 is a period of transition between the Plan development component of the BLM management system and the activity planning and implementation components. Planning will be de-emphasized as a result of having completed the Plan and an aggressive program of preparing activity plans and implementing such plans will be initiated.

Cost estimates for the Wilderness Element and ACEC program are greatest during the first years, reflecting a goal to prepare wilderness study reports and to protect ACECs by the end of FY-82. Funding for the required mineral inventories for those Wilderness Study Areas preliminarily recommended as suitable for wilderness designation is shown on Table 17 below the "Total" line. The mineral inventories required for those Wilderness Study Areas preliminarily recommended as suitable will be conducted by the U.S. Bureau of Mines and Geological Survey.

The current projected costs and timeframe (two years) may exceed the capabilities of these agencies. However, the implementation approach, as proposed, assumes that the other agencies' inventories will augment existing BLM inventory data rather than having to start anew.

Cost estimates for the Recreation, Cultural Resources, and Wildlife Elements increase steadily during the 10-year period. The greatest increases are during the first five years. Several recreation, cultural resource, and wildlife activity plans have been developed during the interim management period and will be completed and/or implemented early in FY-81.

Heavy emphasis has been placed on the Wild Horse and Burro and Grazing Elements during the first five years. All 17 Herd Management Area Plans and 35 Allotment Management Plans will be completed and implemented by FY-85. Burro and wild horse populations will be reduced to those levels identified in the management goals by FY-85. No Allotment Management Plans are shown for implementation in FY-81, because all Rangeland Program Summaries must first be prepared. Partial implementation begins in FY-81, but completion is not anticipated until following years.

Cost estimates for the Motorized-Vehicle Access Element are highest in Fiscal Years 1981 and 1982, reflecting the priority placed on implementation of this element. The map showing existing vehicle routes will be prepared in FY-81, and the most critical route approvals in Class L will be completed by FY-82. The entire vehicle access designation process would be completed by FY-87. The fairly stable cost estimate across the years include the significantly increased service, operations, and maintenance costs resulting from implementation of the Motorized-Vehicle Access Element (printing of maps, sign and barrier maintenance, road grading and maintenance, etc.).

Cost estimates for the Geology-Energy-Minerals and the Energy Production and Utility Corridors Elements steadily increase, reflecting the projected increased need in these activities over the next 10 years. The tables only show funds that need to be appropriated by Congress. Funds required to process major rights-of-way are not shown because they are provided by the utility companies through a cost-recovery system.

Cost estimates for the Native American Values and Vegetation Elements remain relatively stable during the 10-year period.

Cost estimates for other requirements increase sharply over the first five years. Additional inventory requirements for soils, air, and water account for much of this increase. The lands case workload is also expected to increase. The withdrawal review workload required under FLPMA is also a major cost item in this element. Planning cost estimates is at a low level until it increases in FY-85, when the first major Plan revision would be conducted.

Table 18 and Figure 3 portray cost estimates broken down into management system categories. Activity planning is greatest in Fiscal Years 1981 and 1982 and gradually decreases in FY-90 when activity plans will be completed. Cost estimates for implementation increase dramatically during the first three years, then decrease slightly in FY-84, after a year of heavy emphasis in the Wild Horse and Burro and the Livestock Grazing Elements. The annual rate of implementation funding would steadily decrease after FY-83 until FY-90, as major action items are completed. Inventory has a steady but slight increase, reflecting the need for additional soil and water inventories. Costs estimates for planning are low and stable through FY-84, then increase in FY-85, reflecting the first major Plan revision analysis.

Service, operations, and maintenance cost estimates increase through FY-85 and, at a more gradual level, through FY-90, reflecting the increased emphasis on this management-system component as activity planning and implementation are carried out. Resource monitoring and compliance are a part of this component and are highlighted in Table 18. A good monitoring program is extremely important in the management of the CDCA. The Plan provides for numerous monitoring systems to be developed covering such resources as critical wildlife habitat, grazing systems, wild horse and burro populations, rangeland condition and trend, cultural values, air and water quality, and proper use of identified roads. In many instances, the protection of resource values is directly related to and dependent upon an aggressive and effective monitoring system. Monitoring systems will be designed and developed so that data and information gathered can be funneled into the planning process and, when appropriate, Plan revision and amendment can be made. Funding for the design, development, and implementation of monitoring systems is emphasized in the first two years. Monitoring and compliance increase at a moderate rate, reflecting an on-going, rigorous monitoring program, increased compliance, and surveillance of all activity in the Desert.

PERSONNEL

The California Desert District was established on October 1, 1980, as the management structure for the CDCA. It is staffed by employees representing diverse skills necessary to implement the Plan. The District Office has a core staff of resource, planning, budget, administrative, and operations personnel. Resource Area Office staffs consist predominantly of resource and visitor services personnel.

To effectively spend the dollars required to implement the Plan, successful management of available human resources is essential. Permanent and seasonal employees will fill all key staff positions and their expertise will be augmented by the use of temporary employees to accomplish special assignments.

Steady growth in permanent and seasonal employee numbers is depicted to FY-90. The increase correlates with projected funding levels and the shift through the management components. Employees will be heavily involved in activity planning during the first few years of implementation. The number of employees can be expected to grow as BLM moves into the service, operations, and maintenance component, with the need for monitoring, compliance, person-to-person contacts, and public services increasing.

TABLE 19

Number of Positions by Fiscal Year

	FISCAL YEAR				
	FY-81	FY-82	FY-83	FY-84	FY-85
Permanent	120	140	156	180	193
Seasonal	80	90	95	105	110
Total	200	230	251	285	303

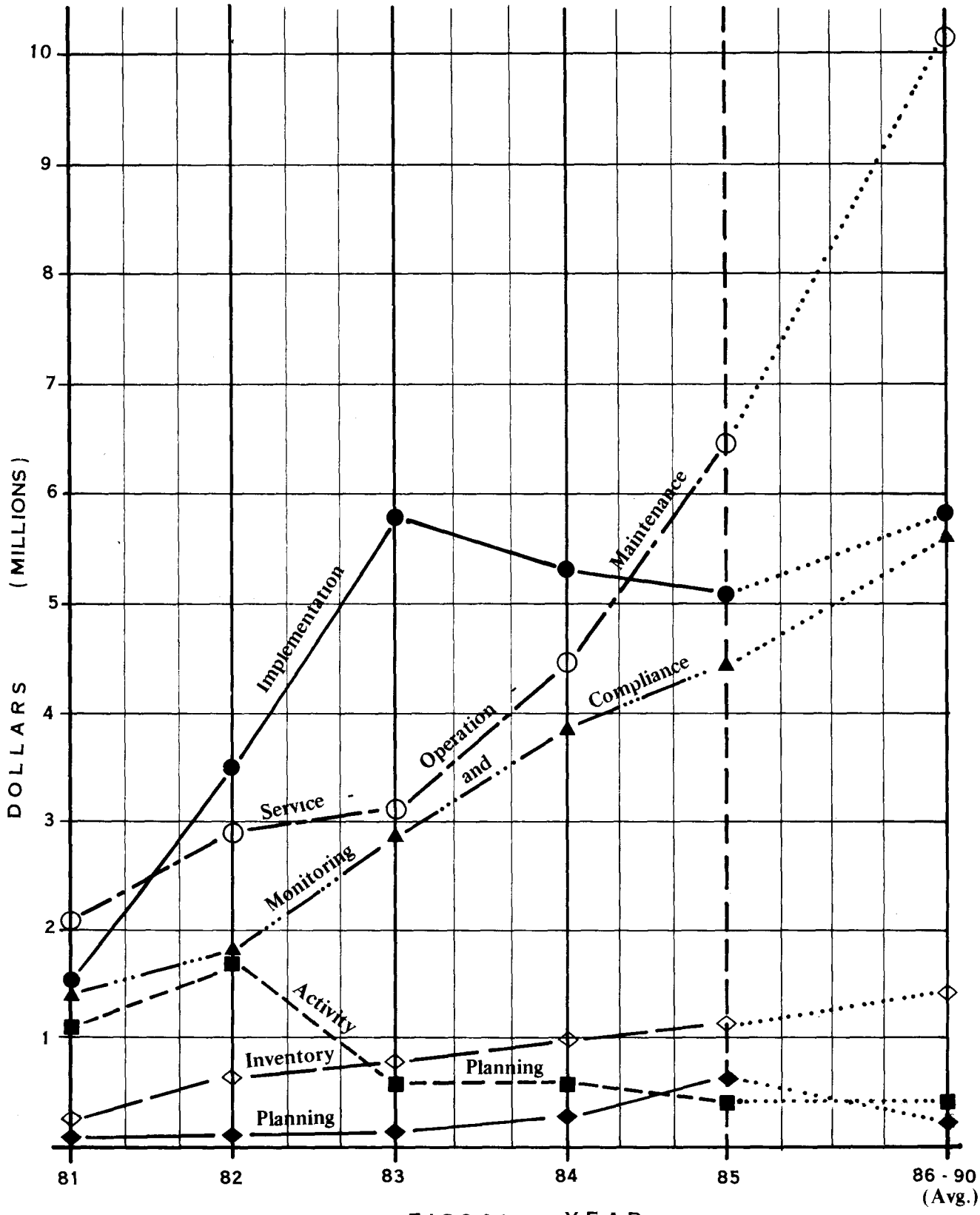
Volunteers will not be used to displace or replace employees; rather, they will be used to enhance services provided by BLM employees. Volunteers will aid in office and field settings. They will participate in the development and presentation of interpretive materials and educational programs. They will assist in resource protection and education in the field. Some volunteers may be individuals who live in remote areas near sensitive resources. Their regular presence in an area can provide a higher level of protection than could ever be provided by Bureau rangers and other visitor services personnel.

Other volunteers may have special knowledge or insights, gained through years of desert experience, which they may want to share with desert users. Details of the numbers and specific roles of volunteers would be completed during Plan implementation.

The California Desert Plan can and will be implemented in a responsive and effective manner. If the proposed funding and staffing levels identified here are not made available, however, implementation will occur at a slower pace with significant differences in impacts possible.

FIGURE 3

MANAGEMENT SYSTEM CATEGORIES



Annual Estimates for FY 81 - 85 and 5 Year Average Estimate for FY 86 - 90

Conclusions

Conclusions

The overall management goal to be met in the CDCA during the next 20 years is to have a California Desert Plan fully operational. The Plan will be a dynamic, usable tool guiding BLM management activity in the Desert. By the year 2000, the Plan will have undergone three major revisions. New inventory data and the results of monitoring and special studies will have been incorporated. Monitoring will have occurred over a time period long enough to more accurately portray the effects of various management actions and their effectiveness.

The California Desert District staff will be large enough to adequately manage the Desert. The public will have become a full participating partner in BLM management activities. The volunteer program will be established as an invaluable asset and, through interpretation and education, public awareness of the CDCA will have increased.

Wilderness areas will have been designated by the Congress and will be part of the National Wilderness Preservation System. Management plans will be guiding BLM in providing opportunities for wilderness experiences for all citizens, including those with low incomes, the handicapped, and the elderly.

Recreational facilities will have been modified or contracted in order to be usable by all citizens. Interpretive and recreational experiences will be available to everyone, including those with physical limitations.

Wildlife habitat will have been maintained and improved so that declining wildlife populations will be showing improving trends or stabilization. The number of species on threatened, rare, or endangered species lists will be decreasing.

Range management projects will have been completed. Vegetative condition will be improving in those areas where it was in fair, poor, or declining condition at the time Plan preparation began. The rangelands for all areas in the CDCA will be in good or better condition. Excess numbers of wild horses and burros will have been removed to maintain healthy, stable population levels.

Knowledge of mineral resources will be vastly improved. Rehabilitation and restoration will be an integral, ongoing part of all mining activities. Mining projects will be monitored. Case histories will have been developed to use that information in more accurately assessing impacts from various types of mining activities and in developing innovative ways to permit mineral development while protecting environmental quality.

The major land-tenure adjustments will be completed. The manageability of lands to meet the objectives of the public and the land managers will be increasing significantly. All other unclassified lands will have been evaluated and determinations will have been made on retention or disposal. The BLM will be responsive to planned urban expansion needs for desert communities and residents. Acquisition of critical lands for managing resources will be in progress.

Areas of Critical Environmental Concern will be intensively managed. Special resource values will be protected, while still allowing for compatible uses within the ACEC area.

Cultural resource management will be an aggressive program. Inventory in the CDCA will approach 15 percent, giving a much better base for understanding CDCA prehistory and history and for predicting the locations of other significant cultural sites. Through various mitigation measures, cultural resource destruction and degradation will be significantly reduced.

The Desert will continue to be accessible to people in vehicles, as consistent with changing trends and needs. The Motorized-Vehicle Access Element will not remain static but will give guidance by responding to new demands for resource protection and access.

New powerlines, and probably powerplants, will have been constructed in the Desert. Geothermal leasing will have led to the development of geothermal powerplants. Wind and solar technology will be advanced to the point that several electrical generation plants may be found in the Desert by the year 2000.

In summary, in 20 years the BLM will be managing the CDCA under a dynamic land-use plan in a manner that will protect resources while allowing for the Desert's enjoyment and use by man. The Desert will be in better resource condition than today, and consumptive uses will occur in a wise and stable manner. The objectives of the Congress and the public will have been achieved: multiple use, resource protection, and sustained yield.

Addenda

ADDENDUM A

Development of the Desert Plan

The process and development of a California Desert Plan have been as important as the Plan itself, for there is no way that a single document can describe the enormous effort made in its development.

The process started with the hiring of expert desert scientists; the establishment of the Desert Planning Staff Office; and the beginning of one of the most intense resource inventories ever undertaken. The section on Documentation, below, describes in more detail the type of data collected and analysis made during this process, which lasted three years and cost $6 million.

In 1979, during the last stages of inventory, the Draft Plan Alternatives—No Action, Protection, Use, and Balanced—were formulated and their impacts assessed.

Over 18,000 copies of the draft document were distributed for review and comment. Twelve hearings and workshops were attended by over 900 people. Nearly 9,000 written responses, containing over 40,000 individual comments were received. A more detailed discussion of the public consultation and review process throughout the formulation of the Desert Plan is described below.

The major issues were formulated from the public comments and were analyzed during development of the Proposed Plan. There was a 51-day public review of the Proposed Plan, after which it was revised in response to reviewers' comments and concerns. The Plan was approved by the Assistant Secretary of the Interior, Land and Water Resources, and concurred in by the Secretary of the Interior in December 1980.

CONCEPTS IN THE DRAFT ALTERNATIVES

The Plan and EIS development process was very complex. To provide orderliness it was necessary to develop a structure that could be used as a basis for planning and environmental assessment as well as for understanding and communicating about the Plan and EIS. The following describes the concepts of the structure and how it was used.

Three multiple use alternatives—Protection, Balanced, and Use—were considered during the draft phase. A No Action Alternative, required under the National Environmental Policy Act, was used as the point of origin, or baseline. These alternatives were all offered for public review as an acceptable range of multiple-use possibilities on which to conduct impact analysis. A preferred alternative was not identified at the time the Draft was developed because it was intended that the public review of the Draft Plan Alternatives should and would be used completely objectively as the basis for developing the Proposed Plan.

To frame the total pattern of land-use activities in each Draft Plan Alternative, these planning components were devised: (1) multiple-use classes and resource management guidelines for each class, (2) Plan Elements, and (3) Areas of Critical Environmental Concern (ACECs). Details on these components are found starting on page 17 of the Draft Plan Alternatives document.

Proposed broad regional resource uses in the Draft Plan Alternatives were addressed by a system of multiple-use classes: Class C (Controlled Use), Class L (Limited Use), Class M (Moderate Use), and Class I (Intensive Use).

Class C was designed to protect and preserve areas having wilderness characteristics described in the Wilderness Act of 1964. Class L would protect sensitive natural scenic, ecological, and cultural resources, while providing for low-intensity multiple use that could be carefully controlled. Class M was designed to provide a wide variety of uses, yet mitigate damage to the most sensitive resources. Class I emphasized development-oriented use of lands and resources to meet consumptive needs, while providing appropriate mitigation and protection of sensitive, natural, and cultural values.

While the multiple-use class designation of an area might allow a number of types and levels of use fully consistent within the guidelines for that class, these uses might be totally incompatible in the same area at the same time. These conflicts, the major issues of the Plan (see below), were addressed in Plan Elements. These residual conflicts occurred in each multiple-use class as they were designed, although they would be most limited in Class C, with its dedication to wilderness preservation. The resolution of these conflicts and tradeoffs in use is fundamental to multiple-use management. The task of the element was to resolve these conflicts within each class under the broader multiple-use class guidelines, or to establish procedures for resolving these conflicts as they are later identified during use of the Plan.

Nine plan elements were presented in the Draft. The

Wildlife, Cultural Resource/Native American, and Mineral Exploration and Development Elements provided information about the nature and location of a resource or activity, describing management efforts which would support that resource or activity; in addition, the Wildlife and Cultural Resource/Native American Elements identified subsequent active management that would follow adoption of the Desert Plan. The Livestock Grazing and Wild Horse and Burro, Wilderness, Motorized Vehicle, Recreation, Energy Production and Utility Corridors, and Land Tenure Elements described decisions about the major tradeoffs in use which the objectives of the various alternatives have dictated.

Areas of Critical Environmental Concern (ACECs) was also a planning component that allows special consideration for protection of a distinctly rare or valuable resource that can be given adequate protection through special management plans during implementation.

CONCEPTS IN THE DRAFT EIS

Given the basic structure of the Draft Plan Alternatives, the concept for environmental impacts was to assess the impacts of each Plan Element, or use, on each major resource for each alternative. This permitted a comparison of cumulative impacts between alternatives.

Impacts upon the following resources and activities were evaluated: air qualty, water quality, soils, energy and minerals, vegetation, wildlife, cultural resources/Native American values, wilderness, visual quality, recreation, domestic livestock grazing, wild horses and burros, and socioeconomics.

MAJOR ISSUES

The public comments on the draft document made it clear that concern was focused on a number of major issues in the California Desert. Systematic analysis and review further refined these issues and the conflicts which created them. Resolution of these issues was a determining factor in the development of the Proposed Plan.

The major issues fell into two groups—resource and procedural. Resource issues directly affect what the Plan will do; i.e., what the management guidance for CDCA public lands will be. Procedural issues affect how the plan is developed, and how it will be put into effect. To put it another way, resource issues are action oriented; procedural issues are process oriented.

Section VI of the final EIS is devoted to a summary of public comments on each of the issues and briefly describes actions taken in response to them. Appendix I to the Proposed Plan (October 1980) explains the public comment review process, and presents representative samples of comments received.

A list of, and brief statement about, each issue addressed in the Proposed Plan, or used in the development of the Final Plan, follows:

Resource Issues

Vehicle Access and "ORVs"

The Draft Plan Alternatives did not clearly differentiate between vehicle access to the Desert on roads and trails and vehicle "free play" and cross-country travel. The term "off-road vehicle" (ORV) is imprecise. Extreme positive and negative positions have been taken regarding "ORVs." There is general agreement regarding the need for vehicle access to the Desert; however, there is great disagreement regarding the degree and methods of managing and controlling that access.

Wildlife Protection

Concern about the impacts of human use in the Desert is stated in terms of limiting or prohibiting uses to protect wildlife. Rare, threatened, or endangered species must be protected. Important wildlife habitat must be safeguarded. Unreasonable wildlife protection eliminates important economic and recreational uses.

Wilderness

How much wilderness is enough? Wilderness proponents seek broad and representative wilderness areas on the public lands in the CDCA. Users who would be limited or precluded, particularly miners, ask for fewer and nonconflicting areas. Concern was expressed by the military about impacts of wilderness on air space.

ACECs

Areas of Critical Environmental Concern (ACECs) are generally supported. Protection-oriented comments favor as many and as large ACECs as possible. Consumptive users favor fewer designated ACECs and smaller areas that include only the most critical areas.

Mineral Exploration and Development

Keeping as much land area as possible available for mineral exploration, with minimum reasonable constraints on economic development, is a concern of some, while others favor limiting available areas and providing rigid controls to ensure the protection of sensitive resources.

Energy and Utilities

There is a disagreement about the number of utility corridors needed to meet projected utility needs at reasonable cost and reliability while fully protecting sensitive locations. There are strongly voiced concerns about the need for proper environmental review and controls before powerplant sites are provided in the CDCA.

Burros

Overwhelming concern was expressed about the impacts from large numbers of burros in the CDCA. Concern was expressed that proper positive management for burros be provided. It is not believed that funds will be provided for BLM to round up burros and provide them for adoption before serious and irreversible damage to resources occurs.

Livestock Grazing

Providing grazing areas and forage levels sufficient to maintain the economic stability of the livestock industry on public lands in the CDCA, while maintaining or improving rangeland conditions, is the main concern of the industry. There is also a major dispute about the effects of livestock grazing on natural systems, particularly wildlife.

Cultural Resource Protection

Potential irretrievable loss of historic, cultural, and Native American resources and values is a major concern. Both direct impacts from economic users, as well as possible indirect impacts from burro presence and vandalism are feared. Users agree that protection of these resources is important, but they feel that the constraints which proponents seek are unreasonable.

Recreation

There is a major, direct conflict between non-impacting users (nature study, hiking) and consumptive users (motorcycle racers, vehicle enthusiasts). For this reason, it is felt that there has not been enough emphasis or effort placed on proper management opportunities between these two extremes for many general recreation uses. The Desert is a place for solitude and adventure. These values are impacted by overuse as well as misuse, and by excessive regulation.

Procedural Issues

Adequacy of Alternatives

The range of alternatives was not considered adequate because the Protection Alternative was believed to be not "protective" enough. It was felt that the Balanced Alternative was not truly "balanced" between the Protection and Use Alternatives. Some desired that a "Preferred Alternative" be included in the Draft Plan Alternatives.

Ecosystem Analysis

Little evidence of understanding and analysis of ecosystems in the Desert was provided in the Draft. Decisions and planning should have been on the basis of ecosystems.

Documentation

Not enough information on wilderness or ACEC decisions was provided. Description of information about mineral and other inventory and methods was inadequate. Appendices were inadequate and were not available when needed.

Size and Complexity of Draft

It was felt that the draft was too big and bulky and too complex for general public understanding or comment. It was also stated that not enough information, detail, and backup were provided.

Impacts Over- or Understated

The treatment of impacts was uneven. Impacts would occur which were not included in the Draft. Draft impacts were overstated and would not occur.

Implementation

Implementation schedules, priorities, and funding levels were not explained in enough detail. Key programs would not be implemented soon enough. Implementation would be impossible because funds would not be provided, causing greater impacts to occur.

CONCEPTS IN THE PROPOSED PLAN

The structure of the Proposed Plan uses the same components as the Draft Plan Alternatives and EIS: multiple-use classes, Plan elements, and ACECs. Within the Plan elements the importance of Native American values was recognized by separating them from cultural resources and creating a separate element to address these special needs. Similarly, the topic of wild horses and burros was separated from livestock grazing as a separate element, and vegetation was added as an element because of overwhelming public concern. The multiple-use class guidelines in the Proposed Plan, as in the Draft, control the type and degree of use and establish any constraints needed to meet the objectives for each multiple-use class. The public commented extensively on the guidelines; significant improvements have been incorporated.

For each element in the Proposed Plan there is a short statement of findings, the goals that the Plan establishes for the element, the specific actions proposed for that resource or activity, and an explanation of how those actions would be implemented.

There are 73 ACECs in the Proposed Plan. In addition,

the section on ACECs has been expanded to include proposed actions for other "special area" management categories.

A comprehensive section on total Plan implementation has been developed to respond to public concern about this critical aspect.

CONCEPTS IN THE FINAL EIS

The method of analysis in the Final EIS is similar to that in the Draft EIS, with one notable exception. Because the public review process served to identify major public issues, the impacts of these issues on the resources became the key to the basic assessment. This issue analysis was also applied to the Draft Plan Alternatives to permit a comparative analysis between those alternatives and the Proposed Plan.

There was extensive public comment on the Draft EIS. Those comments pointing out typographical and grammatical errors and internal inconsistencies were all evaluated and resolved in the Proposed Plan. These were perhaps the easiest to accommodate.

Concern about site-specific management was resolved through complete re-analysis of "open" areas, Wilderness Study Areas, and ACECs in the Proposed Plan.

Comments on the adequacy of the impact assessment of the alternatives ranged widely. Some felt the negative impacts of the Use Alternative had not been displayed as severe enough; others argued that impacts had been exaggerated. Similar divergence was typical of comments on the evaluation of impacts of the Protection and the Balanced Alternatives. Because no public concensus exists as to whether impacts had been overstated or understated, the impact analysis of the Draft Plan Alternatives, coupled with the information submitted by the public, is considered adequate for decision-making. This identification of major issues through public review provided greater clarity in and focus on the impact assessment of the final EIS.

FINAL DESERT PLAN

Publication of the Proposed Plan and Final EIS initiated a 51-day public review period. A series of 12 briefings-hearings was held, from October 14 to October 22, 1980, to receive comment on the document. Written comments were also sought during the entire public review period, which ended November 21. The CDCA Advisory Committee, at their meeting of November 20–21, also reviewed the Plan and provided comment. By December 8, necessary changes and revisions in the Plan, in response to public comment, were completed, and the Director, the Assistant Secretary, Land and Water Resources, and the Secretary of the Interior were briefed.

The authority of making the final decision on the Desert Plan, granted under Section 601 of FLPMA to the Secretary of the Interior, was delegated to the Assistant Secretary, Land and Water Resources. The Assistant Secretary accepted the Plan, with some modifications, on December 17, 1980. His decision was concurred in by the Secretary of the Interior on December 18. This approval was the final administrative decision on the Plan—no protests are possible. However, it is important to note that approval of the Plan does not preclude individuals from filing administrative appeals on future decisions affecting existing rights or authorized uses, such as grazing permits.

With the final decision of the Assistant Secretary, Land and Water Resources, implementation of the California Desert Plan has begun by the BLM California State Director through the District Manager, Desert District. The Plan has been published and distributed to government agencies, organizations, educational institutions, and individuals.

SUBSEQUENT PUBLIC INPUT

The Plan is not a static, fixed arrangement. It establishes the process and framework for future program and project plans over time. The public is invited to review all subsequent plans and environmental impact statements.

The Plan will be amended many times. It must be dynamic to meet the needs that none of us can foresee or project. The future of the Desert is what we continue to make it day by day. The Bureau of Land Management intends the shaping of this future to be an open process whereby the public exercises its responsibility for active participation in public-land management.

CONSULTATION AND REVIEW PROCESS

Underlying every facet of the charge for management of lands and resources given the Bureau by FLPMA is the requirement to obtain public involvement in all planning and management actions. The Bureau of Land Management received great assistance in discharging this responsibility when the Act also provided for the California Desert Conservation Area Advisory Committee. Appointed by the Secretary in early 1977, the Advisory Committee quickly became the focal point for public involvement.

Beginning in March 1977 and going through 1979, the committee held a series of 15 forums inviting public participation. Subjects covered at the meetings with desert residents and users were recreation, energy, powerplant siting, utility corridors, geology, minerals, mining, cultural resources, grazing, animal resources, wilderness, and land exchanges.

Bureau specialists also joined with the committee in presenting results of the resource inventories to the public. Then, to make sure that the public had an opportunity to react, BLM held a series of feedback meetings with groups that had provided information on needs, desires, concerns, and values.

During this same period, BLM commissioned three

opinion polls to determine how people felt about the Desert on desert-wide, state-wide, and national levels. All this information helped to provide a base upon which the Draft Plan Alternatives and draft environmental impact statement were built.

To prepare people for the publication of the complex draft document in February 1980, a *Draft Preview* was published in December 1979. This document was intended to give information on the scope, content, and background of the draft, and to prepare people to comment on it. It also contained a postage-free mailer for use in requesting a copy of the draft. The *Draft Preview* was mailed to the entire mailing list of nearly 4,000 addressees.

Concurrently with release of the draft on February 15, 1980, BLM placed display advertising in 26 California newspapers, announcing the availability of the document and the toll-free number which interested people could use to request a copy. Eventually, 18,000 copies were distributed.

During the 90-day comment period, February 15–May 15, BLM, with the CDCA Advisory Committee taking the lead, held major hearings in the four metropolitan areas of Oakland, Sacramento, San Diego, and Los Angeles to obtain comments on the draft document. Additionally, eight hearing-workshops were held at locations in or adjoining the California Desert.

During the public comment period, meetings and briefings were also held with Federal, State, and local agencies, organizations, and interest groups to discuss issues and gain input.

From hearings, meetings, workshops, and written comments mailed in, nearly 9,000 separate inputs were received totalling about 40,000 separate comments.

Tabulation and analysis of the public comments were important, complex tasks. They were carried out under the supervision of knowledgeable BLM staff members who had worked on and understood the draft document. Results of the analysis and tabulations were stored in a computer for later retrieval. The process of analysis and tabulation was audited by a team from the California League of Women Voters, which had agreed to perform the audit to insure that the public comments received on the Draft Plan Alternatives were analyzed thoroughly and impartially and were fairly presented in a form that would provide the fullest opportunities for consideration in the decision-making process. The team reviewed the process that prepared the input for analysis. This included sorting comment documents, assigning documents for analysis categorization, and coding of documents. The report of the League's team, along with a summary of the comments, are contained in Appendix I to the Proposed Plan (October 1980).

USE OF PUBLIC INPUT

Following analysis and tabulation of the comments, issues raised were subjected to a series of reviews to produce recommendations for development of the Proposed Plan.

The first review was performed by a Steering Committee, composed of the Desert Plan Staff and Director, and the District Managers of the Bakersfield and Riverside Districts. The Steering Committee considered issues ranging from dominant, general trends in public opinion to technical discussions of specific sites or resource problems. Their first concern was to determine whether the issue under consideration could be addressed within the scope of the Proposed Plan. Issues requiring specialized analysis were referred to a BLM Plan Development Team, composed of interdisciplinary specialists. The Plan Development Team developed analysis of these issues, complete with options, impacts from the options, and team recommendations, and returned them to the Steering Committee. From the Plan Development Team's efforts, the Steering Committee formulated preliminary plan possibilities which considered land situation and resource capability, law and policy compliance, national, regional, and local goals, and their own professional judgment of management feasibility.

The Steering Committee's recommendations were presented to the CDCA Advisory Committee for review to assure that both public input and the results of the resource analysis of the Plan Development Team were adequately considered.

The agreed-upon recommendations, along with the now narrowed-down range of unresolved issues, were presented to the BLM Management Review Team for final decision or approval. This team consisted of the BLM California State Director and Associate State Director and staff and representatives from the Assistant Secretary's Office and the Bureau's Washington Office. The developed criteria, recommendations, and analyses provided a basis for decision, with legal and policy compliance, management feasibility, and balancing of national and regional goals as primary factors. Multiple-use class assignments and desert-wide management priorities and direction were thus established.

DOCUMENTATION

The foundation of this Plan is the extensive data collection and analysis including analysis of public comments, that was conducted prior to its formulation. Documentation of the complete process was maintained to have this valuable data available for use by resource managers during implementation of the Plan.

Examples of documentation include:

(1) Field inventory data completed by BLM resource personnel and contractors. These include extensive files developed by resource specialists.

(2) Bibliographies that were considered during the process.

Summary of Major Events

EVENT	DATE
Desert Plan Staff established	Early 1976
FLPMA became law; DPS shift to desertwide inventories started	Oct. 1976
Desert Advisory Committee chartered/appointed	Early 1977
DAC conducts public seminars/meetings	1977–1978
Wilderness inventory completed	Early 1979
Inventory and analysis for Draft Plan Alternatives completed	Mid-1979
Draft Preview published	Jan. 1980
Draft Plan Alternatives and EIS published	Feb. 1980
Briefings/hearings on Draft Plan Alternatives and EIS held	Mar.–Apr. 1980
End of 90-day public comment period on Draft	May 1980
Analysis of public comments completed	July 1980
Proposed Plan (draft) reviewed by DAC	Aug. 1980
Proposed Plan and Final EIS published	Sept. 30, 1980
Desert District assumes CDCA management	Oct. 1, 1980
Conduct 12 briefings/hearings on Proposed Plan	Oct. 1980
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Analysis of public comments completed	Dec. 1980
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Completed workup of Plan	Dec. 8, 1980
Brief Director and Assistant Secretary	Dec. 15–17, 1980
Approval of Plan	Dec. 18, 1980
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(3) Appendices developed and printed for the Draft Plan Alternatives and for the Proposed Plan.

(4) Documentation of the public review process, including transcripts of public meetings, public correspondence, and computer analysis.

(5) Transcripts of Desert Advisory Committee meetings.

(6) Internal working papers of the decision process for the development of the Proposed Plan, including:

(a) Issue Sheets describing major issues as expressed in public review of the Draft Plan Alternatives.

(b) Transcripts from workshops and meetings.

(c) Issue-resolution papers developed on major issues.

(d) Steering Committee notes on issue review and recommendation.

(e) Management review and documentation of decisions reached for the Proposed Plan.

Two systems for the storage and retrieval of the above data have been developed: the library system and the computer data base management system.

The library will contain copies of all inventory reports prepared by BLM staff and contractors, and all reference material acquired during this program. In addition, all transcripts, decision documentation, public documentation, and appendices will be catalogued in the library. The maintenance and use of the library will be an important function of the implementation phase of the California Desert Plan. It is also expected that the library will become an important reference tool for individuals or agencies having need for desert resource information.

The data base management system has been established to capture the large volume of resource data collected during the inventory phase. This includes alpha/numeric information with geographic referencing which makes possible the output of selected area through what is termed a "window program." The data base includes information on wildlife, vegetation, archaeological and historic sites, recreation, and minerals. In addition to staff-generated files, the system also includes files created by contractors. Managers who will be implementing the California Desert Plan will be able to easily use and update this large volume of information.

ADDENDUM B

Interim Management Guidelines

EXCERPTS FROM *INTERIM MANAGEMENT POLICY AND GUIDELINES FOR LANDS UNDER WILDERNESS REVIEW* (DECEMBER 12, 1979)

NONIMPAIRMENT CRITERIA

[The following three criteria are referred to many times in the text as the "nonimpairment criteria."]

Activities will be considered nonimpairing if the BLM determines that they meet each of the following criteria . . .

a. It is temporary. This means that the use or activity may continue until the time when it must be terminated in order to meet the reclamation requirement of paragraphs (b) and (c) below. A temporary use that creates no new surface disturbance may continue unless Congress designates the area as wilderness, so long as it can easily and immediately be terminated at that time, if necessary to management of the area as wilderness.

b. Any temporary impacts caused by the activity must, at a minimum, be capable of being reclaimed to a condition of being substantially unnoticeable in the wilderness study area (or inventory unit) as a whole by the time the Secretary of the Interior is scheduled to send his recommendations on that area to the President, and the operator will be required to reclaim the impacts to that standard by that date . . . If the wilderness study is accelerated, the reclamation deadline will not be changed. A full schedule of wilderness studies will be developed by the Department upon completion of the intensive wilderness inventory. In the meantime, in areas not yet scheduled for wilderness study, the reclamation will be scheduled for completion within 4 years after approval of the activity. (Obviously, if and when the Interim Management Policy ceases to apply to an inventory unit dropped from wilderness review following a final wilderness inventory decision of the BLM State Director, the reclamation deadline previously specified will cease to apply.) The Secretary's schedule for transmitting his recommendations to the President will not be changed as a result of any unexpected inability to complete the reclamation by the specified date, and such inability will not constrain the Secretary's recommendation with respect to the area's suitability or nonsuitability for preservation as wilderness.

The reclamation will, to the extent practicable, be done while the activity is in progress. Reclamation will include the complete recontouring of all cuts and fills to blend with the natural topography, the replacement of topsoil, and the restoration of plant cover at least to the point where natural succession is occurring. Plant cover will be restored by means of reseeding or replanting, using species previously occurring in the area. If necessary, irrigation will be required. The reclamation . . . will be complete, and the impacts will be substantially unnoticeable in the area as a whole, by the time the Secretary is scheduled to send his recommendations to the President. ["Substantially unnoticeable" is defined in Appendix F (of the IMP).]

c. When the activity is terminated, and after any needed reclamation is complete, the area's wilderness values must not have been degraded so far, compared with the area's values for other purposes, as to significantly constrain the Secretary's recommendation with respect to the area's suitability or nonsuitability for preservation as wilderness. The wilderness values to be considered are those mentioned in section 2(c) of the Wilderness Act, including naturalness, outstanding opportunities for solitude or for primitive and unconfined recreation, and ecological, geological or other features of scientific, educational, scenic or historical value . . .

* * *

CHAPTER III. GUIDELINES FOR SPECIFIC ACTIVITIES

[These] guidelines . . . are an application of the Interim Management Policy (IMP) to some of the most common activities that take place on the public lands. It should be recognized that factors other than the IMP enter into the decisions made by the Bureau of Land Management on specific projects and activities—among them the laws, policies, and regulations governing that type of activity, and resource management plans for the affected land.

A. RECREATION

Most recreation activities (including fishing and hunting) are permitted on lands under wilderness review. However, some activities may be prohibited or restricted be-

cause they require permanent structures or because they depend on cross-country use of motor vehicles (for example: pickup vehicles for balloons or sailplanes).

BLM will analyze the magnitude of all proposed activities to ensure that recreation use will not cause impacts that impair the area's wilderness suitability.

Most recreation uses take place under general permission from the BLM rather than under specific project applications. There is a possibility that a continuing use or an increasing use could gradually cause increased impacts and, over time, impair the area's wilderness suitability. An example might be erosion caused by increased off-road vehicle travel on trails. To prevent this type of impairment caused by cumulative impacts, the BLM will monitor ongoing recreation uses and, if necessary, adjust the time, location, or quantity of use, or prohibit that use in the impacted area.

1. No new permanent recreational roads, structures, or installations will be permitted, except structures or installations that are the minimum necessary for human health and safety or the minimum necessary for public enjoyment of wilderness values.

2. Hobby collecting of mineral specimens (rockhounding) and vegetative specimens may be permitted.

3. Recreational use of off-road vehicles (ORVs) is permitted on designated and existing routes and within "open" areas designated prior to approval of FLPMA (October 21, 1976).

4. Organized ORV events may be allowed to pass through areas under wilderness review on existing ways and trails, so long as the BLM has determined that such use satisfies the nonimpairment criteria . . .

10. Camping may be permitted. Campsites for primitive recreation use may be established if they are the minimum necessary for public enjoyment of wilderness values . . .

B. CULTURAL AND PALEONTOLOGICAL RESOURCES

Cultural and paleontological resource inventories, studies, and research involving surface examination or limited subsurface sampling may be permitted. Salvage of archaeological and paleontological sites; rehabilitation, stabilization, reconstruction, and restoration work on historic structures; excavation; and extensive surface collection may be permitted if the specific project satisfies the nonimpairment criteria. Permanent physical protection, such as fences, will be limited to those measures needed to protect high-value resources, and will be substantially unnoticeable in the area as a whole.

C. LANDS ACTIONS—DISPOSAL, RIGHTS-OF-WAY, ACCESS AND WITHDRAWALS

1. Disposal. With the exceptions provided below, lands under wilderness review may not be disposed of through any means, including public sales, exchanges, patents under the Recreation and Public Purposes Act, color of title classes I and II, sales under the Unintentional Trespass Act, agricultural leases, desert land entries (except where a vested right was established prior to October 21, 1976), or State selections. (Lands tentatively approved for State selection in Alaska are exempt from wilderness review and are not subject to the Interim Management Policy.)

Disposals of the following types may be permitted under normal BLM procedures: mining patents; desert land entries in which a vested right was established prior to October 21, 1976; exchanges approved prior to October 21, 1976, under authority of the Taylor Grazing Act, Section 8; and homestead entries in which a vested right was established prior to October 21, 1976.

2. Rights-of-Way. Existing rights-of-way may be renewed if they are still being used for their authorized purpose. New rights-of-way may be approved only for temporary uses that satisfy the nonimpairment criteria . . .

3. Right-of-Way Corridors. Right-of-way corridors may be designated on lands under wilderness review . . .

4. Access to Mining Claims and Non-Federal Land. Construction of permanent access routes will not be approved on lands under wilderness review, except two conditions: (a) when such access qualifies as part of the same manner and degree of grandfathered mineral uses and there is no reasonable, less impairing, alternative access available, and (b) when necessary for operations on mining claims that had a valid discovery prior to October 21, 1976, under criteria described in Section J of this policy, and there is no reasonable, less impairing, alternative access available. Temporary access routes may be approved only if they satisfy the nonimpairment criteria . . .

5. Withdrawals. Existing withdrawals for military purposes or the specific purposes of agencies other than the BLM may be renewed if the withdrawal is still serving its purpose. No new withdrawals may be made for such purposes, except temporary withdrawals that satisfy the nonimpairment criteria.

Withdrawals transferring land to the U.S. Fish and Wildlife Service, U.S. Forest Service, or National Park Service may be approved if the land is part of an already-designated unit of the National Wilderness Preservation System or is part of a wilderness study area mandated by Act of Congress.

D. FORESTRY

. . . Trees may be cut when necessary as part of a mining operation on a pre-FLPMA claim with a valid pre-FLPMA discovery, or when the BLM has determined that this is necessary for insect and disease control or in emergencies such as fire . . .

Domestic firewood gathering, conducted under BLM permits, may be allowed to continue in areas where it was being done before October 21, 1976 (including cross-country use of motor vehicles), only so long as it satisfies the nonimpairment criteria.

E. WILDLIFE

Hunting, fishing, and trapping are permitted on lands under wilderness review, under State regulations. The BLM will continue to cooperate with State wildlife agencies in the management of resident wildlife species in accordance with established policies and procedures . . .

Stocking of wildlife and fish species native to North America may be permitted . . .

Introduction of threatened, endangered, or sensitive species native to North America may be allowed . . .

Vegetative manipulation by chemical, mechanical or biological means will not be permitted, except to maintain plantings or seedings established before October 21, 1976. Prescribed burning may also be done where it is required to maintain the natural condition of fire-dependent ecosystems. Hand or aerial seeding of native species may be done to restore natural vegetation.

State and Federal agencies may use temporary enclosures and facilities to trap or transplant wildlife so long as the nonimpairment criteria are met. Certain permanent installations may be permitted to maintain or improve conditions for wildlife and fish, if the benefiting species enhance wilderness values. Installations to protect sources of water on which native wildlife depend, such as enclosures, may be built for permanent use if they are substantially unnoticeable in the area as a whole and blend into the natural setting . . .

F. FIRE MANAGEMENT

BLM will continue all presuppression, suppression, and post-suppression fire activities under current methods of operation, using caution to avoid unnecessary impairment of an area's suitability for preservation as wilderness, until new fire management plans are developed for specific wilderness study areas . . .

H. RANGELAND MANAGEMENT

1. General. In some respects, rangeland management activities are less restricted by the Interim Management Policy than other activities. This is partly because livestock grazing, at appropriate stocking levels, in itself, is compatible with maintaining wilderness suitability; it is partly because most grazing operations on the public lands qualify as grandfathered uses; and it is partly because some range improvements enhance wilderness values by better protecting the rangeland in a natural condition . . .

5. Wild Horse and Burro Management. Temporary facilities for management of wild horses and burros may be installed if they satisfy the nonimpairment criteria. The above guidelines for grazing practices and range improvements will also apply to wild horse and burro management, where appropriate.

[Populations of wild and free-roaming horses and burros will be maintained (in accordance with the Wild and Free-Roaming Horse and Burro Act of 1971) but will be subject to removal or other controls to protect sensitive resources.]

J. MINERAL USES

. . . All mineral activities that were existing on October 21, 1976, may continue in the same manner and degree in which they were being conducted on October 21, 1976, even if they would impair wilderness suitability. These activities fall within the grandfather concept as discussed in Chapter 1.B.6 of the IMP. They will, however, be regulated to prevent unnecessary or undue degradation of the lands . . .

Valid existing rights of mining claimants will be recognized. For a claim to qualify as a valid existing right, a "discovery" of a valuable mineral, the test of which has been accepted in case law as the "prudent man test," must be demonstrated. Activities under valid existing rights may impair wilderness suitability, but they will be regulated to prevent unnecessary or undue degradation of the lands.

All leases issued on or before October 21, 1976, have valid existing rights, the extent of which is defined by the terms and conditions of each specific lease. For the majority of pre-FLPMA leases the lease rights are not absolute or unqualified. In other words, if there were no pre-FLPMA grandfathered activities, post-FLPMA operations would not be allowed if they would impair wilderness suitability . . .

[Prior to any significant surface-disturbing prospecting or exploratory activity for mineral resources, the prospective user will submit to the BLM authorized officer managing the area or to the U.S. Geological Survey, as appropriate, a plan of the proposed operation and reclamation. Mining plans of operations will be treated under 43 CFR Section 3809. All other plans of operations will be treated under the joint BLM-USGS procedures and other applicable regulations.]

1. Oil and Gas and Geothermal Leasing, Exploration, and Development.

a. Pre-FLPMA Leases. All pre-FLPMA leases on which actual pre-FLPMA physical impacts had been created through such activities as seismic, thermal gradient or other exploration drilling, production drilling, or construction of production related facilities, are grandfathered . . .

e. Exploration. Post-FLPMA oil and gas or geothermal exploration applied for under 43 CFR 3045 or 43 CFR 3209 will continue to be approved if the BLM determines that it satisfies the nonimpairment criteria . . .

4. Other Leasable Minerals (Phosphate, Potash, Sodium, Sulphur, and Hardrock (Solid) Minerals on Acquired Lands, including Uranium).

a. Pre-FLPMA Leases and Permits. All pre-FLPMA physical impacts have been created through such activities as exploration drilling, production drilling, or construction of production-related facilities, may continue consistent with the grandfather provisions . . .

b. Prospecting Permits. Prospecting permits may continue to be issued in wilderness study areas (or inventory units), subject to a stipulation that no preference right lease will be issued until or unless an environmental analysis (or environmental impact statement) is completed and it is demonstrated, on the basis of the environmental analysis and a mining plan submitted with the application for a preference right lease, that the minerals can be removed by mining methods that will not impair the area's suitability for preservation as wilderness . . .

3. Mining Operations Under the 1872 Mining Law.

a. Location, Prospecting, Exploration, and Mining. Mining operations conducted on lands under wilderness review will be subject to the forthcoming regulations 43 CFR 3802. The regulations will not apply to areas where a final decision that the area lacks wilderness characteristics has been made through the BLM wilderness inventory process. These regulations will provide a procedure for notifying the BLM of activities being conducted or proposed to be conducted on mining claims and will also establish the standards for approval of the conduct of those operations, including reclamation.

INDEX

A

Adopt-A-Horse Program 59, 63

Agriculture
- Multiple-Use Class Guidelines, 15
- New Desert Crops, 15, 41, 47

Air Quality
- Multiple-Use Class Guidelines, 15
- Importance of, 138
- Air Resources Program, 139

Allotment Management Plans (AMPs)
- Definition of, 70
- Implementation of, 71–72

Alternatives
- Development of, 159

Amendments to Plan 143

Areas of Critical Environmental Concern (ACECs)
- Cultural resources, 22, 23, 24, 25, 125–126
- Native American values, 29, 125–126
- Wildlife, 30, 31, 32, 33–34, 125–126
- Vegetation, 46, 125–126
- Definition of, 123
- Selection of, 123
- Nomination of new areas, 123
- List of, 125–126
- Management prescriptions for, 124–127

Archaeological Resources
- See Cultural Resources.

Animal Unit Month (AUM)
- Definition of, 68
- Allocation, 67, 69
- Allocation of (tables),73–78, 81

Authorized Officer
- Definition of, 12

B

Bighorn Sheep
- Study to determine effects of livestock grazing on, 32
- Livestock management prescriptions to protect, 70, 71

Budgetary Requirements
- Management system, 147
- Process to develop budget, 148
- Priorities for implementation, 148–149
- General cost estimate for 10-year timeframe, 149, 150
- Funding level by element (table), 149

Burros
- See Wild Horses/Burros.

C

Cadastral Survey
- Need for, 138
- Discussion of, 142

California Desert Advisory Committee 6, 133–135, 162

California Desert District 7, 164

CDCA Advisory Committee Recommendations 133–135

Class C
- See Controlled Use Class.

Class I
- See Intensive Use Class.

Class L
- See Limited Use Class.

Class M
- See Moderate Use Class.

"Closed" Designation
- Definition of vehicle designation, 88

Communication Sites
- Multiple-Use Class Guidelines, 16

Competitive Vehicle Events 84

Controlled Use Class (Class C)
- Description of, 13
- Implementation of vehicle access in, 91

Cultural Resources
- Multiple-Use Class Guidelines, 15
- Protection of, 23
- Prehistoric-historic resource areas, 23
- Prehistoric-historic preservation zone, 23
- Public interpretive-use zone, 23

Cultural Resource Management Plans 22, 23, 24

D

Desert Communities
- Land-tenure adjustment with, 121

Desert Tortoise
- Monitoring of effects of livestock grazing on, 32
- Allotment requirements, 70
- Grazing restrictions to protect, 70

Documentation 164

Dry Lakes
- As non-motorized open space, 83, 88, 89
- Vehicle access on, 88, 89

E

Economic Mineral Resources
- Description of, 96
- Table of, 96

Economy of CDCA
- Commercial harvesting of plants, 16, 45
- New desert crops, 15, 47
- Livestock grazing, 17, 67–81
- Mineral economics, 18, 96

Ecosystems
- As procedural issue, 161

Education and Research
- Approval of, 12
- As recreation, 83
- Collection of plants, 45
- See also Environmental Awareness Program.

Electrical Generation Facilities
- Multiple-Use Class Guidelines, 6
- See also Powerplant Siting.

Energy Georesources
- Overview of, 97, 101, 113

Energy Production and Utility Corridors
Description of, 115
Joint use, 115
Contingent corridors, 116
Environmental Assessments and Impact Statements
Determination of need for, 12
Determination of when needed for mineral exploration and development, 18, 101, 102
Environmental Awareness Program
Cultural resources, 22, 23
Definition of, 85
Ephemeral/Perennial Range
Definition of, 70
Allotments, 76, 78, 81
Ephemeral Range
Definition of, 69
Allotments, 77, 78, 81
Existing Rights
Description of, 11

F

Federal Land Policy and Management Act (FLPMA)
Section 601, 5, 11
Management principles of, 5, 6
Section 103, 5
Federally Listed Species (Plants)
Conservation of, 41, 45
Management of, 45, 46
Federally Listed Species (Wildlife)
Management of, 30, 31, 33–34
Protection of, 31, 33–34
Habitat management plans for, 31, 33–34
Final Plan
Completion of, 162
Fire Management
Multiple-Use Class Guidelines, 16
Vegetation, 47
Forage Allocation 44, 67–68, 71, 73–78, 81

G

G-E-M Resources
Definition of G-E-M resource area, 95
Mineral evaluation, 97
Mineral commodities, 96–97
Tables, 96, 98–100
Specific activities, 101–104
Geology, Energy, and Minerals (G-E-M) Element 95–113
Geothermal Energy 15, 97, 98–100, 113, 119
Goals and Objectives
Of Plan, 5
Of Cultural Resource Element, 22
Of Native American Element, 26
Of Wildlife Element, 30
Of Vegetation Element, 41
Of Wilderness Element, 53
Of Wild Horse and Burro Element, 59
Of Livestock Grazing Element, 67
Of Motorized-Vehicle Access Element, 87
Of Recreation Element, 82
Of G-E-M Resources Element, 95
Of Energy Production and Utility Corridors Element, 115
Of Land-Tenure Adjustment Element, 120
Of Areas of Critical Environmental Concern (ACECs), 123
Of Special Areas, 127

H

Habitat Management Plan (HMP)
Description of, 30
Uses of, 30
Table of, 33–34
Harvesting of Native Plants
Multiple-Use Class Guidelines, 16
Legal and biological considerations, 42
Guidelines for harvesting, 42–45
Herd Management Areas
Definition of, 59
Table of, 61
Herd Management Area Plans (HMAPs)
Description of, 59
Implementation of, 60, 63
History of CDCA 3–5
Horses
See Wild Horses and Burros

I

Implementation
Shared responsibility for, 7
Cultural Resource Element, 24–25
Native American element, 29
Wildlife Element, 32
Vegetation Element, 47–48
Wilderness Element, 55–56
Wild Horse and Burro Element, 60–64
Livestock Grazing Element, 71–73
Motorized-Vehicle Access Element, 89–92
Recreation Element, 86
G-E-M Resources Element, 103–104
Energy Production and Utility Corridors Element, 119
Land-Tenure Adjustment Element, 121–122
Areas of Critical Environmental Concern, 124, 127
Overview of, 133
Budgetary requirements, 148–151
Priorities for, 148–150
Cost estimates for, 150–151
As procedural issue, 161
Intensive Use Class (Class I)
Description of, 13
Implementation of vehicle access in, 89–91
Inventory of Rare and Endangered Vascular Plants of California 45–46
Issues, Major
Procedural, 161
Resource, 160–161

J

Jojoba 15, 47

L

Land-Tenure Adjustment
- Multiple-Use Class Guidelines, 17
- With State of California, 120–121
- With Southern Pacific Land Company, 121
- With local governments, 121
- With other agencies, 121
- Boundary adjustments, 121
- CDCA land ownership/administration (table), 122

Laws and Policies
- Native American, 26
- Wildlife, 30
- Vegetation, 41, 46
- Wilderness study areas, 54
- Wild Horses and burros, 20, 63
- Motorized-vehicle access, 87, 90, 91
- G-E-M resources, 101, 102, 103
- Water resources, 140–142

Leaseable Minerals
- Overview of, 97, 98–100

"Limited" Designation
- Definition of, 88
- In Class L, 88
- In Class M, 88

Limited Use Class (Class L)
- Description of, 13
- Implementation of vehicle access in, 91

Livestock Grazing
- Multiple-Use Class Guidelines, 17
- History of, in CDCA, 67
- Management prescriptions, 70–71
- Allotments (map), 79
- Proposed livestock grazing management (tables), 73–78, 81
- See also Livestock Grazing Element.

Livestock Grazing Element
- Class ratings, 69
- New grazing uses, 70
- See also Livestock Grazing.

Locatable Minerals
- Overview of, 97, 98–100

M

Management Principles
- Overview of, 6

Military
- Overflights over WSAs, 56

Mineral Exploration and Development
- Multiple-Use Class Guidelines, 18
- Resource Issues, 160

Mining
- See G-E-M Resources Element

Moderate Use Class (Class M)
- Description of, 13
- Implementation of vehicle access in, 91

Monitoring
- Cultural resources, 23–24
- Wildlife, 32
- Vegetation, 47–48
- Wilderness, 56
- Wild horses and burros, 63–64
- Livestock grazing, 72
- Motorized-vehicle access, 91–92
- Recreation, 86
- Soil resources, 139
- Air resources, 140
- Overview of, 137

Motorized-Vehicle Access
- Multiple-Use Class Guidelines, 19
- As management problem, 87
- Restriction of, as cultural resource management tool, 23
- For wild horse and burro management, 64
- On washes, dunes, and dry lakes, 88
- Access pending implementation, 89–90
- Parking, 88
- Competitive vehicle events, 84
- For energy/mineral exploration and development, 91
- Resource issues, 160

Multiple-Use Classes
- Use of, 13
- Description of, 13
- Acreage of, 13
- Conflicts in, 159

Multiple-Use Class Guidelines
- Purpose of, 13
- Basic guidelines, 15–20

N

Native American
- Element, 26–29
- Values/Multiple-Use Class Guidelines, 15
- Resources, protection of, 26, 29
- Resources, management of, 29

National Trail 83, 127, 128

O

Off-Road Vehicles
- See Motorized-Vehicle Access.

"Open" Designation
- Definition of, 88
- Open space areas, 83
- Vehicle play open areas, 83–84

P

Pacific Crest National Scenic Trail 83

Perennial Range
- Definition of, 68
- Carrying capacity, 68
- Allocations, 69, 75, 81
- Ranking of range condition, 69

Permits and Authorizations
- Laws governing, 12
- For harvesting native plants, 16, 42, 45
- Grazing permits, 67
- For competitive vehicle events, 84
- Mining plans of operations, 101–102
- See also Multiple-Use Class Guidelines.

Plan Elements
- Overview of, 21
- Cultural Resources, 22–25
- Native American, 26–29
- Wildlife, 30–39
- Vegetation, 41–51

Wilderness, 53–57
Wild Horses and Burros, 59–65
Livestock Grazing, 67–81
Recreation, 82–86
Motorized-Vehicles Access, 87–93
Geology, Energy, and Mineral Resources (G-E-M), 95–113
Energy Production and Utility Corridors, 115–119
Land-Tenure Adjustment, 120–122
Planned Management Areas for Fish and Wildlife
Table, 33–34
Planning Process of California Desert Plan
Summary, 159
EIS and Plan development, 159–162
Public input gathering, 162–164
Timetable of, 164
Plants, Rare, Threatened, and Endangered
Protection of, 45–46
See also State-listed Species (Plants), Federally Listed Species (Plants), Vegetation.
Powerplant Siting 15, 116–119
Prehistoric/Historic Resources
See Cultural Resources.
Proposed Plan
Concepts in, 161–162
Public Input
Gathering of, 162
Use of, 162
In California Desert Plan and Final EIS, 161–162
Subsequent to adoption of Final EIS, 162
In development of Proposed Plan, 160–161

R

Range
See Ephemeral Range, Perennial Range, Ephemeral/Perennial Range, Livestock Grazing, Wild Horses and Burros.
Recreation
Element, 82–86
Description of opportunities, 82–84
Multiple-Use Class Guidelines, 19–20
Competitive events, 84
Open space areas, 83
Education and research, 83
Resource issues, 161
Research Natural Area (RNA)
Description of, 31, 127
Table, 125–126
Riparian Areas

S

Saleable Minerals
Overview of, 97, 98–100
Sand Dunes
Vehicle access on, 88–89
Scenic Quality
See Visual Resources/Management Program.
Sensitive Species (BLM)
Additions to, 16, 20, 31
Development of HMPs for, 33–34, 35–36
Sikes Act Agreements
Description of, 31
Table of, 33–34
Soil Resources
Importance of, 137
Soil resources program, 138–139
Solar Energy 15, 119.
Special Areas
Definition of, 123
List of categories of, 127
Nomination of new areas, 128
State-listed Species (Plants)
Conservation of, 41
Collection of, 42
Management of, 45
State-listed Species (Wildlife)
Management of, 30–31, 33–34, 35–36
Protection of, 30, 33–34
Inventories for, 31
Habitat management plans for, 31, 33–34

T

Transmission Facilities
Multiple-Use Class Guidelines, 16
Trespass (Unauthorized Use)
Definition of, 138
Effects of, 138
Discussion of, 142

U

Unclassified Land
Management of, 121
Unusual Plant Assemblages
Description of, 46
Management of, 46

V

Vegetation
Protection of, 41, 45–46
Production of, 41–42
Manipulation of, 46–47
Effects of fire, 47
See also Livestock Grazing, Vegetation Element.
Vegetation Element 41–51
See also Vegetation.
Vehicles, Off-Road
See Motorized-Vehicle Access.
Visitor Information 85
Visitor Services Program 85
Visual Resources/Management Program 84–85
Volunteers
Cultural resources, 25
Motorized-vehicle access, 92
Recreation, 85
CDCA Advisory Committee recommendation for, 133–135
Relationship to BLM personnel, 151

W

Waste Disposal
Multiple-Use Class Guidelines, 20
Water Quality
Multiple-Use Class Guidelines, 15
Importance of, 138

Water resources program, 140–142
Tasks of CDCA water resources program (table), 141
Wetland/Riparian Areas
Multiple-Use Class Guidelines, 20
Management of, 46
Protection from livestock grazing, 70–71
Wilderness Element
Mandate, 53
WSAs in, 53–54, 57
Public opinion, 54
Resource issues, 160
Wilderness Study Areas (WSAs)
Characteristics of, 53
Interim management, 14, 55, 165–168
Evaluation by Native American groups, 29
Protection of wildlife, 31
Preliminarily recommended WSAs, 13, 15, 53, 54
Methodology, 53–55
List of, 54
Limitations on wild horses and burros, 64
Mining and exploration provisions, 103–104
Wild Horses and Burros
Multiple-Use Class Guidelines, 20
Limitations due to WSA management, 64
Wild horse and burro management (table), 61
Resource issues, 161
See also Wild Horse and Burro Element.
Wild Horse and Burro Element
Inventory data, 59
Population levels, 59–60
Forage, 44, 59, 74–78, 81
Reclamation, 64
See also Wild Horses and Burros.
Wildlife Element
Planned management (tables), 33–34, 35–36
Resource issues, 160
Wildlife Species and Habitat
Multiple-Use Class Guidelines, 20
Protection of, 31, 125–126, 127
Wind Energy 119

CALIFORNIA DESERT CONSERVATION AREA PLAN

MULTIPLE-USE CLASSES

CLASS C — CONTROLLED

CLASS L — LIMITED

CLASS M — MODERATE

CLASS I — INTENSIVE

PUBLIC LANDS
NOT WITHIN SPECIFIC MULTIPLE-USE CLASSES

PRIVATE, STATE,
AND OTHER FEDERALLY MANAGED LANDS

PLANNING UNIT

NATIONAL SCENIC AREA

AREA OF CRITICAL ENVIRONMENTAL CONCERN

(ACEC) 19

COMPETITIVE EVENT CORRIDOR

ACEC DESIGNATIONS

Map Number	Name
1-	WHITE MOUNTAIN CITY
2-	WEST RAND MOUNTAINS
3-	EUREKA VALLEY DUNES
4-	SALINE VALLEY
5-	CERRO GORDO
6-	DARWIN FALLS
7-	ROSE SPRINGS
8-	SURPRISE CANYON
9-	GREENWATER CANYON
10-	FOSSIL FALLS
11-	SAND CANYON
12-	GREAT FALLS BASIN / ARGUS RANGE
13-	AMARGOSA RIVER / GRIMSHAW LAKE
14-	KINGSTON RANGE
15-	MESQUITE LAKE
16-	TRONA PINNACLES
17-	DENNING SPRINGS
18-	SALT CREEK (Dumont)
19-	CLARK MOUNTAIN
20-	JAWBONE / BUTTERBREAD AREA
21-	LAST CHANCE CANYON
22-	DESERT TORTOISE Research Natural Area
23-	CHRISTMAS CANYON
24-	BEDROCK SPRINGS
25-	STEAM WELL
26-	SQUAW SPRING
27-	GOLDSTONE
28-	CAMP IRWIN MILITARY BOUNDARY
29-	HALLORAN WASH
30-	MOUNTAIN PASS Dinosaur Trackway
31-	NEW YORK MOUNTAINS
32-	CAMP ROCK SPRING
33-	FORT PIUTE
34-	DEAD MOUNTAINS
35-	BLACK MOUNTAIN
36-	NORTH HARPER DRY LAKE
37-	SOUTH HARPER DRY LAKE
38-	KRAMER HILLS
39-	RAINBOW BASIN / OWL CANYON
40-	CALICO EARLY MAN SITE
41-	FORT SODA Mohave Chub
42-	MESQUITE HILLS / CRUCERO
43-	AFTON CANYON
44-	SILVER MOUNTAIN VICINITY
45-	JUNIPER FLATS
46-	UPPER JOHNSON VALLEY Yucca Rings
47-	SOGGY DRY LAKE Creosote Rings
48-	MARBLE MOUNTAINS Fossil Bed
49-	WHITEWATER CANYON
50-	BIG MORONGO CANYON
51-	DALE LAKE
52-	PATTON'S IRON MOUNTAIN Divisional Camp
53-	WHIPPLE MOUNTAINS
54-	SIDEWINDER WELL
55-	PALEN DRY LAKE
57-	CHUCKWALLA VALLEY Dune Thicket
58-	MULE MOUNTAINS
59-	CHUCKWALLA BENCH
60-	SALT CREEK Pupfish / Rail Habitat
61-	SAN SEBASTIAN MARSH / SAN FELIPE CREEK
62-	COYOTE MOUNTAINS Fossil Site
63-	COYOTE MOUNTAINS
64-	YUHA BASIN
65-	LAKE CAHUILLA NO. 2
66-	LAKE CAHUILLA NO. 3
67-	GOLD BASIN / RAND Intaglios
68-	INDIAN PASS
69-	LAKE CAHUILLA NO. 5
70-	EAST MESA Flat-tailed Horned Lizard Habitat
71-	LAKE CAHUILLA NO. 6
72-	PLANK ROAD
73-	PILOT KNOB
74-	CRONESE LAKE
75-	MOPAH SPRINGS

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF