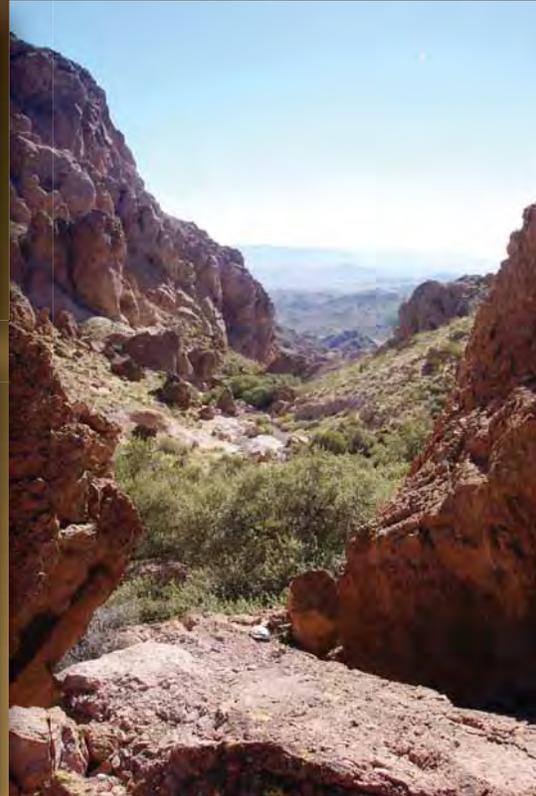




Bureau of Land
Management
Nevada State Office
Las Vegas Field Office

National Park Service
Pacific West Region
Lake Mead National
Recreation Area



**Jimbilnan, Pinto Valley, Black Canyon, Eldorado,
Ireteba Peaks, Nellis Wash, Spirit Mountain
and Bridge Canyon Wilderness Areas
Draft
Wilderness Management Plan
Environmental Assessment**

April 2010



**Jimbilnan, Pinto Valley, Black Canyon, Eldorado,
Ireteba Peaks, Nellis Wash, Spirit Mountain,
and Bridge Canyon Wilderness Areas**

**Draft Wilderness Management Plan and
Environmental Assessment**

ACRONYMS AND ABBREVIATIONS USED IN THIS DOCUMENT

ADA	Americans with Disabilities Act
AIRFA	American Indian Religious Freedom Act
BLM	Bureau of Land Management
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
DO	Director's Order
DOI	Department of the Interior
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FLPMA	Federal Land Policy Management Act
FMP	Fire Management Plan
FONSI	Finding of No Significant Impact
GIS	Geographic Information Systems
GMP	General Management Plan
GPS	Global Positioning System
LNT	Leave No Trace
MOU	Memorandum of Understanding
MSHCP	Multi Species Habitat Conservation Plan
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRA	National Recreation Area
NRHP	National Register of Historic Places
RM	Reference Manual
SHPO	State Historic Preservation Officer
USC	United States Code
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
VERP	Visitor Experience and Resource Protection
WMP	Wilderness Management Plan

Draft
Wilderness Management Plan/ Environmental Assessment
Jimbilnan, Pinto Valley, Black Canyon, Eldorado, Ireteba Peaks,
Nellis Wash, Spirit Mountain, and Bridge Canyon Wilderness Areas
Clark County, Nevada

A wilderness study and recommendation process began in 1974, when the National Park Service completed an initial wilderness review of all the lands within the Lake Mead National Recreation Area (Lake Mead NRA). At that time, 409,000 acres were proposed for wilderness. The 1986 *General Management Plan* for Lake Mead NRA identified 558,675 acres as meeting the criteria of the Wilderness Act, and an additional 115,700 acres that potentially meet the criteria. Per NPS policies, these areas were subsequently managed to ensure that no actions being taken would diminish their wilderness suitability, pending action by Congress.

In 2002, The Clark County Conservation of Public Land and Natural Resources Act (P.L107-282) was signed into law. This act designated 18 wilderness areas in Clark County, Nevada, as part of the national wilderness preservation system. Nine of these designated wilderness areas are fully or partially within Lake Mead NRA. The National Park Service and the Bureau of Land Management jointly manage three of these wilderness areas. This plan covers eight of the nine wilderness areas, of which three are jointly managed with the Bureau of Land Management (BLM). One area, the Muddy Mountain Wilderness, is covered under a separate plan that was jointly developed by the Bureau of Land Management and the National Park Service in 2007.

This *Draft Wilderness Management Plan / Environmental Assessment* presents and analyzes three alternatives for future direction of the management and use of eight wilderness areas in Lake Mead NRA and adjacent BLM lands. Alternative B is the agencies' preferred alternative. The potential environmental impacts of all alternatives have been identified and assessed.

This draft plan proposes some changes in how the eight wilderness areas are managed. Three alternatives were developed that varied primarily in the level of public access and degree of management. All of the alternatives were crafted with the intention of ensuring cohesive management of the wilderness areas. The proposed changes that would be most obvious to the public are those that address access and visitor distribution, visitor information services, and resource conditions. Alternative A, the "no action" alternative, reflects current management of the wilderness areas and serves as a baseline for comparison with the other action alternatives. Alternative B, the agencies' preferred alternative, generally focuses on increasing opportunities for access into the areas while still protecting the character of the wilderness areas. Alternative C provides a higher level of access and visitor use management while still protecting the overall character of the wilderness areas.

This *Draft Wilderness Management Plan / Environmental Assessment* has been distributed to other agencies and interested organizations and individuals for their review and comment. The public comment period for this document will last for 30 days. Readers are encouraged to submit comments on this draft plan at <http://parkplanning.nps.gov>. You may also send written comments to Lake Mead National Recreation Area Wilderness Management Plan, National Park Service, Denver Service Center – PDS, P.O. Box 25287, Denver, CO 80225.

Please note that NPS practice is to make comments, including names and addresses of respondents, available for public review; see "How to Comment on this Plan" for further information.

HOW TO COMMENT ON THIS PLAN

Comments on this *Draft Wilderness Management Plan/Environmental Assessment* (WMP/EA) are welcome and will be accepted for 30 days after its release. During the comment period, comments may be submitted using several methods as noted below.

Online: at <http://parkplanning.nps.gov/lame>

We prefer that readers submit comments online through the park planning website identified above, so the comments become incorporated into the NPS Planning, Environment, and Public Comment System. An electronic public comment form is provided through this website.

Mail: Lake Mead National Recreation Area Wilderness Management Plan
National Park Service
Denver Service Center – PDS
P.O. Box 25287
Denver, CO 80225

Hand delivery: at public meetings to be announced in the media following release of this plan.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

SUMMARY

This document contains the proposed wilderness management plan for Jimbilnan, Pinto Valley, Black Canyon, Eldorado, Ireteba Peaks, Nellis Wash, Spirit Mountain, and Bridge Canyon wilderness areas and the associated environmental assessment. The purpose of this plan is to serve as...

1. A public document that outlines steps for preserving the wilderness character, natural resources, and cultural resources in eight designated wilderness areas within Lake Mead National Recreation Area and adjacent Bureau of Land Management (BLM) lands while also providing for the use and enjoyment of the wilderness areas by current and future generations; and
2. A management document that will provide accountability, consistency, and continuity for managing the wilderness areas in the National Park Service (NPS) and Bureau of Land Management (BLM) wilderness management programs.

This plan covers eight wilderness areas: three of these are managed jointly with the Bureau of Land Management.

The plan addresses issues, provides guidelines for managing the eight wilderness areas, and identifies specific goals, objectives, and decision-making guidelines for administrative actions and visitor use. In many cases, this plan formalizes current NPS and BLM management practices in the wilderness areas. However, several modifications and changes are proposed that are intended to make BLM and NPS management practices consistent, improve visitor services, or generally improve wilderness management. This plan does not propose any changes to the NPS wilderness boundaries set forth in Clark County's 2002 wilderness legislation.

Adopting this plan would result in some changes in how the National Park Service and Bureau of Land Management manage wilderness—some would be readily apparent to the public, while others would be primarily operational. The National Park Service and Bureau of Land Management would implement a minimum requirement process to guide and document decisions on appropriate tools for maintenance activities, research projects, and appropriate administrative actions within the wilderness areas. The agencies would aim to make better use of research and monitoring to guide management through the creation and implementation of a coordinated monitoring plan, and would strive to increase staff training and accountability for wilderness management.

The primary issues facing the wilderness areas include the following:

- identifying appropriate uses for the areas
- providing access within the wilderness areas versus protecting wilderness characteristics
- providing information about the wilderness areas versus protecting wilderness characteristics
- providing for use of Spirit Mountain while meeting tribal needs and concerns
- restoring disturbed areas within the wilderness areas
- coordinating agency management efforts

This draft wilderness management plan/ environmental assessment proposes some changes in how the eight wilderness areas are managed. Three alternatives were developed that vary primarily in the level of public access and degree of management. All of the alternatives were crafted with the intention of ensuring cohesive management of the wilderness areas. The proposed changes that would be most obvious to the public are those that address access and

SUMMARY

visitor distribution, visitor information services, and resource conditions.

Alternative A, the “no action” alternative, reflects current management of the wilderness areas and serves as a baseline for comparison with the other alternatives. Alternative B, the agencies’ preferred alternative, generally focuses on increasing opportunities for access into the areas while still protecting the character of the wilderness areas. Alternative C also protects the character of the wilderness areas but provides slightly more access throughout the areas and slightly fewer opportunities in the Black Canyon area.

The likely impacts of implementing each of the alternatives on visitor use and experiences, wilderness character, natural resources, cultural resources,

socioeconomics, and agency operations and administration were addressed. In general, each of the alternatives would be expected to result in both beneficial and minor to moderate adverse impacts to wilderness area resources and values. None of the adverse impacts would be extensive, or severe enough to result in impairment of resources or values on NPS lands.

After the distribution of the *Draft Wilderness Management Plan / Environmental Assessment*, there will be a 30-day public review and comment period. If no significant environmental impacts are identified and no major changes are made in the alternatives, then separate Findings of No Significant Impact (FONSI) can be made and approved by the NPS Pacific West Regional Director and the District Manager for the BLM Southern Nevada District Office.

CONTENTS

CHAPTER ONE: INTRODUCTION

A GUIDE TO THIS DOCUMENT 3

BACKGROUND 4

Introduction 4

Brief Description of Lake Mead National Recreation Area, Adjacent BLM Lands,
and the Wilderness Areas 4

Purpose of the Plan/EA 7

Need for the Plan/EA 7

Scope of the Plan 8

Overview of the Wilderness Areas 8

FOUNDATION FOR PLANNING AND MANAGEMENT 13

Legal and Policy Requirements 13

The Next Steps 25

CHAPTER TWO: FRAMEWORK FOR MANAGEMENT, USE, AND ADMINISTRATION OF THE WILDERNESS AREAS

INTRODUCTION 29

WILDERNESS MANAGEMENT GOALS AND DIRECTIONS 30

Summary of Uses, Developments, and Management Actions

Permitted and Prohibited in Wilderness 31

Native American Treaty Rights 32

Cooperative Management of Jointly Managed Wilderness Areas 33

Relations with Private and Public Organizations and Governmental Agencies 33

Application of the Minimum Requirement Concept 33

Natural Resources Management 34

Cultural Resources Management 42

Wilderness Routes and Trails 44

Vehicle Access Points 45

Visitor Use Management 45

Interpretation and Education 49

Wilderness Patrols, Education, and Law Enforcement 50

Scientific Activities and Research 51

Commercial Services 52

Mineral Development 53

Administration/Operations 53

CHAPTER THREE: MANAGEMENT ALTERNATIVES

INTRODUCTION 63

Formulation of the Alternatives 63

Identification of the Agencies' Preferred Alternative 64

Management Zones 64

ALTERNATIVE A (NO ACTION) 74

Concept and Summary 74

Management Zoning 74

User Capacity 75

Volunteer Wilderness Stewardship Program 75

Collection of Natural Resources 75

Pets in Wilderness Areas 75

ALTERNATIVE B (PREFERRED ALTERNATIVE) 76
 Concept and Summary 76
 Management Zoning 76
 User Capacity 76
 Volunteer Wilderness Stewardship Program 77
 Collection of Natural Resources 77
 Pets in Wilderness Areas 78
 New Designated Routes 78
 Management of Specific Areas 78
 Staffing 81

ALTERNATIVE C 91
 Concept and Summary 91
 Management Zoning 91
 User Capacity 92
 Volunteer Wilderness Stewardship Program 92
 Collection of Natural Resources 92
 Pets in Wilderness Areas 93
 New Designated Routes 93
 Management of Specific Areas 94
 Staffing 97

MITIGATION MEASURES 107
 Natural Resources 107
 Cultural Resources 108
 Visitor Use and Experiences 108

ENVIRONMENTALLY PREFERRED ALTERNATIVE 109

SUMMARY TABLES 110

CHAPTER FOUR: THE AFFECTED ENVIRONMENT

INTRODUCTION 127

NATURAL RESOURCES 128
 Soils 128
 Vegetation 129
 Terrestrial Wildlife 134
 Threatened and Endangered Species 136
 Natural Soundscape 137

WILDERNESS CHARACTER 142
 Natural 142
 Undeveloped 142
 Untrammeled 142
 Solitude or a Primitive and Unconfined Type of Recreation 143

CULTURAL RESOURCES 144
 Overview 144
 Archeological Sites 145
 Ethnographic Resources 147

VISITOR USE AND EXPERIENCE 148
 Visitor Use Patterns and Characteristics 148
 Visitor Experiences and Opportunities 148
 Visitor Safety 149

CONTENTS

CHAPTER FIVE: ENVIRONMENTAL CONSEQUENCES

METHODOLOGY FOR ASSESSING IMPACTS 153
Natural Resources – Soils 154
Natural Resources – Vegetation and Wildlife 154
Natural Resources – Threatened and Endangered Species 155
Natural Resources – Natural Soundscapes 155
Wilderness Character 156
Cultural Resources – Archeological Resources 156
Cultural Resources – Ethnographic Resources 156
Visitor Use and Experience 157

IMPAIRMENT OF RESOURCES ON NPS LANDS 158

UNACCEPTABLE IMPACTS TO RESOURCES ON NPS LANDS 159

CUMULATIVE IMPACT ANALYSIS 160
Actions and Projects Inside the Wilderness Areas 160
Actions and Projects Outside the Wilderness Areas 160
Other External Events: Climate Change 160

IMPACTS ON NATURAL RESOURCES 162
Alternative A – No Action 162
Alternative B – Preferred Alternative 167
Alternative C 177

IMPACTS ON WILDERNESS CHARACTER 190
Alternative A – No Action 190
Alternative B – Preferred Alternative 191
Alternative C 193

IMPACTS ON CULTURAL RESOURCES 195
Alternative A – No Action 195
Alternative B – Preferred Alternative 196
Alternative C 198

IMPACTS ON VISITOR USE AND EXPERIENCE 201
Alternative A – No Action 201
Alternative B – Preferred Alternative 202
Alternative C 203

CHAPTER SIX: CONSULTATION AND COORDINATION

PUBLIC AND AGENCY INVOLVEMENT 209
Public Meetings and Newsletters 209
Consultation with Agencies, Officials, and Organizations 209
Future Cultural Resource Compliance Requirements 210

PUBLIC OFFICIALS, AGENCIES, ORGANIZATIONS, AND INDIVIDUALS RECEIVING A COPY OF THIS DOCUMENT 212
Federal Agencies 212
U.S. Senators and Representatives 212
State Officials 212
State Agencies 212
American Indian Tribes and Organizations 213
Local and Regional Government Agencies 213
Organizations and Businesses 213
Libraries 214
Media 214
Individuals 214

APPENDIXES, SELECTED REFERENCES, PREPARERS

APPENDIX A PUBLIC LAW 107-282 (Abbreviated) 217

APPENDIX B: MINIMUM REQUIREMENT DECISION PROCESS FOR NPS LANDS 223

APPENDIX C: MINIMUM REQUIREMENT DECISION PROCESS FOR BLM LANDS 233

APPENDIX D: CONSULTATION LETTERS 241

APPENDIX E: MEMORANDA OF UNDERSTANDING WITH THE NEVADA DEPARTMENT OF WILDLIFE 246

APPENDIX F: LAKE MEAD NATIONAL RECREATION AREA ACOUSTICAL MONITORING 2007 - 2009 265

SELECTED REFERENCES 293

PREPARERS 298

CONTENTS

FIGURES

- Figure 1: Regional Map 5
- Figure 2: Overview Map 11
- Figure 3: Alternative B, Jimbilnan and Pinto Valley Wilderness 83
- Figure 4: Alternative B, Black Canyon and Eldorado Wilderness 85
- Figure 5: Alternative B, Ireteba Peaks Wilderness 87
- Figure 6: Alternative B, Nellis Wash, Spirit Mountain, and Bridge Canyon Wilderness 89
- Figure 7: Alternative C, Jimbilnan and Pinto Valley Wilderness 99
- Figure 8: Alternative C, Black Canyon and Eldorado Wilderness 101
- Figure 9: Alternative C, Ireteba Peaks Wilderness 103
- Figure 10: Alternative C, Nellis Wash, Spirit Mountain, and Bridge Canyon Wilderness 105

TABLES

- Table 1: Designated Wilderness Areas in Lake Mead National Recreation Area and on Adjacent BLM Lands, their Acreages, and their Administration 10
- Table 2: Indicators for Monitoring Wilderness Character 58
- Table 3: Potential Management Zones for Lake Mead NRA/BLM Wilderness Areas 65
- Table 4: Wilderness Management Plan User Capacity Indicators and Standards, and Strategies for Management 70
- Table 5: Management Zones in Alternative B (acres and percentages) 77
- Table 6: Proposed Trails and Designated Routes in Alternative B. 78
- Table 7: Management Zones in Alternative C (acres and percentages) 92
- Table 8: Proposed Trails and Designated Routes in Alternative C 93
- Table 9: Summary of the Wilderness Alternatives 110
- Table 10: Summary of Key Impacts of the Alternatives 116
- Table 11: Soil Type and Vegetation 129
- Table 12: Common Noise Levels and Their Effects on the Human Ear 138
- Table 13: Natural and existing ambient levels at selected Lake Mead acoustic monitoring sites (LAME009, LAME010, and LAME011 141
- Table 14: Future Cultural Resource Compliance Required for Implementation of Specific Actions 211



Chapter One: INTRODUCTION

A GUIDE TO THIS DOCUMENT

Chapter One: Introduction sets the framework for the entire document. It describes why the plan is being prepared and what needs it must address. It gives guidance for the management alternatives that are being considered—guidance that is based on the Wilderness Act, special mandates and administrative commitments, agency laws and policies, and other planning efforts in the area.

The chapter also details the planning opportunities and issues that were raised during public scoping meetings and initial planning team efforts; the alternatives in chapter three address these issues and concerns. This chapter concludes with a discussion of the scope of the environmental assessment – specifically what issues and impact topics are or are not analyzed in detail.

Chapter Two: Framework for Management, Use, and Administration of the Wilderness Areas provides general directions for management of the eight wilderness areas. A variety of administrative and operational topics is covered. The management directions included in this chapter would be the same for all the alternatives in chapter three.

Chapter Three: Management Alternatives, Including the Preferred Alternative, begins by describing the management zones that would be used to manage the wilderness areas in the future. It includes a description of the continuation of current management practices and trends in the wilderness areas (alternative A—no action). Two alternatives for managing the wilderness areas, the preferred alternative (alternative B) and alternative C are presented next. Mitigative measures proposed to minimize or eliminate the

impacts of proposed actions in the alternatives are described, followed by a discussion of future studies that would be needed. The environmentally preferable alternative is identified, followed by a discussion of alternatives or actions that were considered but dismissed from further evaluation. The chapter concludes with summary tables of the alternatives and the environmental consequences of implementing the three alternatives.

Chapter Four: The Affected Environment describes those areas and resources that would be affected by implementing the actions contained in the alternatives. It is organized according to the following topics: natural resources, cultural resources, visitor use and experiences, and wilderness character.

Chapter Five: Environmental Consequences analyzes the impacts of implementing the alternatives on topics described in chapter 4. Methods used for assessing the intensity, type, and duration of impacts are outlined at the beginning of the chapter.

Chapter Six: Consultation and Coordination describes the history of public and agency coordination during the planning effort, including Native American consultations, and any future compliance requirements. It also lists agencies and organizations that will be receiving copies of the document.

Appendixes, a Glossary, Selected References, and a list of Preparers and Consultants are found at the end of the document.

BACKGROUND

INTRODUCTION

This *Draft Wilderness Management Plan / Environmental Assessment* presents and analyzes three alternatives for future direction of the management and use of eight wilderness areas in Lake Mead National Recreation Area (NRA) and adjacent Bureau of Land Management (BLM) lands (see figure 1). Alternative B is the agencies' preferred alternative. The potential environmental impacts of all alternatives have been identified and assessed.

BRIEF DESCRIPTION OF LAKE MEAD NATIONAL RECREATION AREA, ADJACENT BLM LANDS, AND THE WILDERNESS AREAS

Lake Mead National Recreation Area, in southern Nevada and northwestern Arizona, was formally established by the Act of October 8, 1964 (78 Stat. 1039). The national recreation area covers 1,495,664 acres, including two reclamation impoundments: Lake Mead and Lake Mohave. In both the national recreation area and BLM lands, the scenery includes dramatically colorful geologic landforms and largely undisturbed panoramic vistas. Rugged north-trending mountain ranges and broad alluvial slopes dominate the area. The seemingly endless desert and massive mountain ranges, unencumbered by dense vegetation, are strange and awesome to many visitors.

Shaped by fiercely hot summers, temperate winters, and low cumulative, but often locally intense rainfall, the desert generally supports sparse vegetation. The vegetation of the Lake Mead National Recreation Area and adjacent BLM lands contain species representative of three of the four North American deserts. The creosote bush community is the most widespread and prominent plant community

of the areas. However, in washes and other areas where moisture periodically accumulates, scattered cottonwood, desert willow, and mesquite grow.

These areas and their environs contain a great diversity of wildlife. Animals of special interest include the desert bighorn, which thrive in the national recreation area's mountain ranges, and desert tortoises. Other animals include cougar, mule deer, bobcat, coyote, ringtail cat, and a host of small desert rodents. Over 230 species of birds have been recorded in the area. The wilderness units provide vital habitat for the threatened desert tortoise and other species of concern.

Fossils and other paleontological resources, including petrified wood, are abundant within the national recreation area and adjacent lands.

Archeological artifacts and rock art provide a record of early Indian habitation. There are over 1200 identified archeological sites above the water line of Lakes Mead and Mohave in the national recreation area and adjacent BLM lands.

These eight designated wilderness areas offer picturesque views and remarkable natural and cultural resources found in the desert Southwest. Rugged mountains, secluded valleys, flat alluvial fans, steep canyons, astonishing geological formations, caves, springs, and seeps define the landscape. Opportunities for silence, solitude, and isolation abound within the wilderness areas.

History of Wilderness Designation in the Vicinity of Lake Mead National Recreation Area

The wilderness study and recommendation process for Lake Mead National Recreation Area began in 1974 when the National Park

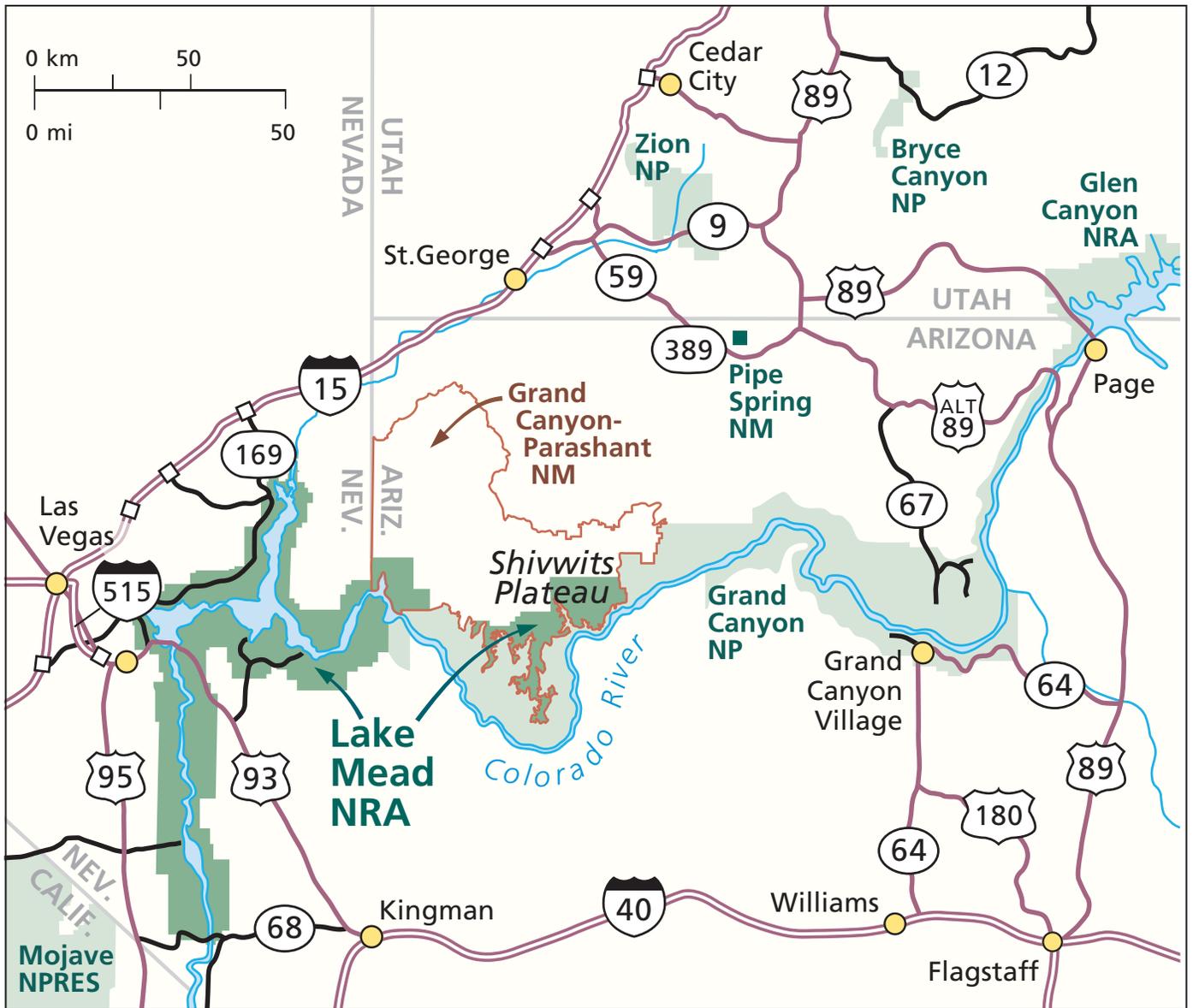


Figure 1

VICINITY
WILDERNESS MANAGEMENT PLAN
Lake Mead National Recreation Area

United States Department of the Interior
 Bureau of Land Management
 National Park Service



Service completed an initial wilderness review of all the lands within the national recreation area. At that time, 409,000 acres were proposed for wilderness. The 1986 general management plan for Lake Mead National Recreation Area identified 558,675 acres as meeting the criteria of the Wilderness Act, and 115,700 acres that potentially meet the criteria. Per NPS management policies, these areas were subsequently managed to ensure that no actions being taken would diminish their wilderness suitability, pending action by Congress.

In 2002, The Clark County Conservation of Public Land and Natural Resources Act (P.L. 107-282) was signed into law. This Act designated 18 wilderness areas in Clark County, Nevada, as part of the national wilderness preservation system. Nine of these designated wilderness areas are fully or partially within Lake Mead National Recreation Area. These nine designated wilderness areas include approximately 184,439 acres, or approximately 12% of the national recreation area's total of 1,495,664 acres. This number excludes the portions of the wilderness areas that are managed by the Bureau of Land Management. Table 1 lists the nine designated wilderness areas, their acreage, and their administrating agency.

This plan covers eight of the nine wilderness areas, of which three are jointly managed with the Bureau of Land Management. The Muddy Mountain Wilderness is covered under a separate plan that was jointly developed by the Bureau of Land Management and the National Park Service (BLM and NPS 2007)

PURPOSE OF THE PLAN/EA

The purpose of this Wilderness Management Plan (WMP)/Environmental Assessment (EA) for the eight wilderness areas is to provide long term direction for preserving the wilderness character, natural resources, and cultural resources in eight wilderness areas within Lake Mead National Recreation Area and on adjacent Bureau of Land Management (BLM)

lands, while also providing for the use and enjoyment of the areas by current and future generations. Additionally, this plan will provide accountability, consistency, and continuity for the management of the wilderness areas in the National Park Service (NPS) and BLM wilderness management programs.

The wilderness areas receive relatively little use today. However, future changes in use and visitation patterns could occur with the growing population in the Las Vegas area and with changes in visitor desires and technology. The goal of this wilderness management plan is not to freeze the eight areas in their current state, but to provide additional opportunities for the public to enjoy these areas while also ensuring that any future changes do not result in the degradation of resource conditions and opportunities. Thus, a purpose of this management plan is to establish guidelines to help NPS and BLM wilderness area managers in maintaining desirable conditions in the wilderness areas, and in responding effectively to future changes.

NEED FOR THE PLAN/EA

This wilderness management plan / environmental assessment is needed for several reasons:

1. NPS policy requires that each park containing wilderness maintain an up-to-date and approved wilderness management plan that "...will identify desired future conditions, as well as establish indicators, standards, conditions, and thresholds beyond which management actions will be taken to reduce human impacts to wilderness resources" (NPS 2006, § 6.3.4.2). The Bureau of Land Management also requires wilderness management plans be prepared for all wilderness areas on public lands (BLM Manual 8561, section .06A).
2. The 1986 general management plan does not address management issues for the wilderness and backcountry, but deferred to a wilderness management plan for

identification of specific issues and guidelines for addressing these issues. The general management plan specified that a wilderness management plan would be prepared following completion of the general management plan.

3. Clark County is one of the fastest growing regions in the country. Changes in visitation patterns have the potential to affect visitor opportunities for solitude and other characteristics of the wilderness areas.
4. Three of the wilderness areas are jointly managed by the National Park Service and Bureau of Land Management. A plan is needed to ensure consistent management of the areas and to resolve potential conflicts.
5. A plan is needed to address several wilderness-specific issues and topics that have not yet been addressed by the agencies, including access to the areas, appropriate types and levels of resource management, a minimum requirement analysis process, user capacities for the areas, education of visitors, and the ongoing occurrence of illegal uses.

SCOPE OF THE PLAN

This plan provides the primary management guidance for the Jimbilnan, Pinto Valley, Black Canyon, Eldorado, Iretaba Peaks, Nellis Wash, Spirit Mountain, and Bridge Canyon wilderness areas. The plan is jointly prepared by the National Park Service and Bureau of Land Management. Each agency has jurisdictional authority for separate portions of three of these wilderness areas (Eldorado, Iretaba Peaks, and Spirit Mountain). The plan also addresses some actions outside the wilderness areas, including information provided to the public about wilderness areas, access to the wilderness areas from adjacent nonwilderness areas, and roads that may extend a short distance into a wilderness area and are bordered by wilderness on both sides.

It should be noted that all road closures proposed in the alternatives would constitute an amendment to the national recreation area's general management plan.

OVERVIEW OF THE WILDERNESS AREAS

Figure 2 shows the locations of the eight designated wilderness areas that are addressed in this management plan. The wilderness areas are briefly described as follows:

- **Jimbilnan Wilderness** is bounded on the north by the Echo Wash Access Road, on the east by the 300-foot setback from the high water line of Lake Mead, on the south by an access road, and on the west by North Shore Road and the Boathouse Cove Access Road. This area contains mountainous terrain representing the northeast extremities of the Black Mountains, which contrast directly with the flat surface of the waters of Lake Mead in the distance. The colorful sand dunes in this area are known habitat for two rare plants, the threecorner milkvetch and the sticky buckwheat.
- **Pinto Valley Wilderness** is comprised of rugged hills and scenic valleys. This unit contains Guardian Peak, one of the highest peaks within the area. The northern side of Boulder Canyon is formed by steep cliffs and barren rock that drop to the waters of Lake Mead in a dramatic fashion. Red sandstone outcroppings merge with the green desert vegetation and the grays, browns, and yellows of the desert floor. This unique place is habitat for the rare Las Vegas bear poppy.
- **Black Canyon Wilderness** is home to the picturesque and rugged Eldorado Mountains. This wilderness unit is a maze of peaks and side canyons with vertical cliffs extending to the edge of the Colorado River. Much of the terrain was formed by volcanism. Mountain lions, bighorn sheep, bobcats, coyotes, and jackrabbits inhabit the area. Reptiles found in the area include side-blotched lizard, rattlesnakes, and

desert tortoise. Archeological resources include rock art, lithic scatters, and an intaglio. Some remnants of past mining are present. Adjacent to the wilderness, located on the river, are structures associated with Hoover Dam. A 230-kV powerline corridor separates this unit from the Eldorado Wilderness.

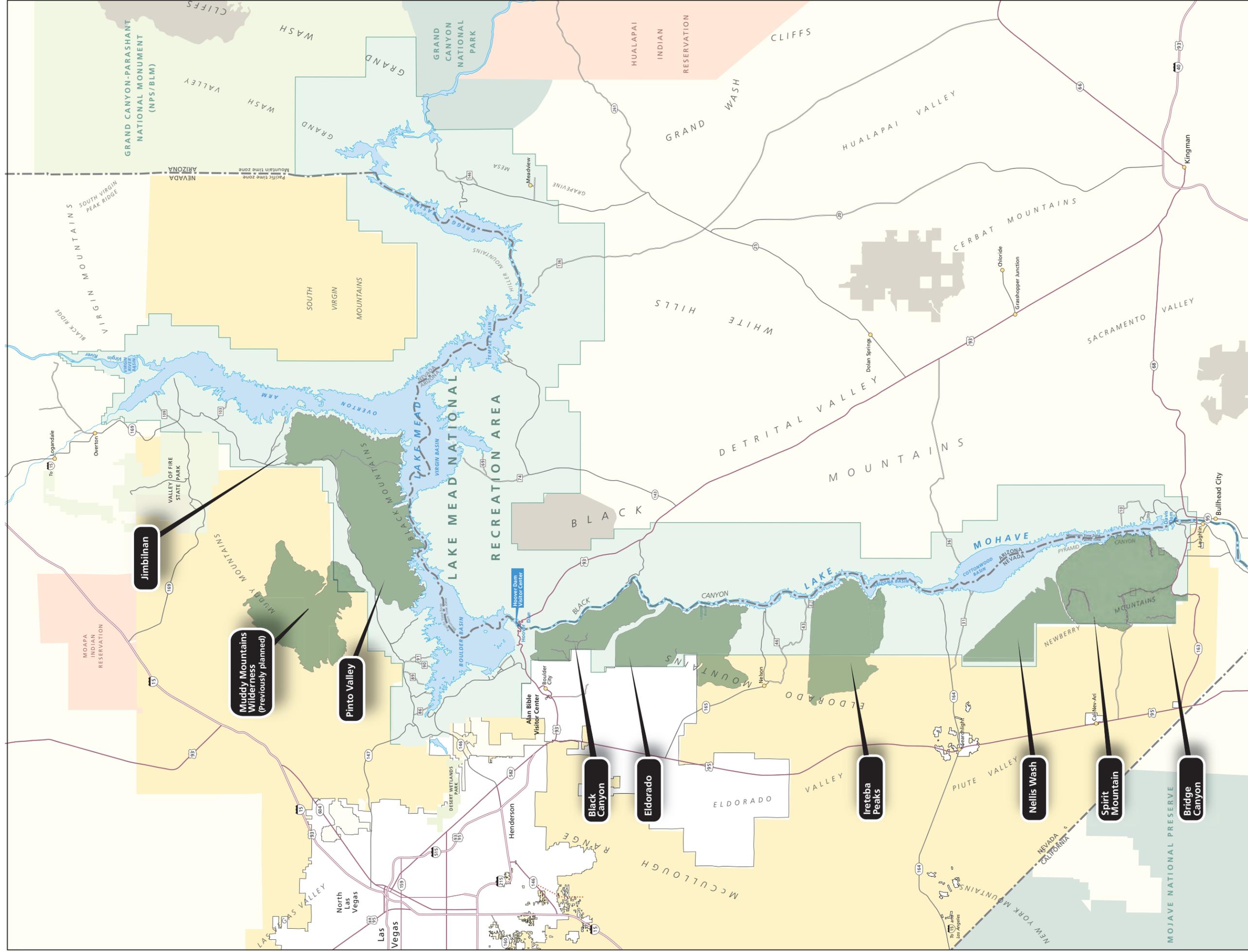
- **Eldorado Wilderness** also contains the Eldorado Mountains. An intricate web of peaks and side canyons with craggy cliffs extends to the waters of the Colorado River. This area is jointly managed with the Bureau of Land Management. The Eldorado Wilderness access road forms the southern boundary, the Colorado River/Lake Mohave 300-foot setback constitutes the east boundary, the north side is bounded by the Burro Wash access road and the Mead-Liberty Transmission Line, and the national recreation area boundary forms the west unit boundary. The mountains in this area include prime bighorn sheep habitat, which contrasts sharply with the shoreline habitat along the river's edge that attracts migrating birds.
- **Ireteba Peaks Wilderness** contains a portion of the Eldorado Mountains, gently rolling hills and wandering washes extending to Lake Mohave. Rugged mountains, secluded valleys, and flat alluvial fans provide opportunities for seclusion and isolation. Teddy bear cholla, desert tortoise, and Townsend's western big-eared bats are just some of the unique species surviving in this part of the Mojave Desert. Also found here is one of the few populations of the rare rosy two-toned beardtongue in the national recreation area. This area is jointly managed with the Bureau of Land Management.
- **Nellis Wash Wilderness** is nestled in the isolated Newberry Mountains along the western side of the national recreation area. Fingerlike drainages and alluvial fans

extend eastward from the mountains toward Lake Mohave. Jackrabbits, side-blotched lizards, rattlesnakes, coyotes, and desert tortoise make their home in the area. Remnants of past mining activities are found here. Isolation and solitude can easily be found here.

- **Spirit Mountain Wilderness** is also located in the Newberry Mountains in an area containing granite boulders and rock outcrops. Numerous archeological resources occur in the area. The mountain plays a prominent role in the religion and beliefs of the Yuman tribes of the lower Colorado River. They believe it is their spiritual birthplace. Members of the Yuman tribes continue to use the area according to their traditions. Bighorn sheep, bobcats, coyotes, western chuck-wallas, side-blotched lizards, Gila monsters, and rattlesnakes inhabit the area. The area contains important desert tortoise habitat. This wilderness area is jointly managed with the Bureau of Land Management
- **Bridge Canyon Wilderness** is also located in the Newberry Mountains. The area contains rugged granite boulders, outcrops, caves, steep canyons, and intermittent springs and seeps. Stands of cottonwood trees can be found along the Grapevine and Sacatone washes. Perennial flowing water can be found in Bridge and Upper Grapevine canyons. This wilderness area is important desert tortoise habitat. The area also contains bighorn sheep, bobcats, coyotes, western chuckwallas, side-blotched lizards, Gila monsters, and rattlesnakes. There are also important archeological and ethnographic resources present, including rock art, and a variety of historic and prehistoric sites.

Table 1: Designated Wilderness Areas in Lake Mead National Recreation Area and on Adjacent BLM Lands, their Acreages, and their Administration

Wilderness Area	Acreage	Administration
Jimbilnan	18,879	NPS
Muddy Mountains	48,019 (3,521 NPS; 44,498 BLM)	NPS and BLM
Pinto Valley	39,173	NPS
Black Canyon	17,220	NPS
Eldorado	31,950 (26,250 NPS; 5,700 BLM)	NPS and BLM
Ireteba Peaks	32,745 (22,299 NPS; 10,446 BLM)	NPS and BLM
Nellis Wash	16,423	NPS
Spirit Mountain	33,518 (32,913 NPS; 605 BLM)	NPS and BLM
Bridge Canyon	7,761	NPS



- Designated Wilderness Areas
- Lake Mead National Recreation Area
- Bureau of Land Management



Figure 2

OVERVIEW
WILDERNESS MANAGEMENT PLAN
Lake Mead National Recreation Area
 United States Department of the Interior
 Bureau of Land Management
 National Park Service



FOUNDATION FOR PLANNING AND MANAGEMENT

LEGAL AND POLICY REQUIREMENTS

Many federal laws and NPS and BLM policies guide the management and planning for the eight wilderness areas in Lake Mead National Recreation Area and adjacent BLM lands. These laws and policies form the foundation for this wilderness management plan. Management of the eight wilderness areas must be consistent with these laws and policies. The following section summarizes the key laws, policies, and authorities governing management of and planning for the wilderness areas.

The Wilderness Act of 1964 (P.L.88-577, 16 USC 1131 et seq.) establishes a policy for the enduring protection of wilderness resources for public use and enjoyment. The act defines wilderness as...

“...a tract of undeveloped federal land of primeval character without permanent improvements or human habitation; an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain; where the forces of nature predominate and the imprint of human activities is substantially unnoticeable; which provides outstanding opportunities for solitude or a primitive and unconfined type of recreation.”

This act established the national wilderness preservation system, and set forth management directives that specify the preservation of wilderness character. Section 4 of the act identifies appropriate uses and inappropriate uses in wilderness areas.

Clark County Conservation of Public Land and Natural Resources Act (P.L.107-282) designated the nine wilderness areas in Lake Mead National Recreation Area and on adjacent BLM lands. Title II of the act also provided direction on management of the areas, including livestock grazing, water rights, military overflights, Native American cultural

and religious uses, wildlife management, and wildfire management (see appendix A).

The National Environmental Policy Act of 1969 (NEPA) (P.L.91-190, 42 USC §4321 et seq.) establishes “a national policy which will encourage productive and enjoyable harmony between man and his environment.” NEPA requires all government agencies to develop procedures that ensure open and honest documentation of existing resources and potential effects to these resources as a result of the proposed action. NEPA fosters public involvement as a key element of the decision-making process. NEPA compliance procedures are described in NPS Director’s Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision Making* and the accompanying Reference Manual. See also the next section on this plan’s compliance with NEPA.

The Endangered Species Act of 1973 (16 USC 1531-1543) requires federal agencies to ensure that management activities authorized, funded, or carried out by the agency do not jeopardize the continued existence of listed endangered or threatened species, or result in the destruction or adverse modification of habitat that is critical to the conservation of the species.

The National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470). Passage of the National Historic Preservation Act (NHPA) established a comprehensive program to preserve the historical and cultural foundations of the nation as a living part of community life. Section 110 of the NHPA delineates broad historic preservation responsibilities for federal agencies, such as the National Park Service and Bureau of Land Management, to ensure that historic preservation is fully integrated into all of their ongoing programs. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic

properties that are either listed in or eligible to be listed in the National Register of Historic Places. The national register includes districts, sites, buildings, structures, and objects important for their significance in American history, architecture, archeology, engineering, and culture. The goal of the Section 106 review process is to seek ways to avoid, minimize, or mitigate any adverse effects to historic properties that are listed in or eligible for listing in the national register.

American Indian Religious Freedom Act of 1978 (AIRFA) (P.L.95-341; 92 Stat. 469; 42 USC 1996) determines that the policy of the United States is to "protect and preserve for American Indians their inherent right of freedom to believe, express and exercise the traditional religions of the Native Americans, including but not limited to site access, use and possession of sacred objects, and the freedom to worship through ceremonial and traditional rites."

The Federal Land Policy and Management Act of 1976 (FLPMA); (P.L.94-579) established policies for the Bureau of Land Management's administration and management of public land, including the protection, development, and enhancement of these lands. Section 102 calls for the public lands to be managed so their resources and values are protected, including preserving and protecting certain public lands in their natural condition. A land-use planning process is also called for, coordinated with other federal and state planning efforts. Section 603(c) enables the Bureau of Land Management to manage wilderness areas under the provisions of the Wilderness Act.

The National Park Service Organic Act of 1916 (16 USC 1a-1) created the NPS, and established its purpose: "...to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." It directs the National Park Service to promote and regulate the use of the parks by such

means and measures as conform to their fundamental purposes. Congress and the courts have interpreted this act with clarification that "when there is a conflict between conserving resources and values and providing for enjoyment of them, conservation is to be predominant" (NPS 2000, § 1.4.3).

NPS Management Policies 2006 establishes servicewide policies for preservation, management, and use of park resources and facilities, and establishes direction for the management of NPS wilderness. Section 6.1 states: "The National Park Service will manage wilderness areas for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness. Management will include the protection of these areas, the preservation of their wilderness character, and the gathering and dissemination of information regarding their use and enjoyment as wilderness. The purpose of wilderness in the national parks includes the preservation of wilderness character and wilderness resources in an unimpaired condition and, in accordance with the Wilderness Act, wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use." More specific guidelines for application of the Wilderness Act in NPS areas are described in Chapter 6 of *Management Policies*, including wilderness resource management, wilderness planning, wilderness use, and public education.

NPS Director's Order 41 and Reference Manual 41: Wilderness Preservation and Management, 1999 provide clarification and interpretation of the NPS wilderness policies and establish specific guidelines to provide accountability, consistency, and continuity to the NPS wilderness management program. Topics include wilderness management planning, management techniques, minimum requirement concept (see page 33 for more information on this concept), interagency coordination, interpretation and education,

scientific activities, facilities, signs, fire management, cultural resources, general public use, use by persons with disabilities, commercial services, special events, air quality, mineral development, and training requirements.

BLM Manual 8560 - Management of Designated Wilderness provides specific policies for managing BLM wilderness areas. The manual identifies goals of wilderness management and specific activities in wilderness areas, including uses, resource management, and administrative structures and facilities.

BLM Manual 8561 - Wilderness Management Plans provides policy and instructions for preparing, approving, and implementing wilderness management plans. The manual identifies the objectives of a wilderness management plan, provides guidelines for the planning effort, describes the wilderness-planning framework, and provides direction on preparing and writing the plan.

Lake Mead National Recreation Area Enabling Legislation, October 8, 1964 established the national recreation area. The legislation includes a brief description of the original boundary, outlines the recreational purposes, and permits hunting, fishing, and trapping.

Lake Mead National Recreation Area Superintendent's Compendium, as amended, March 25, 2009 summarizes park specific rules implemented under the discretionary authority of the NPS superintendent. The compendium provides for the superintendent to set public use limits and close areas in the national recreation area, including portions of the wilderness areas, and identifies uses that require a special use permit. The compendium provides for camping and the use of horses and pack animals in all of the wilderness areas.

Compliance of this Plan with the National Environmental Policy Act (NEPA)

The planning team has analyzed the development of this wilderness management plan according to the following questions to determine the appropriate level of compliance with the National Environmental Policy Act:

- 1. Does the decision or action conform to the existing land use plan?*
The proposed action (i.e., this wilderness management plan) is subject to the BLM *Las Vegas Resource Management Plan (RMP)*, approved in October 1998, and the NPS *Lake Mead National Recreation Area General Management Plan*, approved in 1986. Although the wilderness areas covered by this wilderness management plan were designated after these other plans were approved, the wilderness management plan is consistent with the terms, conditions, and decisions of these plans.
- 2. Is the proposal an exception from NEPA requirements?*
This wilderness management plan is not a congressionally exempt action, an emergency action, or rejection of a proposed action. Therefore, it is not exempt from NEPA requirements.
- 3. Is the proposal listed as normally requiring an environmental impact statement (EIS)?*
Approval and implementation of this wilderness management plan is not an action listed in 516 Departmental Manual 11 (BLM) or 516 Departmental Manual 12 (NPS) as normally requiring an EIS. None of the alternatives considered are expected to have a significant effect on the quality of the human environment. No actions are being proposed whose effects on the quality of the human environment are expected to be highly controversial.
- 4. Are existing analysis and documentation sufficient?*
Because the wilderness areas included in this planning effort were not designated during the last BLM or NPS land-use planning efforts, the existing analysis and documentation is not sufficient.

Information from other existing land use plans was used in preparation of this wilderness management plan.

5. *Is the proposal listed as a categorical exclusion?*

The proposal is not listed as a categorical exclusion in Appendix 1 of 516 Departmental Manual 2, or on agency lists (516 DM 11, BLM; 516 DM 12, NPS).

After conducting the analysis summarized above, it has been determined that an environmental assessment is the appropriate level of compliance with NEPA and agency policies. The National Park Service is the lead agency in preparing this environmental assessment.

Special Mandates and Administrative Commitments

Clark County Conservation of Public Land and Natural Resources Act (2002)

The federal law establishing the wilderness areas (P.L.107-282) includes several specific mandates regarding management of the areas. The act states that nothing in the law shall affect any water rights in the state of Nevada, or modify the Clark County Multi-Species Habitat Conservation Plan, including that plan's specific management actions for the conservation of perennial springs (§203). Nothing in the law restricts or precludes military overflights (§205), or diminishes Native American tribal rights regarding access to the areas for tribal activities, including spiritual, cultural, and traditional food-gathering activities (§206). The act also does not affect the state's management of wildlife in the areas, including the regulation of hunting, fishing, and trapping (§208). Wildlife water-development projects, including guzzlers, may be authorized in the wilderness areas under certain conditions. (For more details on these mandates, see P.L.107-282 in appendix A.)

Master Memorandum of Understanding between the National Park Service, Lake Mead National Recreation Area and the State of Nevada Department of Wildlife (2004)

The agreement calls for the National Park Service and Nevada Department of Wildlife to cooperate in maintaining or restoring fish, wildlife, and their habitat in the wilderness areas. The agencies will regularly consult on actions affecting wilderness. Aerial surveys are permitted to continue over the wilderness areas. The compliance for this is addressed in the *2005 Aerial Operations Plan/Environmental Assessment*. With the approval of the National Park Service, the state may undertake scientific research, sampling of fish and wildlife populations, wildlife habitat improvements, wildlife damage control, control of non-indigenous species, facility development, and habitat alteration to address human impacts. The agreement also calls for actions to limit visitor use if significant disruptions or degradation of wildlife resources is occurring. (A similar agreement is in place between the Bureau of Land Management and the Nevada Department of Wildlife.)

Issues and Concerns to be Addressed

Early in the planning process, the planning team identified the primary issues and concerns facing the eight wilderness areas with assistance from the public, NPS and BLM staffs, various organizations, and other governmental agencies. An issue is defined as an opportunity, conflict, or problem regarding the use or management of the wilderness areas. Comments were solicited at public meetings and through a planning newsletter. Most of the issues facing the wilderness areas relate to protecting wilderness resources and values, and providing for quality visitor experiences. This section summarizes the main issues or concerns to be addressed by the wilderness management plan.

Identifying Appropriate Uses for the Wilderness Areas

A variety of uses and activities are appropriate and permitted in wilderness areas, while other uses are prohibited (see chapter 3). However, law and policy are not always clear about some uses. Should horseback users be permitted in these desert wilderness areas? Should large groups be permitted? Some people probably believe these uses should be allowed in some or all of the wilderness areas, while others believe they should be restricted or prohibited due to potential environmental impacts or potential conflicts with other user groups. The wilderness management plan needs to provide direction on answering these questions.

Providing Access within the Wilderness Areas vs. Protecting Wilderness Characteristics

There are relatively few well-marked access points into the wilderness areas and no official designated trails within the wilderness areas. Should additional access such as trailheads, trails, or cairned routes be provided for visitors? Providing this access into the wilderness areas would provide a new opportunity for people to use and enjoy these public lands. However, increased use levels, in turn, could affect opportunities for solitude, the apparent naturalness of the area, and other wilderness resources. Some members of the public likely would want designated trails or routes, while others, who want to see no other signs of people and want opportunities to be self-reliant, could oppose these developments. On the other hand, sometimes trails or routes may be needed for resource protection purposes, to avoid sensitive resources or prevent erosion and resource damage from braided, user-created, foot-worn trails. These questions need to be addressed in the plan.

Providing Information about the Wilderness Areas vs. Protecting Wilderness Characteristics

This issue is related to the above issue. The National Park Service and Bureau of Land Management do not publicize or provide

much information about the wilderness areas. Independent of the agencies, information is already available on the wilderness areas in guidebooks and on the Internet. Public education and outreach is needed to inform people about the concept of wilderness and the opportunities these areas provide, as well as to inform them about the sensitivity of the areas, Leave No Trace behavior, and other proper etiquette in wilderness. However, increasing information about the areas will also increase use levels in the wilderness areas, which in turn could result in some adverse impacts to wilderness resources and values.

Providing for Use of Wilderness Areas while Meeting Tribal Needs and Concerns

Spirit Mountain is one relatively popular area with many existing access points. This area receives some of the greatest amount of use in the eight wilderness areas. It is also a national register – listed traditional cultural property. A traditional cultural property can be defined generally as one that is eligible for inclusion in the national register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community. Spirit Mountain is a sacred area for the Yuman Tribes, who are concerned about the use of this area. However, use may continue to increase in this area in the future. The management plan needs to determine what uses and use levels should and should not occur here, and where and when they should occur, to meet both the needs and desires of the tribes and visitors.

Additional ethnographic resources of interest to the Yuman Tribes exist in the Bridge Canyon and Nellis Wash Wilderness Areas. Current use levels do not pose immediate concerns; however, use of these areas may increase in the future. The management plan needs to determine what uses and use levels should and should not occur here, and where and when they should occur, to meet both the needs and desires of the tribes and visitors.

Restoration of Disturbed Areas within the Wilderness Areas

Another issue related to wilderness is determining when and under what conditions managers should actively intervene in wilderness. As established by the Wilderness Act, the objectives to manage wilderness for ecological conditions (the forces of nature) and for wildness (minimal imprint of man's work) can be in conflict. There are signs of human disturbance in some of the wilderness areas (excluding cultural resources); these include litter and the presence of old roads. Nonnative invasive plants also are present, as are nonnative burros. Direction is needed on how much restoration work, if any, should be done in the wilderness areas.

Coordination of Agency Management Efforts

For the three wilderness areas that are on BLM and NPS lands, coordination is needed to ensure consistent management with regard to resources, visitors, and overall administration of the areas. For instance, consistent direction is needed on user capacity and access to these areas, interpretive materials, and the application of the minimum requirement concept. The wilderness management policies of the two agencies vary on some topics, such as collecting of plants, animals, and rocks, and geocaching.

Coordination is also needed for many of the wilderness areas regarding such topics as legal and illegal access from BLM non-wilderness lands onto NPS wilderness areas, obtaining required agency permits, law enforcement, and agency-led hikes into the areas.

Issues and Concerns Not Being Addressed

Air tour operators conduct overflights of the wilderness areas, some while touring Lake Mead National Recreation Area and others while traveling to different destinations (e.g., Grand Canyon National Park). These overflights affect wilderness resources and values (e.g., opportunities for solitude, apparent naturalness of the areas) as well as wilderness visitors. A future air-tour

management plan will address the management of these overflights.

Other overflights by agencies and military occur infrequently and will not be addressed in this plan. The military overflights are provided for under the Clark County Conservation of Public Land and Natural Resources Act of 2002. Agency aircraft overflights for wildlife management purposes are provided for under the memoranda of understanding among the National Park Service, Bureau of Land Management, and the State of Nevada Department of Wildlife.

Identification of Impact Topics

An important part of planning is seeking to understand the consequences of making one decision over another. To this end, an environmental assessment was prepared as part of the wilderness management plan. Environmental assessments identify the anticipated impacts of possible actions on resources and on visitors and neighbors. Impacts are organized by topic, such as "impacts on the visitor experience" or "impacts on vegetation." Impact topics serve to focus the environmental analysis and to ensure the relevance of impact evaluation. Impact topics identified for the *Lake Mead National Recreation Area Wilderness Management Plan / Environmental Assessment* were identified based on federal laws and other legal requirements, Council on Environmental Quality (CEQ) guidelines, NPS management policies, staff subject-matter expertise, and issues and concerns expressed by the public and other agencies early in the planning process (see previous section). The planning team selected the impact topics for analysis based on the potential for each topic to be affected by the alternatives. Also included is a discussion of some impact topics that are commonly addressed in environmental assessments, but that are dismissed from detailed analysis in this plan for the reasons given.

The "Affected Environment" chapter contains a more detailed description of each impact

topic potentially affected by the actions described in the alternatives.

Impact topics were retained for analysis if there could be appreciable impacts from the actions of the alternatives considered. Impact topics were dismissed if either (a) implementing the alternatives would have no effect or negligible effect, or (b) the resource does not occur in the wilderness areas.

Impact Topics to be Analyzed

Natural Resources

Soils

Soils are a key resource in the wilderness areas, helping determine where native vegetative communities and wildlife occur. They affect the areas' productivity, drainage patterns, and erosion. The NPS Organic Act, the Federal Land Policy and Management Act, and NPS *Management Policies* call for the protection and conservation of soil resources. Soils may be affected by visitors and by the construction and maintenance of trails and trailheads in the alternatives. Since some of the proposed actions could affect soils in the wilderness areas, impacts to soils are addressed.

Vegetation

Lake Mead National Recreation Area is located at the juncture of three of the four desert ecosystems in the United States, and thus supports a variety of plants and plant communities. Nonnative vegetation is also present, which affects the character of the wilderness areas. The NPS Organic Act, the Federal Land Policy and Management Act, and NPS *Management Policies* call for the protection and conservation of vegetation. Some of the plan's proposed actions, including the development of trails, routes, and trailheads, could affect the wilderness areas' vegetation, which would be of concern to managers, visitors, and the public.

Terrestrial Wildlife

Mammals, birds, reptiles, and other wildlife are an important resource of the wilderness areas. Desert bighorn sheep are highly valued by visitors, including hunters. The NPS

Organic Act, the Federal Land Policy and Management Act, and NPS *Management Policies* call for the protection and conservation of wildlife. Human activities can affect wildlife species. Because some of the proposed actions in the wilderness management plan may alter the patterns of human activities and affect wildlife and wildlife habitat, these impacts are included in the environmental assessment.

Threatened and Endangered Species

The Endangered Species Act requires an examination of impacts on all federally listed threatened or endangered plant and animal species. NPS *Management Policies* repeats this requirement and adds the further stipulation that the analysis examine impacts on state-listed species. One federally threatened species—the desert tortoise—and eight of the state listed sensitive species—the Las Vegas bear poppy, banded Gila monster, desert bighorn sheep, the spotted bat, burrowing owl, phainopepla, Swainson's hawk, and ferruginous hawk—inhabit Lake Mead National Recreation Area and may occur within the wilderness areas. Changes in human activities proposed in the management plan's alternatives have the potential to affect some of these species or their habitats; thus, this topic is included in the environmental assessment.

Natural Soundscape

NPS *Management Policies* calls for the National Park Service to "preserve, to the greatest extent possible, the natural soundscapes of parks" (NPS 2006). Additionally, the preservation of wilderness character and values includes the preservation of natural sounds, minimizing the noise intrusions of modern human activities. Noise can affect the apparent naturalness and opportunities for solitude in a wilderness area. The alternatives being considered in this plan call for new facilities and may increase use levels, which in turn could affect the soundscape of the wilderness areas. Any such changes would be of concern to managers, visitors, and the public. Thus, this topic will be analyzed in the environmental assessment.

Wilderness Character

The Wilderness Act and management policies of both the National Park Service and the Bureau of Land Management mandate the protection of the resources and qualities of the eight wilderness areas.

The management actions in the alternatives and visitor use could affect the character of the wilderness areas, including apparent naturalness and opportunities for solitude. Any changes to wilderness character would be of concern to the land management agencies, visitors, and the public, and thus will be analyzed in the environmental assessment.

Cultural Resources

Archeological Resources

Archeological resources is retained as an impact topic because ground disturbance associated with proposed actions, such as for new designated routes and developed access points could disturb currently unidentified archeological resources. This topic is also retained for further analysis as an impact topic because of potential impacts associated with increased visitation as more people use the designated wilderness areas. Law, regulation, or policy sources relevant to the impact analysis of archeological resources are Section 106 of the National Historic Preservation Act of 1966 as amended; NPS Director's Order 28; *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, Effective September 29, 1983, as amended*; NPS *Management Policies 2006*; and the National Environmental Policy Act as amended.

Ethnographic Resources

Ethnographic resources are defined by the National Park Service as any "site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it" (Director's Order # 28, *Cultural Resource Management Guideline*, 181).

Ethnographic resources is retained as an impact topic because of potential impact to traditional cultural properties such as Spirit Mountain that may result from increased visitation. Law, regulation, or policy sources relevant to the impacts analysis of ethnographic resources are Section 106 of the National Historic Preservation Act of 1966 as amended; Director's Order 28; Executive Order 13007 on Sacred Sites; NPS *Management Policies 2006*; and the National Environmental Policy Act as amended.

Visitor Use and Experience

The NPS Organic Act, the Federal Land Policy and Management Act, and the Wilderness Act all provide for visitor use of the eight wilderness areas. Providing opportunities for visitor use is one of the primary issues being addressed by the alternatives in this plan. Actions being proposed in the alternatives, such as the development of trails or routes and trailheads, would affect visitor use and experience. The alternatives also could affect interpretive and educational opportunities, which would affect the visitor experience. Any changes to visitor use and experience would be of interest to visitors, the land management agencies, and the public.

Impact Topics Considered but Dismissed from Analysis in Detail

Air Quality

Lake Mead and the eight wilderness areas are classified as Class II areas under the Clean Air Act. Air quality is considered generally good. Visible pollutants rarely diminish the vistas within the wilderness areas. Depending on wind direction, air pollution from Las Vegas sometimes affects the air quality of the wilderness areas. In all of the alternatives, the National Park Service and Bureau of Land Management would continue to protect air quality as required under the Clean Air Act and NPS *Management Policies*.

No actions are being proposed in the alternatives that would measurably alter the wilderness areas' overall air quality. Construction of new facilities would result in

dust and vehicle emissions and therefore would have a short-term, negligible impact on the airshed. Use levels may increase with implementation of the alternatives, but the increase is not expected to be substantial and the emissions from additional vehicles would be negligible compared to current levels. Therefore, air quality is not analyzed in detail in this environmental assessment.

Prime and Unique Farmlands

In 1980, the Council on Environmental Quality (CEQ) directed federal agencies to assess the effects of their actions on farmland soils classified as prime or unique by the United States Department of Agriculture, Natural Resources Conservation Service (NRCS). Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is available for these uses (the land could be cropland, pastureland, rangeland, forestland, or other land, but not urban built-up land or water). Unique farmland is land other than prime farmland that is used for the production of specific high value food and fiber crops (CEQ 1980). According to NRCS maps, there are no prime or unique farmlands within the wilderness areas. Therefore, prime and unique farmlands are not analyzed in this assessment.

Water Quality

Aside from a few springs, no water bodies are within the wilderness areas. No actions are being proposed in the alternatives that would be expected to increase the potential for water pollution within the wilderness areas—any impacts from increased visitor use to the springs in the alternatives would be negligible. Thus, there is no need to address this impact topic in further detail.

Water Quantity

As noted above, water is almost non-existent resource in the wilderness areas. The springs that do exist are important for recreation and wildlife habitat. The proposed changes in the alternatives would have negligible impacts to surface water flows, primarily from regarding

for parking areas; thus, this the topic of water quantity is not analyzed in detail.

Floodplains

Executive Order 11988, “Protection of Floodplains,” requires the examination of impacts to floodplains. The eight wilderness areas have dry washes but no perennial drainages. No new developments or uses are being proposed in the alternatives that would affect the floodplains of the dry washes. Thus, this topic is not analyzed in detail.

Wetlands

Executive Order 11990 (Protection of Wetlands) requires the examination of impacts to wetlands. Wetlands have not been mapped in the wilderness areas, but due to the climate and nature of the areas, only a few isolated wetlands associated with springs, seeps, and small impoundments likely occur in the areas. No actions are proposed in the management plan that would affect these wetlands or their function. Therefore, wetlands are not analyzed in this environmental assessment.

Lightscaapes

NPS Management Policies 2006 states that the National Park Service strives to preserve natural lightscaapes of parks, which are natural resources and values that exist in the absence of human-caused light. The night sky substantially contributes to the visitor experience in the wilderness areas. No actions are being proposed in the alternatives that would affect lightscaapes in the wilderness areas. Proposed development such as the addition of signs and access points would not require artificial lighting. Therefore, lightscaapes are not analyzed in this environmental assessment.

Cultural Landscapes

A cultural landscape is a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. Cultural landscapes can be

associated with prehistoric, historic, and ethnographic resources.

Law, regulation, or policy sources relevant to the impact analysis of cultural landscapes are Section 106 of the National Historic Preservation Act of 1966 as amended; NPS Director's Order 28; *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes, Effective August 11, 1995*; *NPS Management Policies 2006*; and the National Environmental Policy Act of 1969 as amended.

A cultural landscape related to Hover Dam has been identified for Lake Mead National Recreation Area; however, currently no cultural landscapes are identified in any of the wilderness areas. Cultural landscapes is dismissed as an impact topic because changes associated with proposed actions would not affect landscape features or patterns of national register – eligible cultural landscapes or potential national register – eligible cultural landscapes.

Historic Structures

Historic structures is dismissed as an impact topic because none of the proposed actions would affect the very small number of historic structures within the wilderness areas. Laws, regulations, and policies relevant to the impact analysis of historic structures include the following: Section 106 of the National Historic Preservation Act of 1966 as amended; NPS Director's Order 28; *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, 1995*; *NPS Management Policies 2006*; and the National Environmental Policy Act of 1969 as amended.

Historic sites have been located in several of the wilderness areas. They are primarily associated with past mining activities. Most have not been evaluated for their significance or integrity for listing in the national register. These structures will not be impacted, as there

is no proposed construction for any of the alternatives. Currently visitation is not impacting historic structures within the wilderness areas and this is not anticipated to change in the future. Historic structures would be inventoried and their significance and integrity evaluated under National Register of Historic Places criteria. Those qualities of the historic structures that contribute to the structures' listing or eligibility for listing in the national register would be protected in accordance with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*, and the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (unless it is determined through formal consultation that disturbance or natural deterioration is unavoidable).

Therefore, although a few historic structures have been documented in some of the wilderness areas, they are not found near any of the areas proposed for actions under any of the alternatives. Therefore, this topic was dismissed from detailed analysis.

Indian Trust Resources

Secretarial Order 3175 issued by Secretary of the Interior Bruce Babbitt, November 8, 1993, requires that impacts on Indian trust resources from a proposed project or action by United States Department of the Interior agencies be addressed in environmental documents.

This order was reinforced by President William Clinton's April 29, 1994, memorandum to the heads of executive departments and agencies directing that tribal trust resources be considered during the development of federal plans, projects, programs, and activities.

The federal Indian trust responsibility is the fiduciary duty of the federal government emanating from treaties and statutes to protect Indian lands, resources, assets, and rights and to carry out the mandates of federal law concerning American Indian and Alaska Native tribes.

Indian trust resources is not analyzed as an impact topic in this document because the resources of Lake Mead National Recreation Area are preserved and managed for the benefit of all Americans, as are other units of the national park system. This management mandate stems from the Organic Act of August 25, 1916, establishing the National Park Service; and from President Lyndon Baines Johnson's signing of the 1964 legislation establishing Lake Mead National Recreation Area (Public Law 88-639). The planning team has concluded that there are no Indian trust resources within the wilderness areas at Lake Mead National Recreation Area. Therefore, the subject is not included as an impact topic.

Museum Collections

Current Lake Mead National Recreation Area strategic goals call for a revision of the scope of collections statement and the continuation of a comprehensive cleanup of the catalog system. The park's museum collection consists of archives that contain records related to 60 years of park operations. The collection also includes a number of archeological and historical objects that have been recovered during surface surveys or small data recovery projects within the park's boundaries. The collection also includes geological specimens, botanical specimens, faunal specimens, and other biological specimens (insect, reptile, amphibian, bird, and mammal specimens) with associated field records. The total number of objects in the park's collection is about 100,000 items.

The topic of museum collections and archives is dismissed from further consideration because none of the alternative actions would affect museum collections.

Energy Requirements/Depletable Resource Requirements and Conservation Potential

None of the alternatives would affect the agencies' energy requirements or result in the extraction of depletable resources from the wilderness areas. No new facilities are being developed that would substantially increase the use of energy. Under all of the alternatives,

ecological principles and sustainable design concepts would be applied to ensure that the wilderness areas' natural resources were maintained and protected. Therefore, this topic is not analyzed in this environmental assessment.

Public Health and Safety

No actions are proposed in the alternatives that would result in identifiable impacts on human health or safety. Although the alternatives would increase the access opportunities into the wilderness areas, information is already available to visitors about potential risks of traveling in these areas (e.g., dehydration). Thus, this topic was not analyzed in this environmental assessment.

Environmental Justice

Executive Order 12898, "General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires all agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income communities. The alternatives in this document would not result in any identified effects that would have disproportionate health or environmental effects on minority or low-income populations or communities. Increased wilderness access would be available equally to everyone. Therefore, environmental justice is not analyzed in this document.

Socioeconomics

There are no proposed actions in this plan/EA that would change any local or regional economic patterns, or affect nearby communities. Some actions in the alternatives could affect private businesses in the area through the construction of a few new developments and increased use of the wilderness areas, but any such effects on businesses would be expected to be beneficial and negligible. Thus, this impact topic was dismissed from further consideration.

NPS and BLM Operations

Managing the eight wilderness areas would require a very small amount of time, resources, and staff under the alternatives. Some of the potential actions proposed in the alternatives could affect budget needs, as well as the workloads and day-to-day operations of some staff, but compared to the two agencies' overall workloads and operations in the Lake Mead National Recreation Area, any such changes would be expected to be negligible in extent. Thus, this impact topic was not analyzed in detail.

Relationship of this Plan to Other Lake Mead and BLM Management Plans

Several agency plans have influenced or would be influenced by the approved wilderness management plan. The wilderness management plan is intended to complement and be consistent with these other plans. Some of these plans are briefly described here, along with their relationship to this management plan.

Muddy Mountains Wilderness Management Plan and Environmental Assessment (2006) provides guidance for management of the Muddy Mountain Wilderness in Lake Mead National Recreation Area and adjacent BLM lands. This plan was jointly prepared by the Bureau of Land Management and the National Park Service. The plan identifies the conditions and opportunities that will be managed within the wilderness; creates specific guidance for managing resources and activities in the wilderness; and provides direction for the preservation of the area's wilderness characteristics. Although this wilderness area is not related to the eight wilderness areas addressed in this plan, it is in close proximity to two of the wilderness areas. Management of all the areas by the two agencies should be relatively consistent from both a visitor use and an administrative standpoint.

Clark County Multi Species Habitat Conservation Plan (MSHCP) (2000) serves to conserve many species and their habitats in Clark County, Nevada, including species and

habitats found with Lake Mead National Recreation Area. The MSHCP process works in accordance with the Endangered Species Act, treating covered species as though they are listed as threatened or endangered. All of the actions in this wilderness management plan must be consistent and comply with the provisions of the habitat conservation plan.

Las Vegas Resource Management Plan (1998) provides guidance for the long-term management of over three million acres of public land in Clark and Nye Counties in Nevada. These lands are administered by the Bureau of Land Management and include the three Lake Mead wilderness areas that partially are on BLM lands. Section 2-34 of the resource management plan directs the development of a wilderness management plan after wilderness areas are designated.

Lake Mead National Recreation Area Final Environmental Impact Statement Burro Management (1995) addressed the environmental impacts caused by nonnative burros in the national recreation area. The plan called for the elimination of burros in portions of the national recreation area. Control methods that were identified in the plan include live removal (e.g., helicopter/trap, helicopter/rope; and helicopter/net-gun), and fencing. The wilderness management plan does not affect these actions; NPS staff will continue to manage burros in NPS wilderness areas as called for in this plan and the 2005 aerial operations plan.

Lake Mead National Recreation Area General Management Plan (GMP), 1986 establishes the guidelines for the overall use, preservation, management, and development of Lake Mead National Recreation Area. The general management plan articulates a management philosophy and framework for decision making and problem solving. The plan provides park purpose, significance and emphasis statements to guide future actions. The plan divides the park into zones of activity to provide a separation of uses to enhance visitor enjoyment and to preserve the

natural and cultural resources of the national recreation area. Although the general management plan does not directly address management of the wilderness areas, the directions in the wilderness management plan (which is considered an implementation plan) are consistent and compatible with the general management plan.

Lake Mead National Recreation Area Backcountry Management Plan, 1989

outlines the management of recreational use in the national recreation area's backcountry. The backcountry management goals were to provide a variety of appropriate recreational opportunities in the backcountry for visitors compatible with resource protection and visitor health and safety. For the eight wilderness areas, this wilderness management plan replaces, with more detailed management, the backcountry management plan.

The Lake Mead National Recreation Area and Grand Canyon-Parashant National Monument Environmental Assessment for the Implementation of the Fire Management Plan 2004 describes the approach the National Park Service takes to the management of fire in the national recreation area, including the wilderness areas. The management actions in this wilderness management plan are consistent with and support the actions called for in the fire management plan.

Environmental Assessment for Aerial Operations Plan Within Lake Mead National Recreation Area And Grand Canyon-Parashant National Monument (2005) describes fixed-wing and helicopter flights that the National Park Service and its cooperating agencies, including the Nevada Department of Wildlife and the Bureau of Land Management, have proposed to accomplish a variety of essential management actions over or within designated, suitable, or potential wilderness areas within the national recreation area.

Lake Mead NRA Exotic Plant Management Plan (in process) describes the approaches NPS staff will take in managing exotic plants in the national recreation area. The plan covers the wilderness areas in the national recreation area and is consistent with the Wilderness Act as well as this wilderness management plan.

THE NEXT STEPS

After the distribution of the *Draft Wilderness Management Plan / Environmental Assessment*, there will be a 30-day public review and comment period, after which the planning team will evaluate comments from other federal agencies, tribes, organizations, businesses, and individuals regarding the draft plan. If no significant environmental impacts are identified and no major changes are made in the alternatives, then separate Findings of No Significant Impact (FONSIs) can be made and approved by the NPS Pacific West Regional Director and the District Manager for the BLM Southern Nevada District Office.

Implementation of the Plan

The implementation of the approved plan will depend on future funding. The approval of this plan does not guarantee that the funding and staffing needed to implement the plan will be forthcoming. Full implementation of all of the actions in the approved wilderness management plan could be several years in the future.

The implementation of the approved plan also could be affected by other factors, such as changes in staffing, visitor use patterns, and unanticipated environmental changes. Once the wilderness management plan has been approved, additional feasibility studies and more detailed planning, environmental documentation, and consultations would be completed, as appropriate, before certain preferred alternatives can be carried out. For example,

- additional environmental documentation may need to be completed

- appropriate permits may need to be obtained before implementing actions
- appropriate federal and state agencies would need to be consulted concerning actions that could affect threatened and endangered species
- Native American tribes and the state historic preservation office would need to be consulted, as appropriate, on actions that could affect cultural resources

Plan Review and Update

Wilderness management is an iterative process, with ongoing monitoring informing

managers of the effectiveness of their actions and identifying when changes are needed to meet management goals and objectives. This calls for some flexibility in the wilderness management plan, but the specific direction and desired future conditions established in the final plan will remain as the management guideline. Environmental, social, and political conditions change, as does the information available to most effectively manage public lands, and it is not the intent of this plan to freeze conditions. Over time, changing conditions may call for changes in the management approach to preserving or restoring wilderness resources.