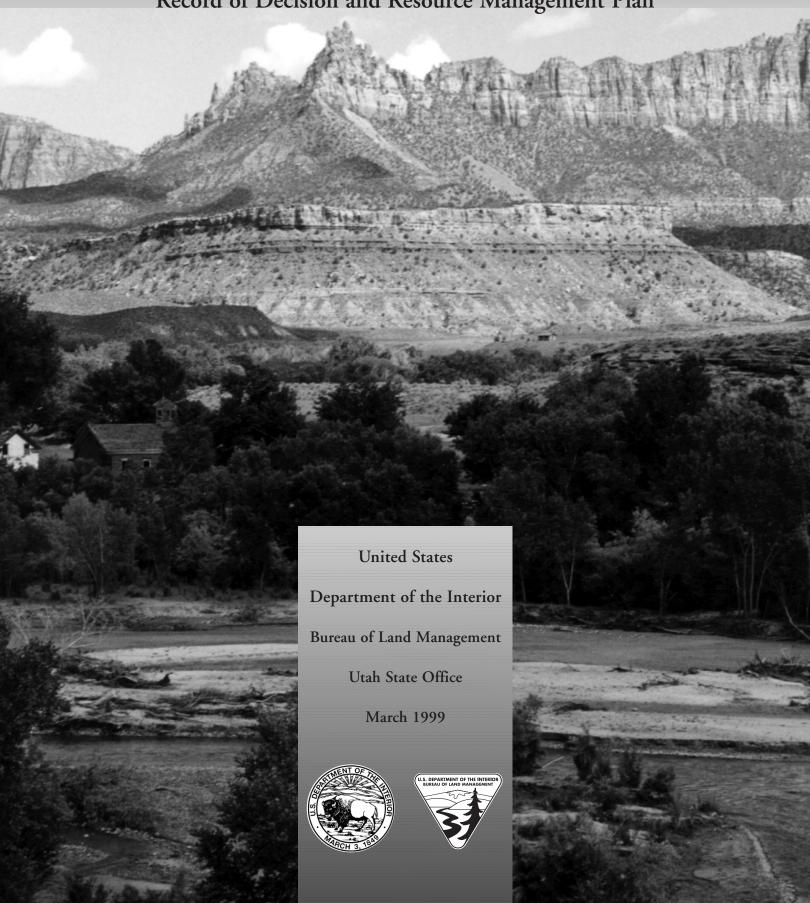


Record of Decision and Resource Management Plan



The Bureau of Land Management is responsible for the stewardship of our public lands. It is committed to manage, protect, and improve these lands in a manner to serve the needs of the American people for all times. Management is based on the principles of multiple use and the sustained yield of our Nation's resources within a framework of environmental and scientific technology. These resources include recreation, rangelands, timber, minerals, watershed, fish and wildlife, wilderness, air, and scenic, scientific, and cultural values.
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ST. GEORGE FIELD OFFICE (formerly the Dixie Resource Area)

Record of Decision and Resource Management Plan

March 1999

Prepared by: United States Department of the Interior Bureau of Land Management **Utah State Office** St. George Field Office

> G. William Lamb State Director, Utah



RECORD OF DECISION

ST. GEORGE FIELD OFFICE

Resource Management Plan

This document records the decisions reached by the Bureau of Land Management (BLM) for managing approximately 629,005 surface acres and 671,545 total acres of federal mineral estate administered by the BLM under the St. George Field Office in St. George, Utah. The decisions, which are summarized below, are more fully described in the approved Resource Management Plan in Chapter 2 of this document.

Decision Summary

The decision is hereby made to approve the attached Plan as the Resource Management Plan (RMP) for the St. George Field Office. This Plan was prepared under the regulations for implementing the Federal Land Policy and Management Act (FLPMA) of 1976 (43 CFR 1600). An environmental impact statement was prepared for this Plan in compliance with the National Environmental Policy Act (NEPA) of 1969. The Plan is nearly identical to the one set forth in the Dixie Resource Area Proposed Resource Management Plan and Final Environmental Impact Statement published in September 1998. Specific management decisions for public lands under the jurisdiction of the St. George Field Office are presented in Chapter 2 of this Resource Management Plan (hereafter referred to as the Plan). Major decisions include:

- BLM has made a commitment to collaborate with affected interests, including local and state governments, Indian tribes, organizations, other federal agencies, and the private sector, in order to actively address issues of mutual concern. BLM will seek numerous options, including the formation of partnerships, cooperative management agreements, memorandums of understandings, as well as other means, to carry out this commitment.
- Preservation and protection of the desert tortoise and its habitat will be accomplished by implementing the goals and objectives of the Washington County Habitat Conservation Plan and Red Cliffs Desert Reserve within the Upper Virgin River Recovery Unit. In addition, the Desert Tortoise Northeastern Mojave Recovery Unit, which includes Beaver Dam Slope, will be managed as an Area of Environmental Concern (ACEC) and have consistent land use prescriptions across state lines designed to protect and help recover tortoise populations.
- Management of the Virgin River and its drainages will be guided by collaborative partnership efforts with other federal agencies, state agencies, Washington County, Indian tribes, user groups, and interested organizations as it relates to water quality, water conservation, floodplain management, and protection of related resources.
- The following 10 areas are designated as ACECs: Upper Beaver Dam Slope, Beaver Dam Wash, Santa Clara/Gunlock, Santa Clara River/Land Hill, Red Mountain, Red Bluff, Lower Virgin River, Warner Ridge/Fort Pearce, Little Creek Mountain, and Canaan Mountain.
- Sensitive areas such as special status plant and animal species habitat, developed recreation sites, recreation opportunity spectrum primitive areas, riparian areas, floodplains, watershed pro-

tection areas (including municipal watersheds), VRM Class II areas, crucial deer winter habitat and elk calving areas, severe erosion soils, designated wilderness, and cultural sites will be afforded a higher level of protection than under current management.

- The following 25.7 miles of rivers or river segments are found suitable for congressional designation as wild rivers under the Wild and Scenic Rivers Act: Deep Creek/Crystal Creek, North Fork of the Virgin River above Zion National Park, Oak Creek/Kolob Creek, that portion of LaVerkin Creek/Smith Creek from above Zion National Park to the north boundary of the private parcel in Section 18, T 40 S, R 12 W, and that portion of Segment B of the Virgin River contained wholly within the Beaver Dam Mountains Wilderness Area.
- Standards for rangeland health from BLM Utah's approved *Standards for Rangeland Health and Guidelines for Grazing Management* will be applied to all pertinent decisions made on public lands.

Notice of Modifications

With exception to minor clarifications, the only additions to this Plan are detailed in Chapter 2 under the Off-Highway Vehicle section (OV-10), which allows for low-impact OHV trials events in the Pahcoon Gulch area; and under the Wildlife Habitat Management section (FW-15), which states that all activities within desert tortoise habitat will be conducted in accordance with the terms and conditions described in the U.S. Fish and Wildlife Service Biological Opinion for the Mojave desert tortoise (ES/6-UT-98-F-005, August 12, 1998). The terms and conditions are specified under Appendix 4 in this document.

Plan Development

In October 1995, BLM published the Draft Dixie Resource Area Resource Management Plan and Environmental Impact Statement (Draft RMP/EIS). The Draft RMP/EIS considered four different alternatives for addressing management of public lands in Washington County. Alternative A represented the No Action alternative or the continuation of present management. Alternative B represented a multiple-use approach to resource management with an emphasis on development and land use projects. Alternative C, the preferred alternative, represented a multiple-use approach to resource management with an emphasis on balancing resource development and resource protection. Alternative D represented a multiple-use approach with an emphasis on preserving biological systems and scenic values.

BLM received over 800 letters and hundreds of verbal comments from local, state, and federal agencies, citizens, and organizations during a 7-month comment period following publication of the Draft RMP/EIS. The comments recommended changes, corrections, additions, or clarifications throughout the draft document. After careful consideration of all of the comments, BLM prepared the Proposed Resource Management Plan for the Dixie Resource Area (recently renamed the St. George Field Office) in condensed format. A condensed format was used because only the Proposed Plan, as a single alternative, was brought forward and analyzed in the Final Environmental Impact Statement. The Proposed Plan was based on the preferred alternative (Alternative C) from the Draft RMP, and also drew from Alternatives A, B, and D to respond to issues, questions, and recommendations in the comments.

Views of the public were sought and considered throughout this planning process. Chapter 1 of the Plan provides a condensed discussion of the public participation process.

In September 1998, the Proposed Plan was released to the public for review and protest. BLM received 19 letters of comment and protest on the Proposed Plan. During the period of November 1998 through March 1999, the 19 letters were analyzed by the BLM Director. Based on the analyses

of these protests, it was the Director's decision to dismiss the protests on the basis that the protests did not meet the requirements of a valid protest or that the Utah BLM State Director had complied with all requirements relative to the RMP's development. In accordance with federal regulations, the Director's decisions constitute the final decision of the Department of the Interior.

Mitigation Measures

Mitigation measures have, to a great extent, been built into the Plan. Sensitive resources are protected through resource allocations, designation of ACECs with prescriptive management, and limitations and restrictions placed on surface disturbing activities. All practicable means to avoid or minimize environmental harm were carried forth into this Plan. During the next tier of planning, which allows for more detailed and site-specific analysis, additional measures will be taken, as necessary, in order to mitigate subsequent adverse impacts to the environment. Monitoring will tell how effective these measures are in minimizing environmental impacts. Additional measures to protect the environment may be taken during or following monitoring.

Plan Monitoring

BLM will review the Plan periodically to determine whether the Plan remains effective in guiding BLM's management of lands and resources so as to achieve the objectives set forth in this and other applicable planning documents. Where it is found wholly or partly ineffective, BLM will consider adjustments of appropriate scope to restore the Plan's effectiveness. These adjustments may be accomplished through the plan amendment process, or through a full or partial plan revision.

Consistency Review

This Plan is consistent with plans and policies of the Department of the Interior and Bureau of Land Management, other federal agencies, state governments, and local governments to the extent that the guidance and local plans are also consistent with the purposes, policies, and programs of federal law and regulation applicable to public lands. Where the Plan is not consistent with plans or local governments, BLM will continue to work with affected officials to resolve the inconsistencies. The Governor of the State of Utah found that the Proposed Plan was not inconsistent with state plans, programs, or policies in his letter dated November 16, 1998.

Management Considerations for Selecting the Approved Plan

The decision to select this Approved Plan is based on an evaluation of the alternatives described in the Draft RMP/EIS and public comments and input provided throughout this planning process. The Proposed Plan depicted a combination of decisions from the four alternatives considered in the Draft RMP/EIS with emphasis on the preferred alternative (Alternative C). Decisions contained in the Proposed Plan reflected a commitment to achieve critical resource management objectives, employ approved standards for maintaining long-term health of the land, provide for sound human use and enjoyment, and sustain local economies and community well being. The Proposed Plan best balanced competing and conflicting resource needs and public desires as expressed through public comments and public meetings throughout this planning process.

By adopting the Proposed Plan as the approved Resource Management Plan, with minor changes as described above, this Plan attempts to deal honestly and comprehensively with the numerous and often contentious issues that surround public land management in Utah. BLM intends to use the goals, prescriptions, decisions, and criteria established in this Plan to reach beyond the adverse positions of various constituencies and find common interests on which to build an integrated approach to resolving

land management issues in the county. The approach would rely heavily on collaboration with willing partners at the local, state, and federal levels and shared decisionmaking across agency and jurisdictional boundaries. In this fashion, BLM will look to meet the reasonable needs and expectations of affected agencies and the community at large in allocating limited resources and promoting the long-term sustainability and health of the land. The decisions in this Plan will allow future management of public lands to move forward in a progressive and dynamic manner.

Availability of the Plan

Copies of the St. George Field Office Record of Decision and Resource Management Plan are available from the St. George Field Office, Bureau of Land Management, 345 E. Riverside Drive, St. George, Utah 84790, telephone (435) 688-3200.

Signatures

In consideration of the foregoing and with full knowledge of the contents and purposes of the Resource Management Plan, I herewith recommend the St. George Field Office Resource Management Plan for State Director approval.

Recommended to the District Manager on	MAR 1 5 1999 :
	James D. Crisp St. George Field Office Manager
Recommended to the State Director on	MAR 1 5 1999 :
	Arthur L. Tait Acting Cedar City District Manager
MAR 1 5 1999 Approved on	
	G. William Lamb

Utah State Director

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Public Lands Are Important to Washington County

Washington County, Utah, has become a major destination point for visitors, retirees, and an increasing number of families relocating for social or economic reasons.

Growth in the St. George area over the past three decades has brought urban amenities, as well as some urban issues, to the rural communities that are located throughout the county. Public lands play an important role in how the communities deal with such issues.



CHAPTER 1 General Direction and Focus of the Plan

Introduction

This St. George Field Office Resource Management Plan (hereafter referred to as the Plan) sets forth a vision, objectives, and land use prescriptions for the management of public lands and associated natural resources in Washington County, Utah. The lands are administered by the U.S. Department of the Interior's Bureau of Land Management (BLM). How the lands are used and managed is of great importance to a wide variety of local, regional, and national interests and has considerable impact on communities, agencies, businesses, interest groups, individuals, and others who use or depend on the lands.

Description of the Planning Area

The public lands administered by the St. George Field Office lie almost entirely within Washington County, Utah. Situated in the southwestern corner of Utah, the area lies astride the transition between three major physiographic provinces including the Colorado Plateau, the Great Basin, and the Mojave Desert. This unique blend of geologic landforms creates a wealth of varying landscapes, open vistas, and spectacular scenery that is recognized in national and international sectors. Zion National Park and the Pine Valley Mountains of the Dixie National Forest define the eastern and northern boundaries of the county. To the west lie the desert valleys and mountains of Nevada, while the broad, undeveloped expanses and rugged topography of the Arizona Strip lie immediately to the south. The geographic setting is depicted on Map 1.1, General Location.

The Virgin River and its many tributaries flow through portions of the county and provide the lifeblood to the desert and mountain ecosystems and human populations that reside here. Countless numbers of wildlife and vegetation species, many at the extreme end of their natural ranges, contribute to a rich biological diversi-

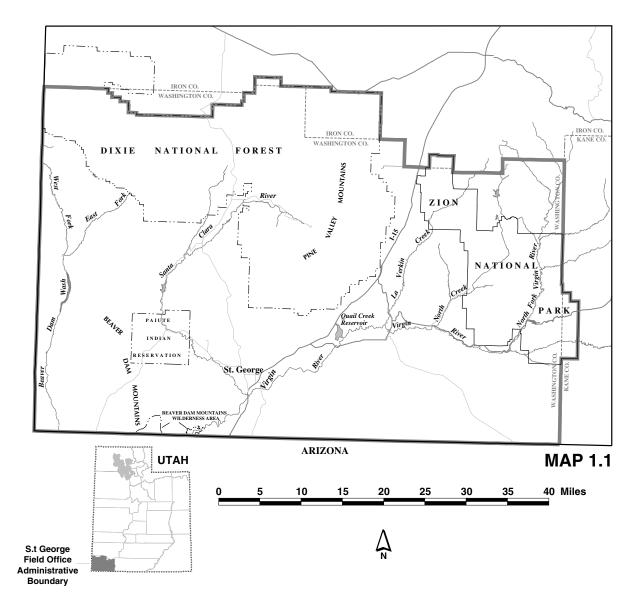
ty that is otherwise uncommon in parts of the arid, intermountain west. Elevations range from a low of 2,200 feet at the Arizona border to nearly 10,400 feet in the Pine Valley Mountains. Average yearly precipitation ranges from a low of 7.5 inches in the desert to 35 inches in the higher elevations.

Most public lands in Washington County are managed by the BLM's St. George Field Office in St. George. About 4,800 acres of public land situated north of the Dixie National Forest near Enterprise are managed by BLM's Cedar City Field Office and are not addressed in this RMP. Land ownership in the county is depicted in Table 1.1 and shown on Map 1.2 in the back pocket (some recent changes in ownership are not reflected on the map). Privately owned lands are concentrated primarily around the major transportation routes, river corridors, and areas suitable for agricultural development. The Shivwits Band of Paiute Indians occupies a reservation 4 miles west of St. George. Lands owned by the State of Utah include three state parks and a significant amount of acreage managed by the Utah School and Institutional Trust Lands Administration.

TABLE 1-1 • Land Ownership in Washington County

MANAGER	ACREAGE	PERCENT
Bureau of Land Management	629,005	40
USDA Forest Service	425,285	27
National Park Service	143,605	9
Bureau of Indian Affairs	27,890	2
State of Utah	101,040	6
Private Lands	255,060	16
Total	1,581,885	100

ST. GEORGE FIELD OFFICE ADMINISTRATIVE BOUNDARY GENERAL LOCATION MAP



Purpose and Need for Action

The St. George Field Office Resource Management Plan is being prepared to fulfill the planning requirements of the Federal Land Policy and Management Act (FLPMA) of 1976 (43 CFR 1600) and to provide a vision and direction for future public land management in Washington County. This document replaces the Virgin River Management Framework Plan which was approved in 1981.

General Planning Criteria and Guidelines

The general planning criteria and guidelines for this Resource Management Plan are as follows:

A. This Plan only addresses management on public lands administered by the St. George Field Office.

- B. Implementation of this Plan will be subject to all valid existing rights.
- C. This Plan supercedes the following documents:
 - 1)Virgin River Management Framework Plan (1981)
 - 2)Lands Amendment to the Virgin River Management Framework Plan (1996)
 - 3)Those portions of the Hot Desert Grazing EIS (1978) concerning desert tortoise critical habitat.
- D. The following closures, limitations, or restrictions that have been previously published in the Federal Register will remain in effect until additional site-specific planning has been completed in the areas described as follows:
 - 1)Federal Register, September 24, 1998 (Volume 63, Number 185); Closure and Restriction Order for off-road vehicles on lands formerly known as the Smith Ranch.
 - 2)Federal Register, August 11, 1998 (Volume 63, Number 154); Closure and Restriction Order on lands within the Washington County HCP Red Cliffs Desert Reserve. This order pertains to camping, fires, weapons use, motorized vehicles, rock climbing, removal of wild plants and animals, and pets.
 - 3)Federal Register, July 9, 1996, (Volume 61, Number 132); Emergency Closure of Public Lands (320 acres) directly north of the Town of Rockville. This order closes the area to off-highway vehicles and mountain bikes.
 - 4)Federal Register, March 13, 1987 (Volume 52, Number 49); Off-road vehicle closure on the Price City Hills and the Red Bluff dwarf bear-claw poppy areas.
 - 5)Federal Register, September 25, 1980 (Volume 45, Number 188); Notice of Off Road Vehicle Designation Decisions. Only the following decisions from this

- notice would be carried forth until additional planning is completed:
- a. Joshua Tree National Natural Area and Woodbury Desert Study Area will remain open for motorized vehicle use on designated roads and trails only.
- b. The following areas will remain closed to off-highway vehicle use:
 Beehive Mountain 320 acres
 Warner Ridge 480 acres
 West Fork of the Beaver Dam Wash "The Narrows" 100 acres
 Red Cliffs Archeological Site
- E. All relevant decisions, projects, activities, and mitigation for the Resource Management Plan will be in accordance with Standard Procedures Applied to Surface Disturbing Activities (Appendix 1), and other applicable laws, regulations, rules, and policies.
- F. Any projects authorized by BLM will be required to obtain the necessary permits and authorizations from other federal, state, and local agencies.
- G. Additional National Environmental Policy Act (NEPA) analysis or documents will be required prior to implementation of the decisions in the Resource Management Plan to determine the impacts from site-specific actions and to identify mitigating measures.
- H. The designation of all or part of the Wilderness Study Areas (WSAs) were analyzed in the "Utah BLM Statewide Wilderness Final Environmental Impact Statement." This Resource Management Plan does not supercede the Wilderness EIS, nor does it reanalyze impacts of wilderness management; rather, it is based on the assumption that WSAs would be released from wilderness review by Congress and would be managed according to the planned actions for the other resource programs.
- No exploration or development of coal or geothermal leases will occur during the life of this Plan.

Management Focus

On September 30, 1997, the Secretary of the Interior approved and forwarded to Congress a Strategic Plan for the management of public lands administered by BLM. In approving the document, the Secretary considered the views of the states and their political subdivisions as well as the public at large. The Strategic Plan ratifies and builds upon BLM's mission, which is to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations. The Strategic Plan recognizes that a growing and increasingly urban population is placing new demands on public lands. Such demands—coupled with growing concern over the health of the environment, new federal mandates, and scientific and technological advances affecting natural resource management—are creating profound challenges for BLM. The Strategic Plan describes these challenges and how BLM intends to address them. Among other things, the Strategic Plan sets general and outcomebased goals for the agency and describes how these goals will be achieved. The goals are depicted in Figure 1.1.

Overall management of public lands within Washington County will be guided by the Strategic Plan as supplemented by the approved decisions of this Resource Management Plan. Land use prescriptions and commitments described later in this document will be implemented and evaluated to determine how well they achieve the strategic goals. To the extent practical, BLM will also seek to integrate these goals with the compatible goals of local, state, and tribal governments and other federal agencies with a stake in the management of public lands. Promoting collaborative land and resource management with other agencies and interested parties will be employed as an essential tool in restoring and maintaining the health of the land across jurisdictional boundaries.

Issues addressed in this Plan are highly interrelated and touch upon a majority of the elements in the fabric of social, economic, and ecologic life in Washington County. Success in resolving conflicts related to any of the previously mentioned issues will require a significant commitment from a variety of sources including government agencies at multiple levels, the private sector, and interested organizations. Over the past several years, numerous partnerships have been

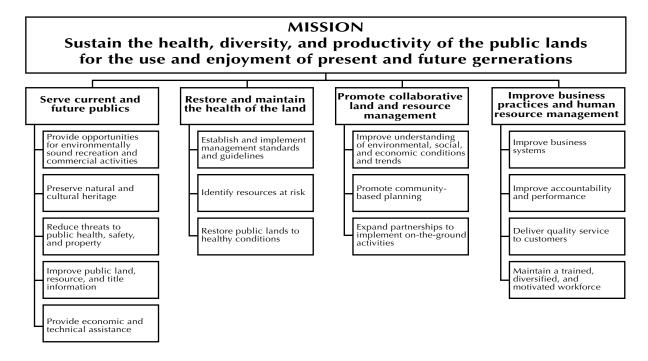


FIGURE 1-1 • USDI/BLM Strategic Goals Framework (Adapted from USDI BLM Strategic Plan, September 1997)

established with active BLM participation to address issues of importance affecting a wide spectrum of interests in the county. The partnerships include efforts such as the Washington County Habitat Conservation Plan for preservation of the desert tortoise and related desert ecosystems, the Virgin River Management Plan, the proposed Virgin River Basin Integrated Resource Management and Recovery Program, the Santa Clara River Reserve, the Virgin Falls Park Initiative, the Grafton Heritage Partnership, the Three Rivers Trails Project, and the Virgin River Focus Area Plan. In order to achieve many of the strategic goals depicted previously and the resource objectives defined later in this Plan, BLM will continue to promote and support such partnerships.

Relationship to Other Agency Plans

Local, state, and other federal agencies and Indian tribes in the immediate region routinely prepare plans that establish goals and direction for land use, economic development, or resource management within their jurisdictions. Many of these plans bear directly on or are significantly affected by BLM plans for managing public lands. Under this Resource Management Plan, BLM will collaborate with such agencies and tribes on planning implementation and achieving consistency with other approved plans. Moreover, BLM will pursue integration of such plans to the extent that they are determined consistent with applicable federal laws, regulations, and policies. The principles of community-based planning will be employed where timing, mutual interest, and the availability of resources are appropriate to address economic, ecologic, and land use issues of concern. The following list of plans relates to the management of lands in or around Washington County and will be given full consideration as land use decisions are made.

- Washington County General Plan
- Coordination Plan for Washington County's Urbanizing Region
- Washington County Habitat Conservation Plan
- General Plans of Incorporated Municipalities in Washington County

- Virgin River Management Plan
- Snow Canyon State Park Resource Management Plan
- State of Utah Plans Relating to Water Management, Water Quality, Nonpoint Source Pollution, Watershed Management, and Air Quality
- Utah's State Comprehensive Outdoor Recreation Plan
- Utah Regional Plans for Game and Non-Game Wildlife Management
- Utah Regional Transportation Plans
- Zion National Park General Management Plan
- Dixie National Forest Land and Resource Management Plan
- Resource Management Plans for BLM's Arizona Strip, Cedar City, Kanab, Las Vegas, and Ely Field Offices

Consultation and coordination with the U.S. Fish and Wildlife Service (FWS) will be ongoing throughout the implementation of this Plan for activities potentially affecting threatened and endangered species and their habitats. On August 14, 1998, the St. George Field Office received a Biological Opinion from the FWS (ES/6-UT-98-F-005) for the Mojave desert tortoise based on decisions made in this Plan. The FWS found "that implementation of the Plan is not likely to jeopardize the continued existence of the Mojave desert tortoise, nor is it likely to result in destruction or adverse modification of critical habitat designated for the Mojave desert tortoise". An incidental take statement for desert tortoise with reasonable and prudent measures and terms and conditions were attached to the Biological Opinion, and are repeated in Appendix 4 of this document. In addition, on December 19, 1998, the St. George Field Office received a letter from the FWS concurring with BLM's determination for the Plan of a "may affect, not likely to adversely affect" for the Southwestern willow flycatcher, Mexican spotted owl, American peregrine falcon, bald eagle, Virgin River chub, woundfin, dwarf bear-claw poppy, and siler pincushion cactus.

Collaborative Management

BLM recognizes that social, economic, and environmental issues cross land ownership lines and that extensive cooperation at the planning stage and beyond is needed to actively address issues of mutual concern. It is also recognized that resource and land use demands will likely exceed BLM's ability to effectively respond to all issues currently before the agency in Washington County and those which will arise in the future. Consequently, under this Resource Management Plan, BLM will seek to:

- form innovative partnerships with local and state governments, Indian tribes, qualified organizations, and adjacent federal agencies to manage lands or programs for mutual benefit consistent with the goals and objectives of this Plan;
- work with communities, state agencies, and interested organizations, in seeking nontraditional sources of funding including challenge cost-share programs, grants, and contributions-in-kind to support specific projects needed to achieve plan objectives;
- place greater emphasis, where appropriate, on contracting out to the private sector, nonprofit organizations, academic institutions, or local and state agencies to accomplish essential studies, monitoring, or project developments; and
- increase the use of citizen and organizational volunteers to provide greater
 monitoring of resource conditions under
 site-steward programs and to complete
 on-the-ground developments for resource
 management and human use and
 enjoyment.

Moreover, where it is found mutually advantageous, BLM will enter into cooperative agreements or memorandums of understanding with federal, state, local, tribal, and private entities to manage lands or programs consistent with the goals and objectives of this Plan. Such agreements may provide for the sharing of human or material resources, the management of specific

tracts of lands for specific purposes, or the adjustment of management responsibilities on prescribed lands to eliminate redundancy and reduce costs. BLM will also encourage the participation of land trusts and similar organizations in facilitating land exchanges or acquisitions that achieve planning objectives. Nonprofit associations, citizens, and user groups that have adequate resources and expertise may enter into cooperative agreements to assist in the management of public lands in Washington County including, but not limited to, resource monitoring, site cleanups, and the construction of interpretive facilities, trails, or other authorized projects.

Public Participation

Public participation and consultation was encouraged and sought throughout the development of this Plan. The planning process was officially initiated through a public notice in the Federal Register in November of 1986. This notice invited the general public as well as other federal, state, and local governments, and Indian tribes to identify major planning issues and to submit other comments or concerns regarding the planning effort to the BLM. News releases and several hundred invitations to interested parties of record were also sent out requesting public input into the process. Coordination meetings with other federal agencies, and state and local governments were also held to obtain their recommendations and assistance in identifying issues, gathering data, and analyzing the impacts of alternative land uses. A draft RMP/EIS was filed with the Environmental Protection Agency in September 1988, and a proposed RMP/final EIS was filed with the EPA in December of 1990. There were 21 protest letters received on the final EIS. As many of the protests could not be resolved, the Utah State Director sent a letter directing the St. George Field Office to complete further planning and environmental review.

In July of 1991, a Federal Register notice was published that updated the planning criteria for a new draft RMP/EIS. Again, news releases and additional coordination meetings occurred in order to gather additional and more current information for the plan.

In October 1995, BLM published another draft RMP/EIS with a corresponding Federal Register notice. During a 7-month comment period following publication of the draft RMP/EIS, BLM received over 800 letters and hundreds of verbal comments from local, state, and federal agencies, citizens, and organizations. Public meetings were held in Hurricane, St. George, and Salt Lake City.

The notice of availability of the Proposed Plan and final EIS was published on September 17, 1998, in the Federal Register. This notice announced a 30-day protest period, ending on October 16, 1998. The Bureau received 19 letters of protest on the Proposed Plan. The Director's office issued final decisions on each of the protests. Only one minor change was made to this final Plan in response to the protest letters. The change allowed for low-impact OHV trials use in the Pahcoon Gulch area. (See OV-10 in Chapter 2)

Plan Conformance, Maintenance, Amendment, Revision, and Implementation

Conformance: All future resource management authorizations and actions, including budget proposals, will conform to or, at a minimum, not conflict with this Plan. All operations and activities under existing permits, contracts, cooperative agreements, or other instruments for occupancy and use will be modified, if necessary, to conform with this Plan within a reasonable period of time, subject to valid existing rights.

Maintenance: During the life of this Plan, BLM expects that new information gathered from field inventories, other agency studies, resource themes from shared interagency data banks, and other sources will change baseline data used to arrive at land use decisions and resource allocations. To the extent such new information or actions bear on issues covered in the Plan, BLM will integrate the data through plan maintenance or updating.

Amendment: Where BLM considers taking or approving actions which will alter or not conform to the approved decisions of this Plan, BLM will prepare a plan amendment and environmental study of appropriate scope in making its determinations and in seeking public comment. Monitoring and evaluation, findings, new data, and new or revised policies will be evaluated to determine if there is a need for an amendment. Any change in circumstances or conditions which affect the scope, terms, or conditions of the Plan may warrant an amendment. The Plan must be dynamic over the course of its life to respond to the numerous changes that will inevitably impact public lands in Washington County during that time. Amendments will be considered a normal and anticipated part of the planning process.

Revision: Where changes would be of a significant magnitude and would affect a variety of resource programs, a full or partial plan revision will be considered. BLM will review the Plan periodically to determine whether the Plan remains effective in guiding BLM's management of lands and resources so as to achieve the objectives set forth in this and other applicable planning documents. Where it is found wholly or partly ineffective, BLM will consider adjustments of appropriate scope to restore the Plan's effectiveness.

Implementation: Decisions in this Plan will be implemented over a period of years. In some cases, more detailed and site-specific planning and environmental analysis may be required before an action can be taken. The environmental impact statement prepared in association with this planning process will be used as a base and incorporated by reference in any additional site or program specific environmental analysis. Requirements for additional planning and analysis are incorporated in the decisions found in Chapter 2.

In implementing the Plan, BLM will focus its limited resources at any given time on those highest priority issues which BLM determines have the greatest significance to the health of the public lands involved and the socioeconomic well-being of local communities dependent on them. Less important issues will be deferred

CHAPTER 1 • GENERAL DIRECTION AND FOCUS OF THE PLAN

until priority programs and projects are implemented and found to be effective in accomplishing their intended purpose. Factors that will be used in setting priorities include, among other things, 1) legal and administrative mandates, 2) the extent to which critical resources or opportunities may be lost if action is not quickly taken, 3) the presence of committed partners willing to share in costs and administration, 4) consistency with priority plans and programs of local, state, and other federal agencies, and 5) geographic areas BLM determines will result in the greatest return for the time and resources applied.

For many of the actions described in this RMP, BLM will prepare or collaborate in preparation

of detailed, site-specific plans called activity level plans that better define actual projects and examine site specific impacts to affected resources. Such plans will address specific resource issues in prescribed geographic areas and will be completed with appropriate public and agency participation and environmental analysis. Planning at this level will allow BLM to focus on particular land management opportunities or problems needing resolution in a manner not possible in the broad overview provided in this RMP. To the extent practical, such plans will be integrated with the plans of other interested or affected agencies.

ST.GEORGE FIELD OFFICE RESOURCE MANAGEMENT PLAN

CHAPTER 2 The Resource Management Plan

Resource Management Plan Decisions

The following decisions were taken from the Dixie Resource Area Proposed Resource Management Plan (1998). They are listed by resource in the order they appeared in the Proposed Plan. Some of the decisions were changed slightly for clarification, but the original intent of the decisions was not altered. A number has been given to each decision for tracking purposes. Many of these decisions were implemented with the approval of the Record of Decision, such as the designation of Areas of Critical Environmental Concern, utility corridors, off-highway vehicle designations, rights-of-way avoidance and exclusion areas, mineral categories, and rivers determined suitable for Congressional designation under the Wild and Scenic Rivers Act.

LD (01-20) = Lands and Realty

MI (01-18) = Energy and Mineral Resources

TR (01-08) = Transportation

AQ(01-03) = Air Quality

SW (01-19) = Soil and Water Resources

RP (01-11) = Riparian Resources

VG (01-09) = Vegetation Resources

FW (01-39) = Fish and Wildlife

Habitat Management

GZ (01-11) = Livestock Grazing Management

FR (01-08) = Forestry Management

RC (01-24) = Recreation

OV (01-10) = Off-Highway Vehicle

Management

VR (01-08) = Visual Resource Management

WD (01-04) = Wilderness Management

CL (01-05) = Cultural and Paleontological

Resources

HZ (01-05) = Hazardous Waste Management

FI (01-04) = Fire Management

Special Emphasis Areas

WR (01-15) = Wild and Scenic Rivers

AC (01-11) = Areas of Critical Environmental

Concern

NC (01-06) = Native American Coordination

ZP(01-06) = Zion National Park

Coordination

Lands and Realty

Objectives

In accordance with national policy, BLM will retain lands within its administration except where necessary to accomplish important objectives outlined in resource sections throughout this Plan. BLM will transfer lands out of federal ownership or acquire non federal lands where needed to accomplish important resource management goals or to meet essential community needs.

LD-01 Land exchanges involving large acreages, multiple parties, or statewide impacts may be conducted using "pooling" or assembled exchange principles to cut costs, reduce processing time, and increase net acres exchanged in any given transaction. Lease or transfer of lands under the Recreation and Public Purposes Act shall occur where such is determined to be the most appropriate method for achieving desired public and municipal purposes.

LD-02 Land ownership changes will be considered on lands not specifically identified in this Plan for disposal or acquisition if the changes are in accordance with resource management objectives and other Plan decisions and will accomplish one or more of the following criteria:

a) Such changes are determined to be in the public interest and will accommodate the needs of local and state governments, including needs for the economy, public purposes, and community growth.

b) Such changes result in a net gain of important and manageable resources on

T. GEORGE FIELD OFFICE RESOURCE MANAGEMENT PLAN

public lands such as crucial wildlife habitat, significant cultural sites, quality riparian areas, live water, listed species habitat, or areas key to productive ecosystems.

- c) Such changes ensure public access to lands in areas where access is needed and cannot otherwise be obtained.
- d) Such changes promote more effective management and meet essential resource objectives through land ownership consolidation.
- e) Such changes result in acquisition of lands which serve regional or national priorities identified in applicable policy directives.

If the above criteria are not met, proposed land ownership changes outside of designated transfer areas will not be approved or will require a plan amendment.

LD-03 Public lands will be managed in accordance with applicable city and county zoning restrictions and municipal ordinances to the extent such restrictions and ordinances are consistent with federal laws, regulations, and policies, and with approved decisions of this Plan.

Land Acquisition

LD-04 BLM will acquire selected non-federal lands, with owner consent, for such purposes as ensuring public access to key use areas, consolidating public ownership of lands critical to recovery of species listed under the Endangered Species Act, providing essential public recreation opportunities, protecting important resources such as floodplains, riparian areas, wildlife habitat, cultural sites, and wilderness, and meeting the mutually agreed upon objectives of local, state, and federal plans or programs. Although most acquisitions will occur through exchange, they may also be made through purchase, donation, or conservation easement.

LD-05 Over the life of the Plan, it is expected that BLM may acquire up to 18,000 acres of land within Washington County. Nearly all of these acres will result from BLM's fulfilling its commitment to acquire available state and private lands within the Washington County Habitat Conservation Plan (HCP) Reserve and to fulfill existing statewide exchange agreements with the Utah School and Institutional Trust Land Administration to remove trust inholdings from within federally reserved areas. A pool of 30,030 acres of non federal lands, which may meet the criteria listed in LD-02, is shown on Map 2.1 for potential acquisition as opportunities arise to help meet objectives for resource management described elsewhere in this Plan.

Land Transfer

LD-06 Over the life of the Plan, it is expected that up to 18,000 acres of public lands may be transferred out of public ownership in Washington County. Most of these transfers will occur as a result of land exchanges needed to complete acquisition of state and private lands within the Washington County HCP Reserve or to support the statewide inholdings exchange with the Utah School and Institutional Trust Lands Administration. Generally, public lands within the designated transfer areas shown on Map 2.1 constitute a pool of lands which may be transferred through sale, exchange, or lease and conveyance under the Recreation and Public Purposes Act or other applicable authority. Lands not contained in this pool may be transferred (other than under land sale authority) if subsequent analysis determines that such transfer will meet the land transfer criteria established above.

LD-07 The State of Utah has designated the section of Highway 9 along the Zion Corridor from LaVerkin to Zion National Park as a Scenic Highway.

Generally, federal lands within view of this scenic highway from the top of the bench north of LaVerkin (lands east of the La Verken scenic overview) will be retained in public ownership, unless as a result of coordination with local, affected communities or government agencies, it is determined that transfer of a specific tract will be in the public interest and/or serve essential municipal purposes. Land transfers so proposed shall not substantially detract from the scenic quality of the corridor. This retention policy will not prohibit the proposed transfer of 240 acres of public lands in or near the town of Virgin previously determined to meet the above criteria and shown on Map 2.1.

- LD-08 The city of Hurricane has approached BLM regarding the need for eventual relocation of the existing municipal airstrip due to encroaching residential development. BLM will coordinate with the city in identifying and analyzing potential alternative sites on public land in or near the city. BLM will also continue its work with the Washington County School District to evaluate public lands for critically needed school sites in or adjacent to developing areas near St. George, Washington, Hurricane, and other communities.
- LD-09 Under federal law, the State of Utah may exercise its right to acquire public lands through state quantity or other special grants. Such lands may or may not be identified for land transfer in this Plan. Lands so selected by the state and subsequently classified as suitable for transfer by BLM in accordance with federal regulations will be considered consistent with the Plan.
- LD-10 Resolution of public land trespass will focus on removal of structures or facilities, particularly those in riparian areas or critical wildlife habitat. Where removal is not feasible or found to be in the public interest, trespass in those areas will be settled by exchange for

equal or better value riparian areas, critical habitat, or lands supporting other significant resource values identified for acquisition.

Easement Acquisitions

LD-11 Where needed to provide public access to important use areas on public lands or to link significant public tracts isolated by state or private lands, BLM will seek to obtain easements for roads or other access. Easements will be acquired only with the landowner's consent. Table 2-1 lists desired easement acquisitions and the resource programs to be benefitted.

Rights-of-Way

Objectives

This Plan will continue to make public lands available for a variety of rights-of-way where consistent with planning goals and prescriptions for other resources. Where possible, BLM will encourage project sponsors to locate new rights-of-way in existing or designated utility and transportation corridors.

- LD-12 Applications for new rights-of-way on public lands will be considered and analyzed on a case-by-case basis. Proposals will be reviewed for consistency with planning decisions and evaluated under requirements of the National Environmental Policy Act and other applicable laws for resource protection. Mitigation needed to avoid adverse impacts will be integrated into project proposals and, where appropriate, alternatives identified to further reduce environmental impacts to lands, resources, or adjacent land uses. New utility lines and long-distance transmission lines will be designed and located so as to reduce visual impacts to travelers along I-15 and visually sensitive highways in the county.
- LD-13 All new rights-of-way will be subject to applicable standards listed in Appendix 1 for surface disturbing activities. Where needed, wildlife seasonal use restrictions

TABLE 2-1 • Potential Access Easements

LOCATION	BENEFITTING ACTIVITY
Canaan Mountain North - (Springdale West & Smithsonian Butte Quads.) T.42 S., R.11 W., sec. 23 & 24	Recreation
Canaan Mountain South - (Smithsonian Butte Quad.) T.42 S., R.11 W., sec. 36	Recreation
Dalton Wash (Administrative only) - (Springdale West & Virgin Quads.) T.41 S., R.11 W., sec. 8	Range
Deep Creek - (Kolob Reservoir & Cogswell Point Quads.) Access is needed from Kolob Reservoir Road at a point approximately in the center of the SE 1/4 of sec. 36, T.38 S., R.11 W., to Volcano Knoll above Deep Creek located in sec. 14, T.39 S., R.10 W.	Recreation and Range
Diamond Valley Gravel Pit Road - (Saddle Mountain Quad.) T.40 S., R.16 W., sec. 34, E1/2E1/2T.40 S., R.16 W., sec. 34, E1/2E1/2	Minerals and Range
Gooseberry (Virgin & Springdale West Quads.) T.42 S., R.11 W., sec. 17, 18, & 20, T.42 S., R.12 W., sec. 2, 12, & 13	Recreation
Hell Hole Pass Road - (Shivwits and West Mtn. Peak Quads) T. 42 S., R. 18 W., sec. 16, N1/2NW1/4 & NE1/4SE1/4	Range and Recreation
La Verkin Creek North - (Smith Mesa Quad.) T.40 S., R.12 W., sec. 18, W1/2E1/2	Recreation
La Verkin Creek South - (Smith Mesa Quad.) T.40 S., R.12 W., sec. 21 & 28	Recreation
Land Hill Archaeological sites (Public) T.42 S., R.16 W., sec. 6 & 7	Cultural
Sand Cove - (Veyo Quad.) T.40 S., R.17 W., sec. 24, SW1/4SW1/4, sec. 25, E1/2, sec. 36,E 1/2	Range
Santa Clara - (Santa Clara Quad.) T.42 S., R.16 W., sec. 16, SW 1/4NW1/4, NW1/4SW1/4, sec. 17, NE1/4SE1/4	Range
Terry Bench - (Terry Bench Quad.) T.42 S., R.20 W., sec. 36	Range

will apply to right-of-way construction. Rights-of-way will generally remain open to other public uses that do not conflict with the purposes for which the rights-of-way are established.

LD-14 Utility corridors have been designated to provide a preferred location for meeting utility transmission and distribution

needs. Such corridors are generally 1-mile wide on public lands but may vary in width according to topography, surrounding land use, and the need to protect adjacent resources. New facilities within the Navajo-McCullough Corridor will be placed north of the existing power line to reduce potential for impacts to resources within adjacent

portions of the Beaver Dam Mountains Wilderness Area. Utilities within designated corridors will be managed under VRM Class III guidelines regardless of the surrounding designation. Nonetheless, scenic areas traversed by the corridors such as the Springdale to LaVerkin corridor will continue to carry a Class II designation for all other land use activities. Designated utility corridors are depicted in Table 2-2 and on Map 2.2. These corridors, where applicable, are designed to conform to the long range corridor needs established by the utility industry in the Western Regional Corridor Study (Western Utility Group, 1992). They also correlate to the extent possible with corridor designations on adjacent public lands in Arizona and Nevada and with corridors on the adjacent Dixie National Forest. New utility construction within the Washington County HCP Reserve will continue to be guided by protocols established in the HCP (Washington County, 1995).

- LD-15 Rights-of-way for the municipal water well field below Gunlock to the Shivwits Indian Reservation for new wells, water pipelines, and small distribution lines to service the pump houses are necessary to support essential municipal purposes. BLM will continue to process applications for such actions on a case-by-case basis.
- BLM will continue to work with project LD-16 sponsors to further identify and analyze a suitable route for the Southern Transportation Corridor from Hildale along the Arizona border to I-15. The route includes a bypass spur that branches off at the base of the Hurricane Cliffs along the existing road and connects with State Route 9. These actions will be considered within the scope of this Plan. BLM will also work with project sponsors to identify and analyze a suitable alignment for an extension of the route from I-15 to Old U.S. Highway 91 between Santa Clara and Ivins. The extension will be ana-

TABLE 2-2 • Designated Utility Corridors

- Navajo McCullough Corridor (existing) north of the Beaver Dam Mountains Wilderness Area boundary.
- Intermountain Power Project Corridor (existing).
- Following the route of the Garkane and UP&L power line from Hildale to Hurricane.
- UP&L substation at Dammeron Valley to the Sand Cove Reservoir power plant and from there to Veyo and Central following
 existing line.
- UP&L substation at Harrisburg Junction to Hurricane following existing line.
- La Verkin to Anderson Junction following the route of SR-17.
- Following the route of old Highway 91 across the Beaver Dam slope from the Arizona border to the Shivwits Indian Reservation, then from the northern boundary of the Shivwits Indian Reservation to Gunlock Reservoir following the Gunlock road. This corridor would be the width of the currently fenced road rights-of-way.
- Following SR-18 Highway from St. George to Veyo. This corridor would be the width of the currently fenced road right-of-way.
- Hurricane south to the Arizona border and over to Hildale. Route would follow the existing road from Hurricane south to border and from there to Hildale following the Arizona border.
- Springdale to La Verkin following the route of the UP&L line.
- Motoqua to Shivwits Indian Reservation following existing road.
- I-15 from beginning of public land to the north to below Harrisburg Junction.

lyzed and evaluated for conformance with this Plan when a feasibility study is completed and a project proposal is submitted.

- LD-17 Scrub Peak will be added to the four existing communication sites at West Mountain, Little Creek Mountain, South Rockville, and Black Ridge north of Toquerville as shown on Map 2-2. To the extent practical, new users will be required to share site facilities to reduce impacts and lessen the need for additional sites. Access roads and additional power lines will not be approved to the Black Ridge site to avoid visible scarring and to maintain naturalness on the ridge.
- LD-18 The Washington County Water
 Conservancy District filed a right-of-way application with affected federal agencies to construct and maintain a pipeline across federal lands to transport water from Lake Powell to the proposed Sand Hollow Reservoir. BLM will coordinate with project sponsors, Indian tribes, and other state and federal agencies to ensure that the required technical and environmental studies are prepared. If the project is not found to be in conformance with the other decisions in this RMP, a plan amendment may be considered.
- LD-19 Rights-of-way avoidance areas, totaling 308,889 acres, are depicted in Table 2-3 and on Map 2.3. New rights-of-way will be granted in these areas only when feasible alternative routes or designated corridors are not available.

 Measures to reduce impacts to affected resources will be applied based on site-specific analysis. Rights-of-way exclusion areas, totaling 2,690 acres, are also depicted in Table 2-3 and on Map 2.3. New rights-of-way will be granted in these areas only when required by law or federal court action.

TABLE 2-3 • Rights-of-Way Avoidance and Exclusion Areas (Subject to Designated Corridors)

AVOIDANCE AREAS	TOTAL ACRES
Washington County HCP Reserve	308,889
OHV Closed Areas	
OHV Designated Roads & Trails Areas	
Proposed ACECs	
Riparian Areas	
Smithsonian Butte National Back Country Byway (1/2 mile on each side)	
River segments with a tentative classification of Wild, proposed as suitable for Congressional NWSRS designation	
T&E and Candidate Species Habitat	
VRM Class I and II areas	
Watershed Protection Areas (Curly and Frog Hollows)	

EXCLUSION AREAS	TOTAL ACRES
Beaver Dam Mountains Wilderness Area	2,690

Land Withdrawals and Classifications

LD-20 Proposed withdrawals from mining location, totaling 56,149 acres, are depicted in Table 2-4 and on Map 2.4. Withdrawals and land classifications that become obsolete will be recommended for revocation or termination.

TABLE 2-4 • Proposed Withdrawals From Mining Location

Willing Location	
	TOTAL ACRES
Washington County HCP Reserve w/Split Estate Lands (45,270 acres)	56,149
Warner Ridge/Fort Pearce Proposed ACEC (4,281 acres)	
Red Bluff Proposed ACEC (6,168 acres)	
Dinosaur Trackway (40 acres)	
Baker Dam Recreation Area (270 acres)	
Red Cliffs Recreation Area (120 acres outside of HCP Reserve)	

Energy and Mineral Resources

Objectives

Consistent with the need to protect sensitive resources at risk from development, BLM's objectives for energy and mineral resources will be to:

a) continue to provide mineral materials needed for community and economic purposes through the designation and management of materials sites for individual and community use, and

b) provide continued opportunity for exploration and development under the mining and mineral leasing laws by leaving public lands open for such purposes consistent with and subject to reasonable measures allowed by law needed to protect the environment. This objective is intended to support national goals for energy and strategic minerals independence and local and state goals for economic health and diversity.

Fluid Minerals

Designate 239,059 acres open to leasing subject to Standard Stipulations (Category 1), 186,225 acres open to leasing with Special Stipulations (Category 2), 176,895 acres open to fluid mineral leasing subject to No Surface Occupancy (NSO) Stipulations (Category 3), and 26,828 acres closed (Category 4) to fluid mineral leasing. Specific areas are outlined in Table 2.5 and depicted on Map 2.5.

TABLE 2-5 • Fluid Mineral Leasing Categories

CATEGORY	ACRES
Open with Standard Stipulation (Category 1)	239,059
Open with Special Stipulations (Category 2)	186,225
Upper Beaver Dam Wash ACEC	
Santa Clara River-Gunlock ACEC	

Severe Erosion Soils

Curly Hollow and Frog Hollow Watersheds

Navajo Aquifer (High Recharge Area)

Municipal Watersheds

Crucial Deer Winter Habitat and Elk Calving Areas

Mexican Spotted Owl Habitat

Desert Tortoise Critical Habitat Outside of ACECs

T&E Plant Habitat Outside of ACECs

Candidate Plant Species Habitat Outside of ACECs

Power Site and FERC Withdrawals

Open with No Surface Occupancy Stipulations (Category 3)

176,895

Washington County HCP Reserve

OHV Closed Areas

River Segments with a tentative classification of Wild, proposed as suitable for Congressional NWSRS designation

Riparian Zones

Red Bluff ACEC

Warner Ridge/Fort Pearce ACEC

Canaan Mountain ACEc

Beaver Dam Wash ACEC

Lower Virgin River ACEC

Santa Clara River-Land Hill ACEC

Red Mountain ACEC

Red Cliffs and Baker Dam Recreation Areas

Smithsonian Butte National Backcountry Byway (within 1/2 mile radius)

Administrative Withdrawals

Public Water Reserves

Recreation and Public Purpose Act Leases

Closed to Fluid Mineral Leasing (Category 4)

Beaver Dam Mountains Wilderness Area Lands within Incorporated City Boundaries 26,826

- MI-02 Categories shown in this Plan for leasing within wilderness study areas reflect what stipulations BLM will employ should the study areas be released from further consideration for wilderness designation. Until such time, all lands within wilderness study areas will remain closed to fluid mineral leasing as required by law.
- Within areas open to leasing with stan-MI-03 dard or special stipulations, sensitive resources needing protection from fluid mineral exploration, development, or production activity will be protected by applicable standard lease terms and the provisions of regulations in Part 3100 of Title 43 of the Code of Federal Regulations. Among other things, the regulations allow the authorized officer to move proposed activities up to 200 meters or prohibit new surface disturbing operations up to 60 days in any lease year (see 43 CFR 3101.1-2). Federal Onshore Oil and Gas Orders and applicable state and local regulations also provide extensive resource protection.
- Lands where the United States owns the oil and gas but does not own the surface estate will generally receive the same leasing categories as adjacent public lands as determined by the BLM's authorized officer. Such splitestate lands outside of incorporated city boundaries within approved residential subdivisions will be placed in Category 3 (NSO) to protect such developments from impacts associated with oil and gas exploration and development activity. After the initial categorization, updates will only occur at scheduled revisions of the resource management plan.
- MI-05 Detailed descriptions of leasing stipulations and lease notices that will be applied to leasing exploration, development, and production are included in Appendix 2, Oil and Gas Leasing Stipulations. These descriptions also explain how and when exceptions,

- modifications, and waivers to the stipulations will be approved.
- MI-06 Exploration, drilling, and production will be subject to the operation and reclamation standards contained in Appendix 1 for surface disturbing activities.

Locatable Minerals

- MI-07 Public lands in Washington County will remain available to mining location under the General Mining Act of 1872 and applicable regulations on 615,151 acres. Map 2.6 depicts mineral areas that will remain open (405,486 acres), open with restrictions (41,169 acres), and open with a plan of operation (168,496 acres). Restricted areas are those lands where mining locations are subject to special requirements of law and regulation as a result of powersite withdrawals, public water reserves, and split-estate created under the Stockraising Homestead Act.
- MI-08 Areas currently withdrawn from mineral location totaling 4,450 acres will remain withdrawn in accordance with applicable law so long as the purposes for which the withdrawals were put in place remain valid. Where BLM determines that any withdrawal is no longer needed, it will take action to have such withdrawal terminated or revoked.
- New withdrawals from mining location MI-09 are recommended on 56,149 acres to protect developed recreation sites, lands, and critical resources within the Washington County HCP Reserve, the Dinosaur Trackway, the Fort Pearce Historic Site, and critical habitats for threatened and endangered plant species in the Red Bluff and Warner Ridge/Fort Pearce Areas of Critical Environmental Concern (ACECs). Withdrawals will be put into place only after approval by the Secretary of the Interior, and in some specific instances, review by both houses of Congress.

- Proposed withdrawals are depicted in Table 2-4 and on Map 2.4.
- MI-10 By regulation, mining activity involving greater than 5 acres of surface disturbance requires a plan of operation.

 Plans of operation are also required for all mining activities, regardless of size other than casual use, within ACECs, areas closed to OHV use, and river segments determined suitable for addition to the National Wild and Scenic Rivers System.
- MI-11 Where applicable, surface disturbing activities will be subject to the reclamation standards listed in Appendix 1.

Mineral Materials

MI-12 Numerous mineral materials sites have been located on public lands in Washington County to meet the needs of private landowners, contractors, and government agencies. Sale of materials from these sites will continue until depletion occurs on individual sites or the lands are transferred out of public ownership. Sites may also be closed

- and restored where needed to resolve conflicts associated with emerging resource issues or adjacent land uses. New sites may be identified and developed from time to time as sites are retired or as demand increases.
- MI-13 Free use of materials will be authorized from selected areas for municipal or noncommercial purposes.
- MI-14 All established mineral materials sites will be managed under VRM Class IV objectives.
- MI-15 Site reclamation or a reclamation fee will be required from all users, including those qualifying for free use.

 Reclamation of depleted areas will be completed according to governing regulations and the standards set in Appendix 1.
- MI-16 A total of 345,104 acres of land will remain open for mineral materials sales on a case by-case basis, subject to additional environmental review. Areas to be closed to mineral materials sales are depicted in Table 2-6 and on Map 2.7 and total 265,732 acres. Additional

TABLE 2-6 • Mineral Materials Sales Designations

	ACRES
Open	345,104
Restricted	64,775
Crucial Mule Deer Winter Habitat	
Elk Calving Areas	
Split Estate Lands	
Powersite Classifications	
Administrative Withdrawals	
Recreation and Public Purpose Act Leases	
Closed	265,732
Washington County HCP Reserve	
All ACECs (exclusive of the cinder pit on Little Creek Mountain ACEC)	
Baker Dam and Red Cliff Recreation Areas	
OHV Closed Areas (See Table 2-10)	
Threatened and Endangered Plant and Animal Species Habitat	
Candidate Plant and Animal Species Habitat	
Riparian Areas	
River segments with a tentative classification of Wild, proposed as suitable for Congressional NWSRS designation	
Municipal Watersheds	
Navajo Sandstone Aquifer (High Recharge Area)	
Beaver Dam Mountains Wilderness Area	
Public Water Reserves	

site-specific restrictions will be placed on mineral materials sales in crucial big game habitats, split-estate lands, administrative withdrawals, powersite classifications, and leases issued under the Recreation and Public Purposes Act. Such restrictions cover 64,775 acres.

- MI-17 Sale or disposal of mineral materials will continue to be prohibited on unpatented mining claims and will generally not be approved on lands encumbered with nonmineral applications such as land sales and exchanges where the mineral estate will leave federal ownership.
- MI-18 The collection of petrified wood on public lands is limited to 250 pounds per person per year for personal use only. No commercial use will be permitted to avoid the rapid depletion of the resource.

Transportation

Objectives

It is BLM's objective to continue to work closely with Washington County officials to ensure that use and enjoyment of existing roads and trails is permitted under safe and prudent conditions and that responsibility for maintenance is properly defined in road maintenance agreements or other appropriate documents. It is also BLM's objective to work with municipalities, Washington County, the Utah Department of Transportation, and other affected parties in defining and planning for future transportation needs, locating environmentally compatible route alternatives, and resolving land use conflicts related to transportation systems where public lands are involved.

TR-01 BLM will continue to maintain those roads for which it holds maintenance responsibility and which are deemed essential for access for resource management purposes. These include 358 roads and jeep trails, three of which constitute collector roads, six of which constitute local roads, and the remain-

der which constitute resource access roads. Most of the latter are dirt, two-wheel or four-wheel drive, dry weather roads or trails. BLM will seek to enter into cooperative agreements with other federal and non-federal agencies to share limited resources and equipment needed for periodic maintenance so as to eliminate organizational redundancy and reduce costs to the public.

- TR-02 BLM will continue to honor existing road maintenance agreements with Washington County and amend them as needed to reflect changing conditions and circumstances. Such agreements describe roads by name, class, miles, and maintenance responsibility. It is expected that Washington County will continue to maintain roads so listed where they have accepted the responsibility.
- TR-03 BLM will continue to provide directional signing on roads under its jurisdiction in remote areas, within the limits of available funding, to increase public enjoyment and safety. Where needed to facilitate travel across public lands, BLM will consider installing cattle guards at fencelines on roads having increased levels of vehicle use.
- TR-04 Upon application from Washington County, BLM will grant FLPMA Title V rights-of way in perpetuity on existing, uncontested roads asserted by the county to be highways under R.S. 2477. Rights-of-way width and standards will be commensurate with the class and purpose of each road. Such rights-of-way will be issued without cost to the county. The issuance by BLM of a FLPMA Title V right-of-way to the county will be conditioned so as not to affect county assertions under R.S. 2477.
- TR-05 Where roads on public lands are determined to no longer serve a useful purpose, to constitute a public nuisance, or to cause unnecessary environmental harm, BLM will seek to close such

roads through coordination with applicable Washington County or municipal officials. Proper exercise of Utah state law and federal regulation regarding public notice and hearings will be followed in pursuing such closures.

- TR-06 Once issues related to road jurisdiction under R.S. 2477 are resolved, BLM will anticipate completing a reinventory of roads on public lands within Washington County and updating its transportation plan accordingly in collaboration with representatives of the county and affected municipalities. BLM will then evaluate the need to adjust off road vehicle management designations through the plan amendment process to reflect changes that may have occurred in jurisdiction and other elements of the revised transportation plan.
- TR-07 BLM will work with the Utah
 Department of Transportation,
 Washington County, and project sponsors to identify a suitable route for the
 Southern Transportation Corridor and
 major connectors along the Arizona border from State Route 59 near Hildale to a
 proposed I-15 interchange on state land
 near Atkinville. For further details, see
 the discussion on the proposed route
 under Rights-of-Way in the Lands section of this Plan.
- TR-08 Within the Washington County Habitat Conservation Plan (HCP) Reserve, road maintenance, upgrades, and new construction will continue to be guided by HCP requirements and protocols as described in Appendix A of the HCP. Where public lands are involved, upgrades and new construction will be subject to applicable environmental study and consultation with the U.S. Fish and Wildlife Service (FWS).

Air Quality

Objectives

BLM's objective for airshed management will be to ensure that authorizations granted to use pub-

lic lands and BLM's own management programs will comply with and support local, state, and federal laws, regulations, and implementation plans pertaining to air quality.

- AQ-01 All BLM actions and use authorizations will be designed or stipulated so as to protect the high-quality airshed within Zion National Park and other Class I areas in the region and to otherwise minimize impacts to visibility.
- AQ-02 Prescribed burns will be approved through the State of Utah permitting process and timed so as to maximize smoke dispersal. In accordance with state agency consultation, ignition will be approved only when the burning index is 500 or greater.
- AQ-03 Industry proposals for development on public lands that would involve new emission sources will be analyzed under new source review procedures by the Utah Department of Environmental Quality (DEQ) for prevention of significant deterioration (PSD) and visibility impacts prior to approval and measures applied to ensure compliance with applicable standards.

Soil and Water Resources

Objectives

BLM's objectives for soil and water resources will be to work with municipalities, state and local agencies, and other interested parties to:

- a) protect community watersheds and sources of culinary water,
- b) reduce erosion, stream sedimentation, and salinization,
- c) improve water quality in streams and rivers,
- d) promote water conservation,
- e) ensure compliance with state and federal laws pertaining to water quality and pollution prevention,

f) ensure water availability for the maintenance of key natural systems and human enjoyment, and

g) where necessary to meet essential community needs, identify environmentally suitable sites for water storage and routes for water transport.

Soils and Watershed

SW-01 BLM will implement the following measures to achieve goals for sound watershed management in collaboration with user groups, municipalities, and other local, state, and federal agencies. Such measures will be designed to protect fragile soils, reduce erosion and stream sedimentation, and lessen impacts of saline runoff into streams and rivers throughout the county.

a) The Red Bluff, Upper Beaver Dam Wash, and Warner Ridge/Fort Pearce Areas of Critical Environmental Concern (ACECs) will be managed, in part, to protect critical watersheds, saline soils, and/or water quality. Specific management prescriptions that will be applied under this Plan are contained under Special Emphasis Areas in the section on ACECs. Protection will include no surface occupancy or special stipulations for fluid mineral leasing, off-road travel limitations or closures, selected mineral withdrawals, designation as right-of-way avoidance areas, and restrictions on fuelwood and mineral materials sales. The critical watershed in the City Creek area will be fully protected by provisions of the Washington County Habitat Conservation Plan (HCP) as carried forward into this Plan. Among other things, such planned actions will restrict or prohibit future development incompatible with HCP Reserve goals, retire affected grazing permits, and limit vehicle travel to designated roads and trails (for details, see the HCP discussion in the section on Special Status Animal Species under Fish and Wildlife Habitat Management).

- b) Critically eroding soils in the West Santa Clara River watershed will be evaluated for nonstructural projects to reduce erosion in accordance with the findings and recommendations of the Virgin River Basin - Utah Cooperative Study (1990). Projects may focus on improving vegetation composition and cover, enhancing and maintaining properly functioning riparian systems, and where necessary, adjusting grazing management and patterns of human use in the watershed. In conducting the evaluations and designing projects, BLM will involve affected operators and local communities in accordance with provisions of BLM Utah's Standards for Rangeland Health included in Appendix 3. Such actions will also be designed to complement planned actions in the Virgin Spinedace Conservation Agreement and Strategy.
- c) The Curly Hollow and Frog Hollow watersheds, important riparian zones, and specified areas of highly erosive soils will be protected through off-road travel restrictions or closures. Projectrelated surface disturbances will be reclaimed to stabilize soils and encourage the reestablishment of vegetation and protective cryptogamic crusts, where appropriate. The Curly Hollow and Frog hollow watersheds will also be designated rights-of-way avoidance areas and placed in fluid mineral leasing Category 2, along with other public lands with a severe erosion hazard. Leasing stipulations will require submission and approval of a plan of development that ensures soil productivity will be maintained and adequate controls applied to prevent erosion and degradation of water quality.
- d) Watershed control structures already in place and continuing to serve valid purposes will be maintained by the sponsoring agency so as to continue their proper functioning. Generally, lands containing such structures will be retained in public ownership unless

transfer may guarantee long-term management of the structures for the purposes for which they were built.

- SW-02 BLM will retain public lands within the 100-year floodplain along rivers and major streams in Washington County, unless transfer will accomplish important objectives that significantly outweigh floodplain concerns, and measures may be applied to the transfer that will prohibit or fully mitigate risks of floodplain development, or transfer will occur to an agency or owner who will manage effectively for floodplain protection.
- SW-03 BLM will comply with the provisions of Executive Orders 11988 and 11990 that require federal agencies to protect wetlands under their jurisdiction and avoid development within floodplains wherever possible. Specific protection that will be applied to floodplain management include the following:
 - a) Public lands within floodplains will generally be managed so as to preserve or restore the natural and beneficial values served by the floodplains.

 Structural developments within the floodplain that will be subject to recurring flood damage or which, in turn, will create adverse impacts to lands, resources, or developments in or adjacent to the floodplain will be discouraged or not authorized. Multiple uses of the floodplain, including recreation, will be encouraged where such will not disrupt the broad purposes for which the floodplain is being managed.
 - b) Prior to taking actions within designated floodplains, BLM will work with project sponsors to seek alternatives that involve no floodplain disturbance. Where suitable alternatives do not exist, BLM will work with local and state agencies to evaluate the potential effects of such actions and apply measures needed to minimize the impact of floods on human safety, health, and

- welfare and to maintain the functionality of the floodplain and related natural values. Where suitable mitigation cannot be applied to eliminate unacceptable impacts, BLM will not approve the action.
- c) Non-federal lands within designated floodplains may be acquired as a result of collaboration with local, state, and federal partners through multijurisdictional planning efforts such as the Washington County HCP, approved conservation agreements, cooperative management agreements, and plans to restore important riparian values or habitat for special status species. Such lands may be acquired through purchase, exchange, donation, or conservation easement.
- SW-04 BLM will apply Standards for Rangeland Health approved for BLM in Utah (Appendix 3) in its various management programs to ensure that upland soils exhibit permeability and infiltration rates that sustain or improve site productivity, considering the specific soil type, climate, and landform. Best management practices appropriate to each site and resource management program will be implemented for sediment control and monitored for effectiveness in meeting objectives for reducing sedimentation and stream salinity. Where standards and objectives are not being met, BLM will work with state, local, and affected partners to determine the cause and adjust management practices accordingly.

Water Resources

SW-05 Numerous municipalities within
Washington County have developed
springs or wells on public lands as
sources of culinary water. Protection of
these resources will be afforded priority
in accordance with state and federal
requirements. The Navajo Sandstone
Aquifer recharge area and other existing
or proposed culinary water sources on

- or adjacent to public land will be identified and managed as municipal watersheds. These will include properties with state-approved water rights used for municipal purposes. The following measures or management practices will be applied to municipal watersheds:
- a) BLM will coordinate with local and state agencies as water protection plans are developed to ensure that federal land management actions or practices do not jeopardize drinking water quality;
- b) municipal watersheds will be closed to mineral materials sales;
- c) fluid mineral exploration and development will be subject to state and federal requirements for casing of drill holes and use of cement plugs to prevent migration of contaminants or low-quality water and special leasing stipulations requiring submission of a plan of development that protects surface and groundwater quality;
- d) no hazardous material or landfill sites will be approved within the watersheds or in a location that will jeopardize watershed integrity; and
- e) where BLM determines that proposed uses will degrade water quality within the watershed below standards set by the State of Utah in R317-2, BLM will not approve such use.
- SW-06 BLM will continue to support and implement current agreements and memoranda of understanding with the Utah Department of Environmental Quality (DEQ) and Department of Agriculture to coordinate planning activities for the conservation of public land waters and to improve, maintain, and protect the quality of such for beneficial uses. It will also seek to prevent, abate, and control new or existing pollution of waters within Washington County and the surrounding region in collaboration with local, state, and fed-

- eral partners. To achieve such goals, BLM will take the following actions:
- a) Continue work with the Utah Nonpoint Source Task Force, under the provisions of the State of Utah Nonpoint Source Management Plan, to (a) prioritize waterbodies for nonpoint source control activities, (b) seek funding for nonpoint source control projects, (c) develop and implement coordinated resource activity plans to resolve nonpoint source-related water quality problems, and (d) identify and develop best management practices to be employed on public rangelands to reduce nonpoint source pollution.
- b) Fulfill its role as the designated management agency for controlling non-point source pollution on public lands in Washington County.
- c) Wherever practical, require best management practices be employed by holders of various use authorizations involving public lands and employ such practices in its own watershed management activities. At the minimum, such will include the application of permit stipulations described in Appendix 1 and the Utah Standards for Rangeland Health and Guidelines for Grazing Management in Appendix 3.
- d) Complementary to BLM's objectives for improving rangeland health, become an active partner in the Utah DEQ's Utah Watershed Approach Framework Initiative (1996) and work closely with other stakeholders in the Lower Colorado Watershed Unit in (a) building public support for a comprehensive, basinwide approach to resolving water quality problems, (b) collecting essential data relative to water quality and pollutant sources, (c) ranking watershed concerns and targeting specific sites for planned actions, (d) developing management strategies to be employed, (e) jointly preparing watershed management unit plans, (f) implementing plan-

ning recommendations, and (g) monitoring and evaluating the results.

e) Meet the goals of the Colorado River Basin Salinity Control Act by implementing administrative actions in this Plan and continuing to require the use of best management practices in areas of highly erodible, saline soils to reduce or prevent the movement of salts into drainages and waterways that flow into the Virgin River or its tributaries.

f) Collaborate with Washington County, municipalities, Indian tribes, affected state and federal agencies, user groups, and interested organizations in formulating and analyzing the proposed Virgin River Management Plan as it relates to water quality, water conservation, floodplain management, and protection of related resources along the Virgin River and its major tributaries. Among other things, the Virgin River Management Plan proposes to (a) protect and improve aquatic habitats for native wildlife species, (b) improve water quality, (c) implement water conservation strategies, (d) protect the 100year floodplain and watersheds, (e) restore water flows to historic riverine habitat areas, (f) establish minimum water flows needed for habitat protection, (g) improve irrigation practices and efficiency of water storage, (h) recycle treated water, (I) develop a river trail and parkway system, and (j) provide water resources to meet human consumptive needs up to the year 2020.

g) Coordinate the implementation of planning recommendations approved through this Plan with the Utah Divisions of Water Quality and Water Resources to ensure consistency with the goals of the 1990 Utah State Water Plan and the 1993 supplement for the Kanab Creek/Virgin River Basin. The state plan and its supplement provide a comprehensive overview of water issues and management recommendations that are directly applicable to public lands in Washington County.

h) Implement those planning prescriptions outlined in this Plan under sections pertaining to Riparian Resources, Fish and Wildlife Habitat Management, and Special Emphasis Areas that bear directly on the reduction of chemical pollutants and sediments in streams or rivers and the improvement and maintenance of healthy, properly functioning waterways, riparian zones, and associated natural systems.

SW-07 BLM will collaborate with partners in local, state, and federal agencies to ensure that the collective programs for management of lands and waters in Washington County are effective in meeting the objectives of and complying with water quality standards established by the federal Clean Water and Safe Drinking Water Acts. In so doing, BLM will manage discretionary actions on public lands so as to fully support the designated beneficial uses described in the Standards of Quality for Waters for the State of Utah (R.317-2) for surface and groundwater.

SW-08 To protect reservoirs and perennial streams from unnecessary pollution and sedimentation from fluid mineral leasing activity, BLM will prohibit surface disturbance within 100 yards of the high water line of permanent water bodies through application of the 200-meter rule in federal regulations at 43 CFR 3101.1-2.

SW-09 BLM will collaborate with the State of Utah's Water Engineer, the Washington County Water Conservancy District, Indian Tribes, the Utah Division of Wildlife Resources, and other affected local, state, and federal agencies in assessing stream segments throughout Washington County to determine which segments possess resource values warranting minimum instream flows to maintain desired values. BLM will work with such agencies to develop strategies using Utah State law and other appropriate mechanisms includ-

ing agreements with water users to establish and maintain such flows. Where appropriate, such studies will also evaluate options for protection of floodplains, improvement of water quality, and conservation measures to eliminate wasteful practices. Table 2-7 depicts water-based resource values that may be the subject of such studies along stretches of creeks and rivers where the lands are currently in public ownership.

TABLE 2-7 • Water-Based Resource Values

STREAM SEGMENT	MILES	WATER DEPENDENT RESOURCE VALUES
East Fork Beaver Dam Wash Salt Lake Base Meridian T. 40 S., R. 19 W., Secs. 9 & 10	3.1	Riparian vegetation, nongame native fisheries, forage production and watering, undeveloped recreation.
Santa Clara River South of Ivins	2.0	Riparian vegetation, undeveloped recreation, nongame native fisheries, forage production and watering.
Santa Clara River Gunlock Reservoir to private land	3.2	Riparian vegetation, undeveloped recreation, nongame native fisheries, forage production and watering.
Santa Clara Baker Dam South to private land	1.0	Riparian vegetation, cold-water fisheries, nongame native fisheries, recreation, wildlife forage and watering.
West Fork Beaver Dam Wash Headwaters to private land north to Motoqua	12.7	Riparian vegetation, forage production, nongame native fisheries and watering,
Quail Creek U. S. Forest boundary to private land	1.0	Riparian vegetation, developed recreation area, wildlife forage and watering, nongame native fisheries.
North Creek T. 42 S., R. 11 W., sec. 6: private land	1.5	Riparian vegetation, undeveloped recreation, nongame native fisheries, wildlife forage and watering.
La Verkin Creek Private land near Toquerville to Zion National Park boundary	13.0	Riparian vegetation, nongame native fisheries, forage production and watering, undeveloped recreation.
Deep Creek/Crystal Creek Zion National Park Boundary north to private land	7.5	Riparian vegetation, game fisheries, forage production and watering, undeveloped recreation.
Kolob Creek North of Zion National Park	3.0	Riparian vegetation, cold-water fisheries forage protection and watering, undeveloped recreation.
Virgin River Quail Creek Reservoir to confluence with Ash Creek	6.0	Riparian vegetation, nongame native fisheries, undeveloped recreation.
Virgin River Atkinville to Stateline	6.0	Riparian vegetation, wilderness, undeveloped recreation, nongame native fisheries.
Ash Creek Ash Creek Reservoir to confluence with Virgin River	1.0	Riparian vegetation, nongame native fisheries, wildlife and livestock forage.

Nongame native fisheries may include woundfin nimmow, Virgin River chub, Virgin spinedace, desert sucker, and flannel-mouth sucker.

- SW-10 On December 4, 1996, the United States entered into a settlement agreement with the State of Utah, the Washington County Water Conservancy District, and the Kane County Water Conservancy District that recognizes reserved water rights for Zion National Park, subordinates the federal reserved water rights to existing state water law, and allows for some potential development of water above Zion National Park. In managing water resources on public lands and making decisions concerning any resource management program, BLM will take no action that will abrogate the intent or provisions of the agreement.
- SW-11 BLM will work with the State of Utah and other affected agencies to evaluate designation and management of approximately 7 miles of the West Fork of the Beaver Dam Wash as an antidegradation segment. The designation will require proposed surface uses to be mitigated through the application of best management practices to reduce adverse impacts to the watershed. Mining exploration and development will require plans of operation.
- SW-12 BLM will continue to protect high quality waters on public land segments of the North Fork of the Virgin River and tributaries already designated as Category 1 by the Utah Division of Water Quality under R317-2-12 of the Utah Administrative Code.
- SW-13 Where needed to support public land management purposes, including consumptive uses for livestock, wildlife, and public land user groups, BLM will seek to acquire water rights under Utah State law where such rights have not already been established. Acquisitions may occur through purchase, exchange, donation, or filing with the Utah State water engineer.
- SW-14 Water rights that have been appropriated by non-federal parties on public lands through the state water engineer and which are supported by legal and physical access across public lands will con-

- tinue to be recognized. Waters in excess of BLM's needs for consumptive uses or resource management will remain available for downstream water users in accordance with state law. BLM will continue to provide access across public lands and to approve facilities needed to collect, divert, or transport water, based on legally recognized water rights. Such actions will be analyzed on a case-bycase basis with public participation and approved where the review determines the action will not adversely affect the management of important public resources or otherwise conflict with the objectives of this Plan.
- SW-15 A total of six potential reservoir sites identified by the State of Utah's Division of Water Resources and the Washington County Water Conservancy District on public lands in Washington County will be recognized as special resources warranting federal awareness and attention in future land management planning and decisionmaking processes (see Map 2.8). In evaluating land use proposals and management options for each of the six sites, BLM will give full consideration to the unique values associated with the potential for water storage and related purposes prior to making decisions which will preempt the use of such sites for future reservoir development. Where such preemption is considered, the State of Utah and local, affected agencies will be consulted and given sufficient opportunity to respond to the proposal before decisions are made. Development of any of the following sites for reservoir purposes will require complete environmental and engineering analysis and public participation prior to consideration for approval.
 - Anderson Junction
 - Warner Valley
 - Leeds Creek
 - Dry Creek
 - LaVerkin Creek (lower site)
 - Grapevine Wash

- SW-16 BLM recognizes that additional sites with water storage potential may yet be identified by state or local water management agencies as a result of new studies or reevaluation and redesign of sites previously eliminated by the respective agencies or BLM. New proposals for development of such sites will be subject to additional environmental review with appropriate public participation and will be considered through the plan amendment process. Actual project approval and development of such sites may occur only after appropriate engineering studies and environmental analysis are completed and favorable decisions issued by respective state, local, and federal agencies.
- SW-17 Five additional reservoir sites listed in the Draft RMP/EIS were recognized by the state and the Washington County Water Conservancy District as having potential for water storage, but are not carried forward into this Plan due to land ownership clarifications and/or conflicts with other decisions in this Plan. These sites include: a) Shem Dam site, which is located entirely within the Shivwits Indian Reservation and conflicts with Virgin spinedace restoration if it is extended onto public lands, b) Gunlock Reservoir Enlargement, which is almost entirely on state land and not under BLM jurisdiction, c) Lower Santa Clara River site, which is within the Santa Clara River/Land Hill ACEC and will conflict with management objectives for the maintenance of important riparian systems, restoration of Virgin spinedace populations, and protection of significant cultural resources, d) LaVerkin Creek (upper site), which will conflict with objectives to manage for natural values under the primitive recreation classification and conflict with BLM's suitability recommendation for Wild and Scenic Rivers designation on this segment of the creek, and the e)West Fork of the Beaver Dam Wash site, which falls within the Upper Beaver Dam Wash ACEC and will conflict with

- management objectives for maintenance of important riparian systems, restoration of Virgin spinedace populations, and protection of potential habitat for the Southwestern willow flycatcher.
- Previous to publication of the Draft RMP/EIS, BLM managers had rejected potential reservoir sites on North Creek and Fort Pearce Wash. Concerns on North Creek involved potential water contamination from old well sites within an abandoned oil well field and potential impacts to Virgin spinedace habitat. Water storage development on Fort Pearce may destroy the National Historic Register property at Fort Pearce and impact a small but important riparian system and associated habitat for the spotted bat.
- SW-18 A culinary wellfield has been considered in the West Fork Beaver Dam Wash drainage. Because of the hydraulic connection of groundwater to surface water in the wash, development of a municipal water wellfield in the wash may cause loss of streamflow and be detrimental to surface water resource values identified in a recent hydrologic study of Beaver Dam Wash (Fogg, et al., 1998). To be consistent with the objectives of this Plan, wellfield configuration and pumpage will need to be evaluated prior to development. Wellfield planning will need to show, among other things, that groundwater withdrawals may be sustained in the long term without adversely affecting surface flows and dependent resource values downstream of the development.
- SW-19 An application has been filed by the Washington County Water Conservancy District to construct a pipeline to convey water from Lake Powell near Wahweap to the proposed Sand Hollow Reservoir. Possible route locations and project features are described in the Lake Powell Pipeline Feasibility Study (Boyle Engineering Corp./Alpha Engineering Inc., 1995). The proposal was not addressed in the Draft RMP and

is not carried forward into this Plan. It will, however, be analyzed in a separate environmental impact statement prepared under a joint agency process and, if necessary, a plan amendment prepared for affected public lands within the right-of-way. According to Water Conservancy District officials and statements in the Purpose and Need Study (Washington County Water Conservancy District, 1995), approval and construction of the pipeline may satisfy long-term municipal, industrial, and instream flow requirements, and eliminate the need for most, if not all, other reservoir proposals on public lands in Washington County (Ron Thompson, personal communication, 1997).

Riparian Resources

Objectives

BLM's objective, to the extent practical, will be to manage riparian areas so as to maintain or restore them to properly functioning conditions and to ensure that stream channel morphology and functions are appropriate to the local soil type, climate, and landform.

Site specific plans to identify desired plant communities, establish specific management objectives, and recommend practices to be employed to achieve desired results, where appropriate, will be prepared in collaboration with affected livestock operators, the Utah Division of Wildlife Resources, the Washington County Water Conservancy District, and other interested parties, agencies, or organizations. Specific priorities for riparian improvement are listed in the sections of this Plan on Livestock Grazing, Fish and Wildlife Habitat Management, Soil and Water Resources, and Areas of Critical Environmental Concern. Monitoring and evaluation strategies will be implemented to measure progress in accordance with Utah's Standards for Rangeland Health and Guidelines for Grazing Management (Appendix 3).

- RP-02 Riparian areas will be protected by standard or special stipulations in leases and permits including those listed in Appendix 1, Standard Procedures Applied to Surface Disturbing Activities. In accordance with Utah BLM riparian policy (1993), major new surface disturbing activity will not be approved on public lands within 100 yards of riparian areas unless
 - a) there are no practical alternatives,
 - b) long-term impacts may be fully mitigated, or
 - c) the action was designed to enhance the riparian resources.
- RP-03 To avoid contamination of water resources and inadvertent damage to nontarget plants and animals, aerial application of pesticides will not be approved within 100 feet of a riparian area unless the product is registered for such use with the Environmental Protection Agency.
- RP-04 Livestock salt blocks and other nutritional supplements will be located at a sufficient distance from natural waters and riparian areas to ensure that livestock concentrations do not impact the values being managed.
- **RP-05** Monitoring studies will be established in riparian areas where increased recreation, OHV use, or grazing patterns are believed to be adversely impacting goals for riparian management. Impacts on key riparian species will be monitored on the following priority river segments: Santa Clara River (below Gunlock), Santa Clara River (Land Hill segment), Fort Pearce Wash (ruins area), and the Virgin River near Zion National Park. Other segments may be added at a later time as resource conditions warrant and priorities allow. Regular monitoring of species and sites will be conducted to determine whether vegetative conditions and objectives are being achieved. If declining trends are identified, BLM will work with livestock oper-

ators, user groups, and other affected agencies, communities, or organizations to identify causes of the declining trends and to recommend and take corrective action. Options may include, but are not limited to, fencing, barriers, selected closures, vegetative manipulations, seasonal use restrictions for camping or recreation, and adjustments in grazing management. Degraded sites along the Santa Clara River below Gunlock Reservoir and segments of the Virgin River near Zion National Park will receive priority attention. The riparian demonstration project on North Creek will be maintained and used as an example of best management practices that may be employed for other zones being impacted by heavy recreation use, off-road travel, or grazing.

- RP-06 Where consistent with other objectives of this Plan, control of exotic or undesirable plant species may be employed to achieve desired plant communities on selected reaches of the Virgin and Santa Clara Rivers and major tributaries. Such action will be coordinated through agreements with interested local, state, and federal agencies and be subject to appropriate consultation with the FWS.
- RP-07 Generally, riparian areas will be retained in public ownership unless they are small and isolated and cannot be effectively managed through agreement with local, state, or other federal agencies or interested conservation groups.

 Changes in ownership will be permissible if such will result in the acquisition of lands with superior public values or if such changes were intended to meet riparian management objectives.
- RP-08 With landowner consent, BLM will acquire lands containing important riparian areas in proximity to other public lands where riparian management is being emphasized. The presence of high public values related to special status species habitats, floodplains, water quality issues, and recreation opportuni-

ties will be considered in evaluating such proposals. Acquisitions will be considered where partnerships, funding, and management priorities will assure long-term commitments to maintain or restore the riparian areas to properly functioning conditions.

- RP-09 Where small or isolated parcels of public land contain riparian resources in unsatisfactory condition, BLM will work with surrounding landowners, municipalities, affected permittees, concerned organizations, and local or state agencies to develop cooperative agreements that will:
 - a) help reestablish desired vegetation,
 - b) implement sound management to accomplish mutual objectives, and
 - c) restore the areas to a healthy condition.
- RP-10 To minimize destruction of essential vegetation, OHV use in riparian areas will be limited to existing roads and trails unless a more restrictive designation is specified. Trails found to impede restoration of degraded areas will be closed, relocated, or subjected to seasonal restrictions to achieve desired conditions. Because of current high-use levels and extensive degradation of streamside vegetation, OHV use on portions of the Virgin and Santa Clara Rivers will be limited to designated roads and trails. Mountain bike use will be limited to existing roads and trails in riparian areas unless subject to a more restrictive designation. See the section on Off-Highway Vehicle Management for OHV use designations.
- RP-11 To minimize disturbance to riparian values, riparian areas will be:
 - a) placed in a right-of-way avoidance category (except in designated corridors),
 - b) closed to sales of fuelwood and mineral materials outside of established community pits, and

c) placed under a no surface occupancy category for fluid mineral leasing activity in riparian zones.

Vegetation Resources

Objectives

BLM's overall objective for vegetation management will be to ensure that the amount, type, and distribution of vegetation on public lands in Washington County reflects desired plant communities. These are defined as plant communities that produce the kind, proportion, and amount of vegetation necessary to meet or exceed management objectives for a given ecological site. Development of such communities will sustain a desired level of productivity for wildlife, livestock, and nonconsumptive purposes while maintaining properly functioning ecological conditions. BLM will apply Utah Standards for Rangeland Health and Guidelines for Grazing Management (Appendix 3) in managing its various resource programs and monitor the results to ensure vegetation management objectives are being met. Collaboration with affected operators, government agencies, Indian tribes, and interested organizations will be promoted to bring together resources needed to complete specific management plans, implement approved recommendations, and monitor and evaluate the results.

BLM will implement management practices on selected vegetation types in areas of suitable soils and annual precipitation to increase the relative composition of desirable browse and grass species to meet important wildlife, livestock, and watershed goals. Objectives for specific vegetation types include the following:

- a) In mountain shrub and sagebrush vegetation types, maximize habitat diversity by reducing the amount of shrubs and sagebrush and increasing grass and forbs in selected areas.
- b) In the pinyon-juniper woodland type, maximize habitat diversity in selected areas by reducing the number of trees and increasing desirable shrubs, grasses, and forbs.
- c) In riparian areas within the mountain shrub type, maximize habitat diversity by maintaining

woody species composition while providing for stream bank protection through adequate forb and grass cover.

These objectives will be achieved through specific actions identified and analyzed in the Dixie Fire Management Plan, allotment management plans, habitat management plans, and other activity plans in the wildlife, watershed, livestock, and riparian programs.

Vegetation Composition

- VG-01 The use and perpetuation of native plant species will be emphasized. However, when restoring or rehabilitating disturbed or degraded rangelands, nonintrusive and non-native species will be approved for use where native species
 - a) are not available,
 - b) are not economically feasible,
 - c) cannot achieve ecological objectives as well as non-native species, and/or
 - d) cannot compete with already established non-native species.
- VG-02 Seed mixes used for rehabilitation will reflect a diversity of plant types suitable to the soils, climate, and landform of the area being restored. Mixes will be designed to meet a range of purposes appropriate for the land involved including wildlife, watershed, soil retention, livestock, and fire ecology.
- VG-03 Rangelands that have been burned, reseeded, or otherwise treated to alter vegetative composition will be closed to livestock grazing as follows:
 - a) burned rangelands, whether by wildfire or prescribed burning, will be ungrazed for a minimum of one complete growing season following the burn, and
 - b) rangelands that have been reseeded or otherwise chemically or mechanical-

ly treated will be ungrazed for a minimum of two complete growing seasons following treatment.

- VG-04 In accordance with national and state policies, BLM will continue working with the Washington County Weed Supervisor through written agreement for the control of noxious weeds on and near public lands. In order to prevent the introduction and spread of noxious weed species, BLM will seek to develop partnerships with landowners, Washington County, state agencies, other federal land management agencies, and interested organizations. Such partnerships will formulate and analyze an integrated weed management approach to develop public awareness programs, establish weed management objectives and priorities, develop and apply common inventory techniques, implement approved treatments and control measures, and monitor and report results.
- VG-05 Specific weed treatments will be determined by plant species, site characteristics, and management objectives. A combination of approaches may be employed to achieve the most environmentally sound results including mechanical, biological, and chemical techniques or changes in land use.
- VG-06 Because demand will rapidly exhaust the available supply, desert vegetation sales will be limited to designated salvage areas only. These areas typically include lands under construction for rights-of-way or other projects undertaken or approved by BLM. Exceptions will be made for:
 - a) specific authorization for the collection of vegetation for scientific purposes, and
 - b) the collection of vegetative products for Native American ceremonial or religious purposes, excluding federally-listed species described in this section.

Special Status Plant Species

Objectives

In addition to the vegetation objectives described previously, BLM will apply appropriate management to special status plant species located on public lands in Washington County. Special status plant species include:

- a) threatened or endangered species listed or species proposed for such listing under the Endangered Species Act,
- b) candidate species, and
- c) state-listed sensitive species. BLM's objective will be to help recover listed species and manage candidate and sensitive species so that additional listings are not necessary. Management will focus on the development and implementation of recovery plans for listed species and conservation agreements and strategies for candidate and other sensitive species.
- VG-07 Where threatened or endangered plant species occur on public lands in Washington County, BLM will collaborate with affected local, state, and federal agencies and researchers in the implementation of approved recovery plans to stabilize and recover such species. In addition to on-the-ground actions, strategies will be developed to provide public education on species at risk, significance of the species to the human and biological communities, and reasons for protective measures that will be applied to the lands involved.
- VG-08 Generally, public lands supporting federally-listed or sensitive plant species will be retained in public ownership unless exchange or transfer will result in acquisition of better habitat for the same species or provide for suitable management by another qualified agency or organization. Habitats for such species may be acquired where logical to block up management areas and where BLM or qualified partners have the resources needed to effectively manage for the intended purpose.

VG-09 The following additional measures will be applied to the plant species indicated to promote their survival and recovery. Other measures may also be employed as a result of yearly monitoring studies and consultations with the FWS, the Utah DWR, and other interested parties:

Dwarf Bear-Claw Poppy and Siler Pincushion Cactus

- a) BLM will continue to implement existing recovery plans, habitat management plans, and the Washington County Habitat Conservation Plan as they apply to these two species. Among other things, the plans call for monitoring and studies, habitat consolidation, selected fencing, public education, signing, law enforcement, and protection from mining, off-road travel, and other forms of impacting land use.
- b) The Red Bluff and Warner Ridge/Fort Pearce habitat areas will be designated and managed as Areas of Critical Environmental Concern (ACECs). Specific prescriptions that will be applied to these areas are described in the section of this plan on ACECs under Special Emphasis Areas.
- c) To reduce conflicts and additional disturbance, habitat areas will be designated as rights-of-way avoidance areas and closed to fuelwood and mineral materials sales. Plants will be protected by restricting mountain bike use and off-road vehicle travel to designated roads and trails.
- d) Dwarf bear-claw poppy habitat adjacent to Webb Hill will be consolidated through land exchange with the Utah School and Institutional Trust Lands Administration, fenced, and signed to increase public awareness of efforts to recover the plant. The area is within the St. George City limits and will remain closed to fluid mineral leasing.

Holmgren Milkvetch and Hermit's Milkvetch

- e) In collaboration with interested local, state, and federal agencies, institutions, and Indian tribes, BLM will prepare conservation agreements and strategies designed to stabilize declining populations and promote protective management to ensure survival of the species.
- f) To reduce conflicts and additional disturbance, habitat areas will be designated as rights-of-way avoidance areas and closed to fuelwood and mineral materials sales. Plants will be protected by restricting mountain bike use and off-road vehicle travel to designated roads and trails.
- g) Prior to surface disturbing exploration or development associated with fluid mineral leasing, botanical surveys will be completed and known populations avoided to eliminate the taking of plants.
- h) Habitat areas will be kept free from use of chemical pesticides and herbicides.
- i) Where necessary to protect small, isolated populations of Hermit's Milkvetch under 10 acres in size, BLM will fence areas to prevent inadvertent destruction of plants.

Other Sensitive Plant Species

j) BLM will continue to work with interested local, state, and federal partners in conducting or authorizing field inventories and studies to establish or refine ranges of occurrence, population data, habitat requirements, and baseline species conditions and subsequent trends. Based on the results of these studies, joint strategies may be developed for habitat protection and to eliminate the need for formal listing.

Fish and Wildlife Habitat Management

Objectives

BLM's overall objective for fish and wildlife habitat management will be to maintain habitats in properly functioning conditions to support natural wildlife diversity, reproductive capability, and appropriate human use and enjoyment. An important objective of BLM's habitat management program will be to work with state, local, and other federal partners to minimize or eliminate the need for additional listing of species under the Endangered Species Act in Washington County.

- FW-01 BLM will manage suitable public land habitats for the recovery or reestablishment of native populations through collaborative planning with local, state, and federal agencies, user groups, and interested organizations. BLM will also seek to limit additional adverse impacts to crucial habitats on public lands from urbanization and encroachment to preserve the integrity of wildlife corridors and migration routes and access to key forage, nesting, and spawning areas.
- FW-02 Consistent with other priorities, BLM will consolidate blocks of public lands resulting in improved habitat management capability. Such will occur in key habitat areas for listed species and other important wildlife populations including, but not limited to, lands within the Washington County Habitat Conservation Plan (HCP) Reserve, the Beaver Dam Slope, the Deep Creek drainage, and in key riparian zones.
- FW-03 Crucial mule deer winter range will be protected from the potential effects of fluid mineral leasing with a Category 2 seasonal stipulation to close the lands to exploration or development from November 1 to April 15. Elk calving areas will be closed for the same reason from May 1 to July 30. These seasonal use restrictions will also be applied to

- mineral materials sales, forest product sales, and rights-of-way construction.
- FW-04 Desert bighorn sheep habitat in the Beaver Dam Mountains will continue to be managed in collaboration with the Utah Division of Wildlife Resources (DWR) to support the existing herd in that location. Existing water developments will be maintained with the help of volunteers and interested organizations.
- FW-05 A West Zion Habitat Management Plan (HMP) will be developed in collaboration with the Utah DWR and other interested parties to guide management of 192,200 acres of wildlife habitat in eastern Washington County. Seven existing HMPs throughout the rest of the county will continue to be implemented.
- FW-06 Prescribed burns in selected areas (including wildfires which meet approved prescriptions in the Dixie Fire Management Plan) will be utilized to improve vegetation composition to benefit wildlife habitat for big game and other species. See the sections of this Plan on Fire Management and Vegetation Composition for further details. A 500 acre sale of pinyon and juniper trees will be approved in the Potters Peak area to improve mule deer habitat.
- FW-07 BLM will collaborate with local, state, and federal agencies, adjacent landowners, users groups, and interested parties to protect and enhance viable fisheries habitat on segments of the Santa Clara River immediately below Baker Dam Reservoir, the upper West Fork of the Beaver Dam Wash, Deep Creek, Crystal Creek, and Kolob Creek. Protective measures will include OHV restrictions, Category 2 and 3 mineral leasing stipulations, pesticide restrictions, and closures to mineral materials sales described in the sections of this Plan on Fluid Minerals, Water Resources,

Riparian Resources, Recreation, and Off Highway Vehicle Management. Enhancement will occur through riparian improvements, stream bank stabilization, gabion construction in suitable areas, water quality improvements, and selected land acquisitions in conjunction with riparian management objectives. Virgin spinedace recovery objectives will take precedence if conflicts develop with fisheries habitat proposals.

FW-08 BLM will work with the Utah DWR to restrict camping from October 15 to November 15 within 0.25 mile of the following water sources west of the Santa Clara River: twelve springs including Cove, Jackson, Red Hollow, Quail, Grapevine, Crazy, Indian, Welcome, Middle, Reber, Summit, and Dodge, all water catchments, and all DWR guzzlers. This seasonal restriction is needed to protect wildlife access to these critical water sources during the fall big game hunting season.

FW-09 In collaboration with the Utah DWR and other interested parties, BLM will develop new wildlife waters in areas where field studies reveal the need for such to maintain healthy, viable populations of mule deer or other game and nongame species. Such waters will be developed in accordance with the objectives and guidelines of applicable game and nongame management plans, habitat management plans, and allotment management plans.

Special Status Animal Species

Objectives

BLM will manage public lands to meet the goals and objectives of recovery plans, conservation agreements and strategies, approved activity level plans, and the Washington County HCP Implementation Agreement related to the recovery of special status animals in Washington County. As part of its plan implementation, BLM will work with its partners to promote public education on species at risk, significance to the human and biological communities, and

reasons for protective measures that will be applied to the lands involved.

BLM's objective will be to collaboratively manage habitat for federally-listed species so as to achieve recovery and delisting. Approved recovery plans will guide management decisions. Recovery plan actions already implemented will be evaluated for effectiveness in achieving desired effects and revised where studies show objectives have not been met.

BLM will also collaborate with appropriate local, state, and federal agencies in the management of habitat for nonlisted special status animal species with the objective of eliminating the need for additional listings. Management actions will be guided by conservation agreements and strategies. Special attention will be given to those animals listed as "sensitive" under the Utah Sensitive Species List maintained by the Utah DWR.

FW-10 Critical habitat for federally-listed species and habitat for candidate species will be designated right-of-way avoidance areas and closed to mineral materials sales. Appropriate use restrictions affecting off-road travel, mineral leasing, mining, recreation, occupancy, and fuelwood sales will be employed where needed to accomplish conservation and recovery objectives.

FW-11 Where monitoring studies show that habitats are being degraded because of discretionary land uses, BLM will collaborate with affected permittees, operators, or user groups, and interested agencies and other parties in designing and implementing changes in the impacting land use to restore the land and meet recovery objectives. Permanent elimination of one or more uses will occur where studies and related data support the conclusion that no other alternatives will resolve the conflict, where affected parties are fully involved throughout the process, and where the requirements of applicable federal regulations for public notification and due process are met.

- FW-12 BLM will collaborate with affected local, state, and federal agencies, water users, Indian tribes, and other interested entities in assessing instream flow requirements needed to sustain viable populations of federally-listed or sensitive fish species. Based on such studies, BLM will promote and support the joint development of strategies for maintaining such flows under Utah State law or other appropriate mechanisms including agreements with affected water users. The Water Resources section of this Plan contains additional information on affected stream segments and related issues.
- FW-13 Public lands supporting federally-listed or sensitive animal species will be retained in public ownership unless exchange or transfer will result in acquisition of better habitat for the same species or provide for suitable management by another agency or qualified organization. Habitats for such species may be acquired where logical to consolidate management areas and where BLM or qualified partners have the resources needed to effectively manage for the intended purpose.
- FW-14 Section 7 consultation with the FWS will be required for any action that might affect federally-listed species or associated critical habitats.
- FW-15 All activities within desert tortoise critical habitat will be conducted in accordance with the terms and conditions described in the U.S. Fish and Wildlife Service Biological Opinion for the Mojave desert tortoise (August 12, 1998). The terms and conditions are outlined in Appendix 4.

Desert Tortoise

Objectives

BLM will work collaboratively with local, state, and federal partners to accomplish the goals and the objectives of the Washington County HCP and Red Cliffs Desert Reserve. Major goals

include the preservation and protection of the desert tortoise and its habitat so as to achieve full recovery of the tortoise as well as other listed or sensitive species found within the Upper Virgin River Recovery Unit.

- FW-16 BLM will continue to implement the terms of the HCP and the Implementation Agreement of February 23, 1996. In accordance with those documents, the following action will be taken:
 - a) BLM will seek to acquire, through exchange, purchase, or donation, state, private, or municipal inholdings within the reserve to reduce fragmented ownership and provide for consistent management. Acquisitions will occur on a "willing buyer-willing seller" basis. Lands so acquired will be managed in accordance with prescriptions planned for the remainder of the area.
 - b) BLM will seek to withdraw HCP lands from mining entry and will restrict motorized travel to designated roads and trails to reduce surface disturbance and related impacts to the resources being protected in the reserve. An offroad travel closure will be placed in the east half of Zone 3 coinciding with the primitive portion of the Washington County HCP Reserve (see Map 3.14 of the draft RMP) to preserve the natural values associated with that area. BLM will work with Washington County and its HCP partners to establish reasonable speed limits in the reserve needed to reduce the likelihood of accidental tortoise deaths from vehicle impacts. Where the HCP partners determine existing roads must be closed, BLM will work with the county to implement the closures under applicable state law and federal regulations.
 - c) BLM will prepare an activity level plan in collaboration with HCP partners and affected user groups to define specific guidelines for human use within the Reserve. Among other things, the

plan will address how to manage hiking, rock climbing, horseback riding, mountain biking, and camping to avoid impacts to critical habitat.

- d) Competitive recreation events will not be allowed because such activities are inconsistent with maintenance or improvement of critical habitats and can be provided for elsewhere in Washington County or in the surrounding areas.
- e) New rights-of-way may be authorized in the Reserve in accordance with protocols established in the HCP for such purposes (see HCP, Appendix A, Washington County, 1995). The protocols are intended to avoid the most sensitive areas in the reserve and to limit habitat disturbance. Among other things the protocols provide for: (a) use of existing corridors in and outside of the HCP Reserve, (b) preliminary project review by HCP biologists to minimize adverse impacts, (c) consultation with the FWS, (d) preconstruction clearance and construction oversight by qualified biologists, (e) avoidance of burrows, (f) fencing and reduction of hazards created by construction activity, and (g) removal of tortoises at risk by qualified personnel.
- f) Fences needed to control tortoise movements or to prevent vehicle or pedestrian traffic in protected areas will be installed, as needed, in accordance with HCP guidelines. In collaboration with user groups, access points will be provided to allow ingress and egress for authorized purposes and use of approved trails.
- g) Where agreement can be reached with permittees, grazing permits will be relinquished after compensation from Washington County and permanently retired on the Alger Hollow, Yellow Knolls, Washington, and Red Cliffs allotments in the Reserve. Other grazing permits in the Reserve may be simi-

- larly retired within tortoise habitat where permittees choose to relinquish them. In accordance with current biological opinions of the FWS, spring grazing after March 31 will not be authorized on those portions of the Leeds, Sandstone Mountain, and Sand Hill allotments in Zone 4 of the reserve to remove potential conflicts during the tortoise active season. No grazing authorization will be granted on lands acquired for reserve management in areas intended for permanent closure.
- h) In collaboration with the Utah DWR and other appropriate law enforcement agencies, BLM will implement public education and enforcement actions needed to accomplish the objectives of the Reserve. BLM will also work with its HCP partners in locating, designing, and operating a desert wildlife education center to foster increased awareness of the important desert ecosystems in the Reserve and throughout Washington County.
- i) BLM will collaborate with the Utah DWR, the FWS, and other interested parties to monitor the status of desert tortoises and to conduct studies needed to accomplish HCP objectives. Such studies may lead to adjustments in Reserve management so as to promote recovery of the tortoise or any other listed or sensitive species in the Reserve.
- j) In accordance with the provisions of the HCP, BLM will work with its HCP partners to achieve congressional designation of the Reserve as a National Conservation Area so as to ensure continued recognition and public support for the maintenance of critical Reserve values.
- k) To meet HCP objectives, lands within the Reserve will also be designated a right-of-way avoidance area and will be closed to mineral materials and fuelwood sales. The Reserve will be placed under Category 3 (NSO) stipulations for

fluid mineral leasing. Such restrictions are necessary inasmuch as essential tortoise habitat requirements and conditions needed for recovery cannot be met in areas impacted by extensive surface disturbance or heavy human activity.

- FW-17 BLM will continue to work closely with the Utah DWR, the FWS, adjacent units of the BLM in Arizona and Nevada, and affected permittees to develop and implement coordinated plans for tortoise management on the Beaver Dam Slope. The Slope extends into three states and forms an essential part of the Northeastern Mojave Recovery Unit as described in the Desert Tortoise Recovery Plan. Through interstate collaboration with its many state and federal partners, BLM will manage the Slope as an Area of Critical Environmental Concern (ACEC) and has established consistent land use prescriptions across state lines designed to protect and help recover tortoise populations in accordance with Recovery Plan objectives.
- FW-18 The Beaver Dam Slope ACEC will also be managed so as to protect and further the objectives of the Woodbury Desert Study Area, the Joshua Tree National Natural Landmark, and the maintenance of important desert ecosystems that include numerous other plants and animals listed under state and federal procedures. The ACEC boundaries have been drawn to coincide as much as possible with the boundaries of the same unit in Arizona and Nevada. The entire ACEC links with Desert Wildlife Management Areas, refuges, and other ACECs proposed for the remainder of the Northeastern Mojave Recovery Unit to provide a contiguous recovery zone of more than 1,750 square miles.
- FW-19 The following use prescriptions will be applied to management of public lands within the Beaver Dam Slope ACEC.
 For additional details, see the discussion on the Beaver Dam Slope ACEC con-

- tained in the section of this Plan under Special Emphasis Areas.
- a) Motorized travel will be restricted to designated roads and trails in order to reduce road proliferation and associated impacts to the habitat, tortoises, and other protected species in the area. BLM will work through Washington County to determine reasonable speed limits and roads needing closure under Utah state law to reduce accidental tortoise deaths from vehicle impacts. Fences will be installed where needed to implement the restrictions and closures. Disturbed surfaces in closed areas will be rehabilitated to achieve natural-like conditions, to the extent practical.
- b) Authorized hunting in season, nonconsumptive recreation, and other casual uses not found to adversely impact tortoise habitat will be allowed. Mountain bikes will be restricted to designated roads and trails. Parking and vehicle-based camping will be restricted to within 25 feet of designated roads.
- c) Except where further restricted, non-commercial groups of over 75 persons camping in open areas will be required to obtain a letter of authorization from BLM that will establish requirements for public sanitation and garbage removal and other terms needed to protect the integrity of the habitat. Competitive events will not be authorized to prevent direct and indirect habitat degradation and tortoise mortality (USDI/FWS, 1994).
- d) BLM will retain lands in this area in public ownership and consider transfer only where such will help accomplish objectives for tortoise recovery. Intensive land uses such as agriculture, sanitary landfills, long-term occupancy, and motorized military maneuvers will not be approved. Non-federal lands within the area may be acquired

through purchase, exchange, or donation to consolidate habitat in public ownership. Lands so acquired will be managed under prescriptions applicable to the adjacent public lands.

- e) Category 3 (NSO) stipulations will be applied to fluid mineral leasing to prevent long-term habitat destruction and direct tortoise mortality from surface disturbing exploration, development, and operations.
- f) The area will be closed to fuelwood and mineral materials sales.
- g) Vegetation sales will be approved only for salvage on approved project construction.
- h) The area will be designated as a right-of-way avoidance area for new rights-of way except in designated utility and transportation corridors. Existing rights-of way will be maintained in accordance with the respective right-of-way grant or other applicable authorization.
- i) Spring grazing by livestock will be eliminated on those portions of the Castle Cliffs, Beaver Dam Slope, and Scarecrow Peak allotments within the ACEC except for the two special management areas recommended by the Utah DWR and the easternmost portion of the Woodbury Desert Study Area, which place emphasis on nontortoise management (see Map 2.9). Winter grazing on these allotments will continue in accordance with current grazing prescriptions from November 1 to March 15. Otherwise, grazing will be managed in accordance with the Desert Tortoise Recovery Plan, BLM's Rangewide Desert Tortoise Plan, and other applicable studies.
- FW-20 In both the Beaver Dam Slope ACEC and the Washington County HCP Reserve, BLM will suppress wildfires in accordance with the guidelines in

Fighting Wildfire in Desert Tortoise Habitat: Considerations for Land Managers, (T. Duck et al, 1994 - Desert Tortoise Council; International Symposium of Wildland Fire, 1995). Generally, the guidelines call for applying the principle of "minimum tool." Under this concept, BLM will use the least disruptive approach to initial attack and fire suppression needed to extinguish the fire and meet other resource objectives for the affected area. Qualified resource advisors will be onsite during fire suppression to guide firefighter activities so as to minimize harm to tortoises and important habitats.

- FW-21 In collaboration with affected state and federal agencies, predator control in either area may be allowed using techniques designed to control target species only. This will reduce the loss of hatchlings and juvenile tortoises to predators such as coyotes and ravens.
- FW-22 Outside of the HCP Reserve and the Beaver Dam Slope ACEC, tortoise habitat now designated as critical will be protected by:
 - a) limiting motorized travel to existing roads and trails;
 - b) applying Category 2 stipulations to fluid mineral leasing to limit exploration and development to the tortoise inactive season from October 15 to March 15;
 - c) closing the areas to fuelwood and mineral materials sales;
 - d) requiring biological surveys before surface disturbing activity and avoidance of den sites and other areas essential to tortoise survival; and
 - e) designating such habitats as right-ofway avoidance areas (outside of utility corridors).
- FW-23 As a result of communications from the FWS, BLM expects that once the HCP

Reserve and Beaver Dam Slope ACEC are in place, any designated critical habitats for the tortoise outside of those special management areas will be withdrawn. (Robert Williams, personal communication and letter of July 21, 1997). Management of tortoises and habitats in such withdrawn areas will continue as outlined immediately above.

Woundfin Minnow, Virgin River Chub, and Virgin Spinedace

Objectives

Management of public land habitat for listed and sensitive fish species in the Virgin River and associated tributaries will be guided by the 1995 Virgin River Fishes Recovery Plan and the 1995 Virgin Spinedace Conservation Agreement and Strategy. Implementation of the plan and the strategy has been underway since their respective approvals and will continue in collaboration with the Utah DWR, the FWS, the Washington County Water Conservancy District, and other interested local, state, and federal entities. The overriding goal is to achieve recovery of the species to allow downlisting and eventual delisting of the two endangered fish and to eliminate the need for listing of the spinedace. Objectives include eliminating significant threats to the fish and their habitats and to stabilize and enhance specific reaches of occupied and historic habitat.

- FW-24 BLM will provide appropriate support to active partners in the Virgin River Fishes Recovery Team in implementing the following measures called for in the plans:
 - a) monitor fish populations and habitat conditions,
 - b) eradicate exotic fish species in selected reaches,
 - c) reintroduce desired native fish species,
 - d) restore degraded habitats,
 - e) implement controls over conflicting land use, and

- f) reestablish instream population maintenance flows through agreements and other appropriate mechanisms.
- FW-25 BLM will continue to work with local, state, and federal partners in formulating and analyzing the proposed Virgin River Management Plan and the proposed Virgin River Basin Integrated Resource Management and Recovery Program. These plans will be designed to promote joint planning and collaboration among active stakeholders and management agencies in matters affecting the Virgin River in Utah, its major tributaries, special status fish species, and other resources dependent upon the river.
- FW-26 BLM will implement protective measures described under sections of this Plan on Water Resources, Riparian Resources, Recreation, Off-Highway Vehicle Management, Livestock Grazing Management, Lands and Realty, and Energy and Mineral Resources to protect and enhance viable fish habitats in the Virgin River, the Santa Clara River, LaVerkin Creek, Ash Creek, and the West Fork Beaver Dam Wash. The measures relate to improved water quality, floodplain protection, point and nonpoint source pollution abatement, riparian restoration, habitat consolidation, and management of potentially conflicting land uses including recreation, rights-of-way, off-road travel, grazing, and mineral development.
- FW-27 Additional river habitat protection will be provided by prescriptions for the Santa Clara/ Gunlock, Santa Clara/Land Hill, and Lower Virgin River ACECs described in the section of this Plan on Special Emphasis Areas.
- FW-28 BLM will seek to acquire nonpublic lands on the Virgin River between Quail Creek Reservoir and LaVerkin Creek in and adjacent to Zones 4 and 5 of the Washington County HCP through exchange, purchase, or donation.

Acquisition of such property will meet goals and commitments associated with the HCP to consolidate habitats for endangered fishes and other listed species in public ownership and allow for permanent habitat preservation.

FW-29 Where proposed new rights-of-way or other permits cannot avoid location within fish habitats, their approval will be subject to necessary mitigating measures and consultation with the FWS. Where new road crossings are proposed, bridge or culvert installation may be required where determined necessary, to allow continued passage of the fish.

Peregrine Falcon, Bald Eagle, Golden Eagle, and Mexican Spotted Owl

Objectives

BLM will continue to implement recovery plans for the federally-listed species and collaborate with the Utah DWR and interested conservation groups in conducting inventories, protecting nest sites and aeries, and preserving associated habitats.

- FW-30 A fluid mineral leasing Category 2 seasonal stipulation will be applied to a 0.5 mile area around known active nest sites closing the lands to exploration and drilling for the following species: golden eagle (February 1 to June 30); peregrine falcon (March 15 to June 30); and the Mexican spotted owl (February 1 to August 31).
 - a) These seasonal restrictions will also be applied to all authorizations for fuelwood permits, mineral materials sales, construction activity, and competitive recreation permits issued for the lands involved. The bald eagle winters but does not nest in this area.
 - b) Prescriptions described for the HCP Reserve, the Canaan Mountain ACEC, and the Deep Creek Special Recreation Management Area will serve to protect nest sites and associated habitats for several sites on public lands administered by the St. George Field Office.

FW-31 Bald eagle protection will be afforded primarily through riparian habitat protection measures described in the section of this Plan on Riparian Resources. Proposals for new permitted actions that might impact wintering bald eagles roosting outside of riparian zones will be approved only after full mitigation is applied and consultation is completed with the FWS.

Southwestern Willow Flycatcher

- FW-32 As of the date of this publication, no critical habitat for the endangered Southwestern willow flycatcher has been designated in Utah, nor has a recovery plan been prepared by the FWS. BLM will collaborate with affected local, state, and federal partners in completing field inventories and other studies to establish habitat locations and requirements.
- FW-33 BLM will protect potential flycatcher habitat through implementation of land use prescriptions for riparian resources described earlier in this Plan. Among other things, the prescriptions will allow no surface occupancy for fluid mineral leasing, limit off-road travel, discourage right-of-way construction, and prohibit sales of fuelwood and mineral materials. The prescriptions also call for retention and acquisition of prospective habitat.
- FW-34 Where known active nest sites are located on public lands, BLM will implement seasonal closures for the period of April 1 to August 30 within 0.5 mile of nests for discretionary permits authorizing construction or other disruptive activity.
- FW-35 In conjunction with affected partners and landowners, BLM will help identify desired plant communities needed to support viable flycatcher habitat.

 Where consistent with FWS consultations, BLM will work with its partners in reestablishing desirable plant species, including willow and cottonwood, for

long-term habitat enhancement and removal of undesired species in selected areas.

Other Special Status Animal Species

- FW-36 Overnight camping will not be allowed within 1 mile of the Fort Pearce Historic Site to protect habitat important to the spotted bat. The 40 acres surrounding the site will be further protected by:
 - a) allowing no surface disturbance for fluid mineral leasing activity, and
 - b) closing the lands to OHV use. Habitat outside of the area within the Warner Ridge/Fort Pearce ACEC will be further protected by restricting OHV use to designated roads and trails and restricting or closing mineral activity.
- FW-37 Livestock grazing will be managed so as to expand and improve the Fort Pearce riparian area, which is essential to bat survival.
- FW-38 Pesticide use will not be allowed within the Fort Pearce Wash riparian zone.
- FW-39 Biological surveys will be conducted to identify sensitive species occurrence, nesting sites (for the northern goshawk and ferruginous hawk), and special habitat requirements. Data gained from the surveys will be used by BLM, Utah DWR, and other affected partners to develop and implement recommendations for habitat management needed to maintain healthy populations of the species involved and reduce the need for additional listings.

Livestock Grazing Management

Objectives

BLM objectives for grazing management on public lands throughout Washington County will be to:

a) promote healthy, sustainable rangeland ecosystems that produce a wide range of public

- values such as wildlife habitat, livestock forage, recreation opportunities, clean water, and safe and functional watersheds;
- b) restore and improve public rangelands to properly functioning condition, where needed;
- c) provide for the sustainability of the western livestock industry and communities that are dependent upon productive, healthy rangelands; and
- d) ensure that public land users and stakeholders have a meaningful voice in establishing policy and managing public rangelands.
- GZ-01 After extensive public review and participation from diverse fields of expertise and interest, the Secretary of the Interior approved Standards for Rangeland Health and Guidelines for Grazing Management for BLM Lands in Utah on May 20, 1997 (see Appendix 3). To achieve the objectives stated above, BLM has integrated the standards into applicable portions of this Plan and will apply both the standards and guidelines to its grazing management program throughout Washington County. In concert with livestock operators, other affected agencies, and interested publics, BLM will monitor key indicators addressed by the standards and assess whether the standards are being met. Where it is determined that an allotment is not meeting a standard, BLM will work with affected partners to determine why the standard was not being achieved and prescribe actions that will ensure satisfactory progress. Existing grazing systems and practices will be modified where the assessment and monitoring strategy indicates livestock grazing is wholly or partly responsible.
- GZ-02 In consultation with affected operators, allotment categories will be reviewed and revised, where needed, to respond to changing resource conditions.
- GZ-03 Recognizing that extensive land exchanges and conveyances out of pub-

lic ownership are highly disruptive to the stability of affected grazing operations, BLM will generally retain public lands in solidly blocked public lands areas west of St. George City, the Shivwits Indian Reservation, and the Gunlock road. Exceptions will be considered where needed to satisfy existing exchange agreements, to meet essential public or municipal purposes, or to accomplish overriding resource management objectives. Public land retention guidelines for special management areas throughout the remainder of Washington County are described in the sections of this plan that address each management area. Affected grazing operators will be given a minimum of 2 years notification prior to the cancellation of all or part of a grazing lease or permit due to the disposition of public lands.

- GZ-04 Special emphasis will be placed on assessing potential conflicts between livestock grazing and deer winter range on 35,325 acres within the Pintura, Minera, Gunlock, Washington, Red Cliffs, and Yellow Knolls allotments. Grazing systems, season of use, numbers of livestock, and/or allotment categories may be adjusted if monitoring and assessments show that current grazing practices are impeding the achievement of goals for properly functioning habitats. Because grazing on all or portions of the Red Cliffs, Washington, and Yellow Knolls allotments is scheduled for retirement under prescriptions for the Washington County Habitat Conservation Plan (HCP), potential conflict throughout much of this area will be eliminated.
- GZ-05 Within desert tortoise critical habitats, grazing permits will be permanently retired on the Alger Hollow, Red Cliffs, Yellow Knolls, and Washington allotments in accordance with Washington County HCP recommendations. In accordance with current biological opinions of the FWS, spring grazing after March 31 will not be authorized in

those portions of Sandstone Mountain and Sand Hill allotments in Zone 4 of the HCP Reserve to reduce potential conflicts during the tortoise active season. Grazing permits in these allotments may also be retired where permittees choose to relinquish them. Spring grazing will also be eliminated on portions of the Beaver Dam Slope, Castle Cliffs, and Scarecrow Peak allotments within the Beaver Dam Slope Area of Critical Environmental Concern (ACEC) to reduce potential conflicts outside of the three special management areas (see Map 2.9). Winter grazing will continue to be authorized in these allotments from November 1 to March 15. Otherwise, grazing will be managed in accordance with applicable portions of the Desert Tortoise Recovery Plan, BLM's Rangewide Desert Tortoise Plan, the Washington County HCP, and the Beaver Dam Slope coordinated ACEC.

- GZ-06 Conversions of kinds of livestock from cattle to sheep will not be allowed where BLM, in consultation with the Utah Division of Wildlife Resources (DWR), determines that such will jeopardize the health or viability of existing herds of desert bighorn sheep in the Beaver Dam Mountains.
- GZ-07 To promote cost effective management, grazing transfers resulting in fragmentation of allotments or increased numbers of permittees with smaller grazing authorizations will not be approved unless necessary to meet overriding management objectives.
- GZ-08 Where they are meeting approved goals and applicable standards and guidelines, existing vegetation treatments will be maintained in the Central, Dagget Flat, Desert Inn, Gooseberry, Jackson Wash, Little Creek, Pintura, Twin Peaks, Veyo, and Black Ridge allotments. BLM will seek to maintain forage production in these areas between 3 and 7 acres per animal unit month. Treatment areas will be placed in VRM Class III or IV. Where consistent with the objectives of

- this Plan, fire rehabilitation projects will be maintained to achieve desired plant communities for livestock and wildlife forage and watershed protection.
- GZ-09 Rangeland projects may be developed where assessments show the need to improve livestock management by establishing proper livestock control or distribution. Projects may include installation of cattle guards, development or reconstruction of water sources, and construction of drift or pasture fences. New vegetation treatments developed in accordance with applicable standards and guidelines may be employed in suitable habitats where needed to increase forage for livestock, wildlife, and other resource purposes. Methods for completing land treatments are described and analyzed in the Final **Environmental Impact Statement for** Vegetation Treatment on BLM Lands in the 13 Western States (USDI/BLM, 1991).
- GZ-10 Public lands within the following allotments or pastures are permanently closed to grazing for resource or administrative purposes:
 - Rockville Allotment administrative
 - Highway Pasture/New Harmony Allotment - administrative
 - Upper South Creek Allotment resource/administrative
 - Allotments retired within the Washington County HCP Reserve resource
 - Fenced portion of the Woodbury Desert Study Area - resource

Administrative closures occur where poor land configuration, limited size, lack of access or water, or the cost of needed range developments make grazing authorizations impractical. Where such factors are determined to make grazing impractical on other pastures or splinter allotments, BLM will consider implementation of similar closures after appropriate analysis and public review.

- GZ-11 The following guidelines will be applied to grazing management in order to help achieve approved standards on public lands within Washington County:
 - 1. Grazing management practices will be implemented that:
 - a) maintain sufficient residual vegetation and litter on both upland and riparian sites to protect the soil from wind and water erosion and support ecological functions:
 - b) promote attainment or maintenance of proper functioning condition riparian/wetland areas, appropriate stream channel morphology, desired soil permeability and infiltration, and appropriate soil conditions and kinds and amounts of plants and animals to support the hydrologic cycle, nutrient cycle, and energy flow;
 - c) meet the physiological requirements of desired plants and facilitate reproduction and maintenance of desired plants to the extent natural conditions allow;
 - d) maintain viable and diverse populations of plants and animals appropriate for the site;
 - e) provide or improve, within the limits of site potentials, habitat for threatened or endangered species;
 - f) avoid grazing management conflicts with other species that have the potential of becoming protected or special status species;
 - g) encourage innovation, experimentation, and the ultimate development of alternatives to improve rangeland management practices; and
 - h) give priority to rangeland improvement practices and land treatments that offer the best opportunity for achieving the standards.

- 2. Spring and seep developments will be designed and constructed to protect ecological processes and functions and improve livestock and wildlife distribution.
- 3. New rangeland projects for grazing will be constructed in a manner consistent with the standards. Considering economic circumstances and site limitations, existing rangeland projects and facilities that conflict with the achievement or maintenance of the standards will be relocated and/or modified.
- 4. Livestock salt blocks and other nutritional supplements will be located away from riparian/wetland areas or other permanently located or other natural water sources. BLM will encourage that the locations of these supplements be moved every year.
- 5. The use and perpetuation of native plant species will be emphasized. However, when restoring or rehabilitating disturbed or degraded rangelands, nonintrusive, non-native plant species are appropriate for use where native species (a) are not available, (b) are not economically feasible, (c) cannot achieve ecological objectives as well as non-native species, and/or (d) cannot compete with already established nonnative species.
- 6. When rangeland manipulations are necessary, the best management practices, including biological processes, fire, and intensive grazing, will be utilized prior to the use of chemical or mechanical manipulations.
- 7. When establishing grazing practices and rangeland improvements, the quality of the outdoor recreation experience will be considered. Aesthetic and scenic values, water, campsites, and opportunities for solitude will be among those considerations.
- 8. Feeding of hay and other harvested forage (which does not refer to miscel-

- laneous salt, protein, and other supplements) for the purpose of substituting for inadequate natural forage will not be conducted on public lands other than in (a) emergency situations where no other resource exists and animal survival is in jeopardy, or (b) situations where the Authorized Officer determines such a practice will assist in meeting a standard or attaining a management objective.
- 9. In order to eliminate, minimize, or limit the spread of noxious weeds, (a) only hay cubes, hay pellets, or certified weed-free hay will be fed on public lands, and (b) reasonable adjustments in grazing methods, methods of transport, and animal husbandry practices will be applied.
- 10. To avoid contamination of water sources and inadvertent damage to non-target species, aerial application of pesticides will not be allowed within 100 feet of a riparian/wetland area unless the product is registered for such use by the Environmental Protection Agency.
- 11. On rangelands where a standard is not being met and conditions are moving toward meeting the standard, grazing may be allowed to continue. On lands where a standard is not being met, conditions are not improving toward meeting the standard or other management objectives, and livestock is deemed responsible, administrative action will be taken by the Authorized Officer pursuant to 43 CFR 4180.2(c).
- 12. Where it can be determined that more than one kind of grazing animal is responsible for failure to achieve a standard and adjustments in management are required, those adjustments will be made to each kind of animal, based on interagency cooperation as needed, in proportion to their degree of responsibility.
- 13. Rangelands that have been burned, reseeded, or otherwise treated to alter

vegetative composition will be closed to livestock grazing as follows: (a) burned rangelands, whether by wildfire or prescribed burning, will be ungrazed for a minimum of one complete growing season following the burn, and (b) rangelands that have been reseeded or otherwise chemically or mechanically treated will be ungrazed for a minimum of two complete growing seasons following treatment.

14. Conversions in kind of livestock (such as from sheep to cattle) will be analyzed in light of rangeland health standards. Where such conversions are not adverse to achieving a standard or they are not in conflict with BLM land use plans, the conversion will be allowed.

Forestry Management

Objectives

BLM's objective for forestry management is to provide woodland products on a sustained yield basis to meet local needs where such use does not limit the accomplishment of goals for the management of other important resources.

Where feasible, harvest of forest products will be encouraged in areas of proposed or existing vegetative treatments to lessen the need for additional treatment or land disturbance.

- FR-01 Noncommercial fuelwood harvest of up to 4,100 cords of dead and downed pinyon and juniper trees will be allowed on public lands except in closed areas depicted in Table 2-8.

 Harvest areas are shown on Map 2.10.

 Seasonal restrictions will be applied to deer winter range and elk calving areas.

 Specific harvest areas will be identified on permits issued for such purposes.
- FR-02 A maximum of 500 noncommercial Christmas tree permits per year will be allowed. Additional trees may be offered for sale in areas where thinning will meet vegetation management objectives. Christmas tree sales will not be permitted in areas closed to fuelwood sales as depicted in Table 2-8. Specific Christmas tree sales areas may be designated based on additional site specific analysis.
- FR-03 Harvesting of trees other than pinyon or juniper will not be allowed unless nec-

Table 2-8 • Fuelwood Harvest Area Designations

	ACRES
Open to Fuelwood Harvest	126,192
Seasonal Restrictions on Fuelwood Harvest Mule Deer Winter Range closed November 1 to April 15	28,530
Elk Calving Areas closed May 1 to July 30	
Closed to Fuelwood Harvest	51,086
Washington County HCP Reserve	
Red Cliffs and Baker Dam Recreation Areas	
OHV Closed Areas (See Table 2-10)	
Proposed ACECs (except for Little Creek Mountain Proposed ACEC	
and lower portion of Upper Beaver Dam Wash Proposed ACEC	
Riparian Areas	
Smithsonian Butte National Back Country Byway (within 1/2 mile radius)	
River segments with a tentative classification of Wild,	
proposed as suitable for Congressional NWSRS designation	
Threatened and Endangered Plant and Animal Species Habitat	
Candidate Plant and Animal Species Habitat	
Beaver Dam Mountains Wilderness Area	

essary for thinning, salvage, or meeting other approved management objectives.

- FR-04 A maximum of 1,200 cords per year of green fuelwood will be available for noncommercial harvest in designated areas on 34,080 acres. Seasonal restrictions on cutting from November 1 to April 15 will be placed on 7,500 acres of crucial deer winter range. Harvest will be approved only where sale areas have been marked on the ground
- FR-05 Tree thinning permits or contracts may be allowed to facilitate a prescribed burn on 500 acres of the Potters Peak wildlife vegetation treatment project. Sales of green fuelwood may be allowed within other vegetation treatment areas or designated pinyon/juniper areas to facilitate achievement of desired vegetation composition. All such sales will be subject to further site specific analysis and will be designed to meet objectives for wildlife and watershed management.
- FR-06 Post permits will be issued for up to 1,600 posts in three specific cutting areas on 4,070 acres depicted on Map 2.10.
- FR-07 Onsite use of dead and down fuelwood for campfires will be allowed except where otherwise prohibited by planning decision or permit stipulations.
- FR-08 Seed harvests will be authorized under permit for selected grasses, forbs, and shrubs, but not for cacti, yucca, or special status plant species listed under state or federal rules. Harvest will be allowed only by hand in areas outside of critical habitats, areas of critical environmental concern (ACECs), designated wilderness, wild and scenic rivers and study areas, recreation sites and campgrounds, areas undergoing vegetation rehabilitation, and highway rights-ofway. No more than 25 percent of the seed available in any one area may be harvested.

Recreation

Objectives

BLM's objective for recreation management will be to provide an array of quality recreation experiences within the agency's capability and logical recreation niche to meet the reasonable needs and expectations of local residents and visitors from outside the area. Because the fiscal and staffing resources available to BLM are likely to remain inadequate to fully accomplish this objective, BLM will use innovative partnerships, pursue grant monies, and work with volunteers, organized user groups, and other recreation providers in developing and managing selected recreation opportunities on the public lands. In managing the overall recreation program, BLM will seek to:

a) establish collaborative partnerships with state and local governments, Indian tribes, other federal agencies, the private sector, and interested organizations in developing recreational plans and opportunities, maintaining facilities, and conducting public information and education programs;

b) reduce potential conflicts between various recreation groups, raise public awareness of impacts of increased recreation use on established user groups and adjacent landowners, and promote outdoor ethics that instill respect for property and natural resources;

c) eliminate unacceptable impacts to important and at risk resources on public lands including wildlife habitats, listed and sensitive species, riparian areas, watersheds, fragile soils, water quality, cultural resources, wilderness values, and the spectacular scenery throughout Washington County; and

d) in accordance with federally-approved programs and guidelines, establish reasonable and appropriate fees that can be returned to the local area to maintain public facilities and provide essential recreation information to the using public.

Public lands in Washington County will generally remain open to most forms of outdoor recre-

ation including, but not limited to, hiking, touring, camping, hunting, picnicking, sightseeing, rock hounding, mountain biking, equestrian use, swimming, fishing, rafting/kayaking, rock climbing, target shooting, and various forms of motorized recreation except as otherwise prescribed in the following sections. Prescriptions for offroad travel are described separately in the section on Off-Highway Vehicle Management. Activities on public lands within incorporated city limits such as shooting, camping, or commercial permits may be further constrained by applicable city ordinances designed to protect public health, safety, and welfare.

Extensive Recreation Management Areas

Extensive Recreation Management Areas are those public land areas where recreation management is only one of several management programs applied to the land and where recreation is typically extensive and unstructured in character. Such areas may contain occasional recreation sites such as the Baker Dam or Red Cliffs facilities. Emphasis will be placed on dispersed recreation, trail development, signing, maintenance of primitive and semiprimitive characteristics, management or abatement of natural and man-made hazards, and protection of resources and sites of recreational interest.

- RC-01 A total of 501,630 acres of public land in the county fall within Extensive Recreation Management Areas. This includes the designated Beaver Dam Mountains Wilderness Area which will no longer be classified as a Special Recreation Management Area because of provisions in the Paiute and Beaver Dam Mountains Wilderness Management Plan (1987).
- RC-02 BLM will work collaboratively with affected user groups and organizations, state and local officials, and other interested parties in identifying existing and potential trails and use areas to meet public needs for hiking, mountain biking, rock climbing, and equestrian use. Where appropriate, BLM will enter into

cooperative agreements with applicable partners to plan for, implement, and maintain such areas. Site steward programs may also be employed to put volunteers on the ground to monitor use and resource conditions and provide assistance for sign installation and maintenance, visitor information, and detection of conflicts or violations. Where appropriate, BLM will work with partners to map and profile approved trails and develop guides to help users remain safe, well-prepared, and informed of special conditions needed to protect sensitive resources.

- RC-03 BLM will collaborate with the Utah Department of Transportation and other affected agencies in making public lands available for a bikeway within the right-of-way of portions of Utah Highway 18 between Central and St. George.
- RC-04 Mountain bike use on public lands will be subject to the open, limited, and closed designations described in Table 2-9 and shown on Map 2.11. Closures or limitations reflect the minimum constraints necessary to protect sensitive resources from impacts of sustained biking use over many years. In addition, the mountain bike closure on lands directly north of the town of Rockville, previously published in the Federal Register (Volume 61, Number 123, July 9, 1996), will remain in effect until site specific planning has been completed for that area.
- RC-05 Dispersed camping in undeveloped areas will be allowed in accordance with the public notice of December 14, 1992 (Federal Register, Vol. 57, No. 240, p. 59121), where the lands are not otherwise closed to such use. To prevent degradation of natural resources and the use of public lands for unauthorized occupancy, dispersed camping by any person or group of persons will be limited to 14 days within a 30-mile radius in a 28-day period.

Table 2-9 • Mountain Bike Use Designations

	TOTAL ACRES
Open to Mountain Bike Use	421,852
Open for Use on Existing Roads and Trails	3,163
Riparian Areas	
Open for Use on Designated Roads and Trails	112,286
Upper Beaver Dam Wash ACEC (in part)	
Beaver Dam Slope ACEC	
Red Bluff ACEC	
Warner Ridge/Fort Pearce ACEC	
Lower Virgin River Proposed ACEC	
Santa Clara River-Gunlock ACEC	
Santa Clara River-Land Hill ACEC	
Washington County HCP Reserve (in part)	
Threatened and Endangered Plant Species Habitat	
Candidate Species Plant Habitat	
Portions of the riparian areas along the Virgin River near Virgin and Grafton	
Rockville Bench	
Red Cliffs and Baker Dam Recreation Areas	

Closed to Mountain Bike Use

91,704

ROS Primitive Areas (except the Volcano Knoll crossing)

River segments with a tentative classification of Wild,

proposed as suitable for Congressional NWSRS designation

Upper Beaver Dam Wash ACEC (in part)

Ripple Arch

Dinosaur Trackway

Watchman Area

Fort Pearce Historical Site

Red Mountain ACEC

Canaan Mountain ACEC

Beaver Dam Mountains Wilderness Area

RC-06 Camping areas for long-term winter visitors will not be established on public lands administered by the St. George Field Office. Permanent funding for management of such areas is lacking and suitable lands free of impacts to sensitive resources and existing land uses are generally not available. Private facilities for such purposes exist throughout Washington County. BLM will, however, provide public outreach and education for such user groups

through interpretive lectures, displays, media presentations, user guides, and other materials produced in collaboration with many private, local, and state representatives and organizations interested in public land resources and issues.

RC-07 Facilities for camping, sanitation, and picnicking at the Baker Dam and Red Cliffs Recreation Areas will be maintained and upgraded as needed to

- achieve management objectives for safety, resource protection, and quality recreational experiences.
- RC-08 To protect public investments and facilities from incompatible disturbance, conveyance, or activities, the following prescriptions will be applied to developed recreation sites at Baker Dam and Red Cliffs:
 - a) BLM will seek to withdraw the sites from mining location (290 and 1,085 acres respectively);
 - b) the areas will be closed to mineral materials and fuelwood sales;
 - c) Category 3 (NSO) stipulations will be applied to the areas for fluid mineral leasing; and
 - d) motorized vehicle and mountain biking use will be allowed on designated roads and trails only.
- RC-09 BLM will work with its local and state partners in promoting public education on outdoor ethics including the Leave No Trace program to foster a heightened awareness of the need to protect public resources from indiscriminate use.
- RC-10 Groups of more than 75 persons will be required to obtain a letter of authorization prior to camping on undeveloped public lands except where more restrictive rules apply. Such groups will be required to provide their own portable sanitary facilities, properly dispose of garbage, and comply with other good sense rules for public safety and protecting the land.
- RC-11 To improve sanitation, reduce over-crowding, enhance public safety, restore degraded areas, and minimize impacts to intermingled private lands, camping in undeveloped areas will be prohibited up to 1 mile from the Baker Dam and Red Cliffs Recreation Sites. Where necessary, public land boundaries will be marked to assist visitors in identifying adjacent private property.

- RC-12 Camping will be prohibited along the Smithsonian Butte National Back Country Byway for a distance of 0.5 miles on either side of the road to preserve the scenic and backcountry experience for visitors. For this same reason, the 0.5 mile corridor along the Byway will be designated a right-of-way avoidance area, placed in fluid mineral leasing Category 3 (NSO), closed to fuelwood sales, and designated a VRM Class II area.
- RC-13 In collaboration with the Utah Division of Wildlife Resources (DWR), BLM will restrict camping from October 15 to November 15 within 0.25 mile of all water catchments, wildlife guzzlers, and the 12 springs located west of the Santa Clara River as described under the section on Fish and Wildlife Habitat. This seasonal restriction is needed to protect wildlife access to these critical water sources during the fall big game hunting season.
- RC-14 BLM will work with state and local officials, affected permittees, and other interested parties in evaluating and implementing appropriate closures, seasonal use restrictions, rotation strategies, and other measures along key, undeveloped riparian areas currently experiencing heavy impacts from camping and recreation use. The areas include, but are not limited to, the Santa Clara River below Gunlock and at Land Hill and the Virgin River near Grafton. Such measures will be needed to allow for revegetation, reduce overcrowding, and eliminate growing sanitation and public safety problems.
- RC-15 Lands in a primitive recreation opportunity spectrum (ROS) class, including portions of the Beartrap Canyon, Taylor Creek Canyon, LaVerkin Creek Canyon, and Cottonwood Canyon areas, will be managed to preserve primitive recreation opportunities. For this reason, they will be placed in fluid mineral leasing Category 3 (NSO), designated as

- rights-of-way avoidance areas, closed to off-road travel, and closed to mineral materials and fuelwood sales.
- RC-16 BLM will continue to work collaborative-ly with its many private, local, state, federal, and Indian partners in developing and implementing recreation opportunities along the Virgin and Santa Clara Rivers. Among other things, this will include the creation of a 48-mile long, multiuser trail system and greenway along the river corridors between Zion National Park and Gunlock Reservoir. BLM will make selected lands available for trails, trail heads, interpretive sites, and other related facilities.
- RC-17 BLM will consider development of the following management activities and opportunities on public lands. Actual implementation will not take place unless site specific planning is completed and necessary partners and resources become available. Strategies and funding for permanent maintenance of proposed facilities will need to be in place before BLM may act on development plans.
 - a) BLM will work with Washington County Habitat Conservation Plan (HCP) partners and interested user groups in identifying, designating, and maintaining hiking, biking, and equestrian trails, trail heads, and rock climbing areas in the HCP Reserve. Trail and area locations and use prescriptions will be designed to avoid negative impacts to the sensitive resources being managed in the Reserve.
 - b) Camping facilities, special use areas, or water-based recreation opportunities may be developed in cooperation with state and local governments on or adjacent to proposed or existing reservoirs where it is determined that such are consistent with reservoir purposes and objectives for land use in the surrounding area.
 - c) Bloomington Cave will be monitored periodically and appropriate guidelines

- implemented to provide for visitor safety and protection of cave resources.
- d) BLM will work collaboratively with local, state, and federal partners including BLM units in adjacent areas to develop interpretive displays with improved access along major tourist routes to increase public awareness and provide an enhanced recreation experience relating to significant historical and natural features. Such will include a partnership with the Vermillion Cliffs Highway initiative for northwest Arizona and southwest Utah.
- e) In collaboration with local communities, historical associations, and interested government agencies, BLM will assist in marking and signing portions of the Spanish Trail that cross public lands in Washington County.
- f) In collaboration with local communities, organizations, and volunteer groups, BLM will enter into cooperative agreements to establish collection boxes outside of regular fee areas to receive voluntary donations from members of the using public at selected special use areas and interpretive sites to be applied to the cost of maintenance and providing public information.
- g) Where developed recreation facilities are maintained or proposed, BLM will consider the use of concessionaire management to provide improved visitor services while minimizing the need for appropriated funds.

Special Recreation Management Areas

Special Recreation Management Areas (SRMAs) are well-defined land units that support a combination of natural features that make them attractive and manageable for interrelated recreation opportunities on a sustained basis. Investment and levels of management are typically higher than what is required across most of the Extensive Recreation Management Areas for

public lands in Washington County. Emphasis will be placed on maintaining specific features or recreation opportunities that make them unique or particularly desirable to recreationists and other members of the public.

- RC-18 Four new SRMAs are designated under this plan including Sand Mountain, Red Mountain/Santa Clara, Deep Creek, and LaVerkin Creek/Black Ridge. Canaan Mountain will continue to be managed as an SRMA. The SRMAs cover 127,375 acres and are depicted on Map 2.12. BLM will prepare recreation management plans for each SRMA. The SRMAs are described below.
- RC-19 Lands classified as primitive under the recreation opportunity spectrum, including portions of the Canaan Mountain, Red Mountain, LaVerkin Creek/Black Ridge, and Deep Creek SRMAs, will be managed to preserve primitive recreation opportunities. For this reason, they will be placed in fluid mineral leasing Category 3 (NSO), designated as rights-of-way avoidance areas, closed to off-road travel for motorized vehicles and mountain bikes. and closed to mineral materials and fuelwood sales. In such areas, mining plans of operation will be required for all mining activity beyond casual use.
- RC-20 **Sand Mountain SRMA** encompasses 40,725 acres of public land. BLM will apply the following management prescriptions relating to recreation management within the area. Where further analysis, planning, or resources are required, actual development or implementation will not take place until such analysis is completed and resources become available.
 - a) BLM will work with local and state agencies in developing recreation plans for lands surrounding the proposed Sand Hollow reservoir once it is constructed. Such plans may provide for staging areas, parking, information displays, and other visitor facilities needed

- to accommodate increased recreation and OHV use expected to occur throughout the immediate area.
- b) Where consistent with the goals and policies of both agencies, BLM will consider entering into a cooperative management agreement with the Utah Division of Parks and Recreation that will allow State Park officials to exercise day-to-day management of access and recreation on selected public lands surrounding the proposed reservoir and on Sand Mountain. Such will be designed to achieve consistent management, law enforcement, user fees, and visitor services. Leases or conveyances under the Recreation and Public Purposes Act may be considered where high amounts of capital investment are involved for campgrounds and related facilities.
- c) BLM will work with user groups and other interested parties to identify and, where appropriate, develop OHV trail systems that will connect with similar trail systems and suitable roads in Arizona. One or more loops will continue to be authorized for yearly competitive events. Where needed to minimize cumulative impacts to soils and other resources, competitive events may be rotated amongst established courses in collaboration with the BLM Arizona Strip Field Office.
- d) BLM will work with interested user groups to identify, develop, and maintain up to 50 miles of equestrian trails near Sand Mountain to meet growing demands for such use. Organized events will be managed under terms designed to avoid sensitive resources and conflicts with OHV use.
- e) Generally, lands within this SRMA not already identified in this Plan for disposal or included in current exchange agreements will be maintained in public ownership to provide long-term stability for user groups such as the OHV community who, as a result of urbanization and land use restric-

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tions, have lost much of their traditional open use areas.

- f) The Fort Pearce and Honeymoon Trail historic sites will be maintained and explained through appropriate interpretive displays for public enjoyment and education.
- g) The Dinosaur Trackway paleontological site, visitor parking area, and interpretive signs will be maintained to enhance site security and public education.
- h) Where previously constructed monuments are missing or in disrepair, BLM will work with local and state historical associations and other interested parties to remark selected portions of the Dominguez-Escalante Historic Trail.
- i) No camping will be authorized within 1 mile of Fort Pearce or the Dinosaur Trackway to protect the sites from excessive human encroachment and to protect sensitive riparian values and wildlife habitat along the Fort Pearce Wash. Both sites (40 acres each) will be closed to motorized travel to protect the historic structure and the dinosaur tracks.
- j) BLM will seek to obtain a 4,240-acre mineral withdrawal for the Dinosaur Trackway and the Warner Ridge/Fort Pearce ACEC to protect listed species habitat and important historical and pale-ontological sites from mining development. Until such time as a withdrawal is in place, mining plans of operation will be required to afford a minimum level of protection. These sites will also be closed to mineral materials sales and placed in fluid mineral leasing Category 3 (NSO).

Recreation Opportunity Spectrum Setting Semiprimitive motorized (39,940 acres), rural (785 acres).

Main Attractions

Sand dune OHV riding area, Dinosaur Trackway paleontologic site, Fort Pearce historic site, historic trails, Warner Valley Road.

Main Recreation Activities

OHV riding and competitive events, horseback riding, scenic driving and viewing, visiting historic and paleontologic sites, natural history education, semiprimitive recreation, undeveloped camping, picnicking, guided tours, and recreation instruction.

encompasses 23,725 acres of public land. BLM will apply the following prescriptions relating to recreation managers

Red Mountain/Santa Clara SRMA

scriptions relating to recreation management within the area. Where further analysis, planning, or resources are required, actual development or implementation will not take place until such analysis is completed and resources become available.

- a) The Red Mountain trail head and hiking trail off Utah Highway 18 north of Snow Canyon State Park will be improved and maintained in partnership with interested agencies or user groups.
- b) BLM will work with affected user groups, landowners, and local and state agencies to identify, develop, and maintain a 60-mile equestrian trail near Red Mountain. Organized events will be managed under terms designed to avoid impacts to sensitive resources in the vicinity of the trail.
- c) BLM will consider entering into cooperative management agreements with the Utah Division of Parks and Recreation that will allow Snow Canyon State Park officials to exercise day-to-day management of access and recreation on public lands immediately to the north and west of Snow Canyon State Park and in Paradise Canyon on the southeast to protect important resources and provide law enforcement and visitor services. The decisions of this Plan are intended to complement the goals, objectives, and decisions of the 1998 Snow Canyon State Park Resource Management Plan. Among other things, such agreements may provide for joint development of hiking, biking, and

equestrian trails and use areas for rock climbing and concessionaire services. Moreover, coordinated management, signing, user fees, interpretive programs, and land use prescriptions may be developed and employed to bring consistency for recreationists using both state and federal lands in this area.

- d) Management of recreation activities within those portions of the SRMA that overlap the Washington County HCP Reserve will conform to approved decisions of the HCP and any subsequent activity level plans for the protection of desert tortoises, their habitat, and other natural features.
- e) Commercial use on Red Mountain will be limited to groups of 12 or less persons per trip with no more than three commercial permittees using an area at one time to reduce user impacts on the natural values of the area. For the same reason, pack animals will be limited to 15 head per trip. Weed-free hay for pack animals will be required of the permittees to prevent the further spread of invasive weeds. Additional limits on the amount of use will be developed, as needed, to maintain important resource values within sensitive parts of the SRMA.
- f) BLM will work with local and state agencies, affected permittees, and other interested parties in designing and implementing management controls on visitor use within the 3-mile-long riparian area on the Santa Clara River below the Gunlock Dam to allow for natural revegetation and reduce threats to effective sanitation and public safety. Restrictions may include closing one or more vehicle access points along the river, implementing seasonal or partial closures to camping, establishing day-use only areas, or allowing selected activities on a rotational basis.

Recreation Opportunity Spectrum SettingPrimitive (10,910 acres), semiprimitive motorized (11,200 acres), roaded natural (1,615 acres).

Main Attractions

Red Mountain, outstanding geological features and scenery, Santa Clara River, petroglyphs.

Main Recreation Activities

Primitive and semiprimitive motorized recreation, hiking, rock climbing, sightseeing, touring, stream-based recreation, outdoor photography, picnicking, undeveloped camping, horseback riding, small game hunting, and viewing petroglyphs.

- RC-22 **Deep Creek SRMA** encompasses 11,350 acres of public land. BLM will apply the following prescriptions relating to recreation management within the area. Where further analysis, planning, or resources are required, actual development or implementation will not take place until such analysis is completed and resources become available.
 - a) BLM will seek to obtain public access to selected portions of the SRMA and will mark public land boundaries to reduce unintentional use of intermingled private lands.
 - b) BLM will collaborate with Zion National Park managers to develop coordinated strategies for management of visitor activities. Emphasis will be placed on maintaining natural values and ensuring consistency with the objectives of the Park's General Management Plan and other policy documents.
 - c) Public lands within 0.25 miles of Deep Creek, Crystal Creek, Oak Creek, Kolob Creek, and the North Fork of the Virgin River north of Zion National Park will be managed to preserve those outstandingly remarkable values associated with BLM's recommendations for wild and scenic river designations. Management prescriptions for such areas are described in the discussion of wild and scenic rivers in the section of this Plan on Special Emphasis Areas.

Recreation Opportunity Spectrum Setting

Primitive (5,760 acres), semiprimitive motorized (5,590).

Main Attractions

Scenic vistas and landforms, Deep Creek, Crystal Creek, North Fork of Virgin River, Box Canyon, Volcano Knoll, Indian Trail, Kolob Creek, Giant Oak Tree.

Main Recreation Activities

Stream-based recreation, hunting, fishing, hiking, wildlife viewing, undeveloped camping, touring, sightseeing, primitive recreation, and cross-country skiing.

RC-23 LaVerkin Creek/Black Ridge SRMA

encompasses 20,180 acres of public land. BLM will apply the following prescriptions related to recreation management. Where further analysis, planning, or resources are required, actual development or implementation will not take place until such analysis is completed and resources become available.

- a) BLM will work with interested volunteers and organizations to construct a 0.5 mile trail and overlook at the Black Ridge viewing area. Construction will disturb less than 1 acre and be completed so as to avoid conflict with the present communication site.
- b) With collaboration from local and state agencies and law enforcement officials, BLM may develop a primitive day-use recreation site on 20 acres near LaVerkin (Twin) Falls and institute controls to reduce or eliminate trashing, undesirable uses, and public safety problems currently being experienced at this area.
- c) In the primitive portion of the SRMA, commercial use will be limited to groups of 12 persons or less per trip with no more than three commercial permittees using the area at one time to reduce user impacts on the natural values of the area. Pack animals will be limited to 15 head per trip. Weed-free

hay for pack animals will be required of the permittee to prevent the further spread of invasive weeds. Additional limits on the amount of use will be developed, as needed, to maintain important resource values within sensitive parts of the SRMA.

d) Public lands within 0.25 miles of portions of LaVerkin Creek and Smith Creek will be managed to preserve those outstandingly remarkable values associated with BLM's recommendations for wild and scenic river designations. Management prescriptions for such areas are described in the discussion of wild and scenic rivers in the section of this Plan on Special Emphasis Areas.

Recreation Opportunity Spectrum Setting

Primitive (11,605 acres), semiprimitive motorized (8,575 acres).

Main Attractions

Scenic vistas and landforms, Red Butte, LaVerkin Creek Falls, LaVerkin Creek Trail, LaVerkin Creek Canyon, Black Ridge Overlook.

Main Recreation Activities

Stream-based recreation, hiking, sightseeing, picnicking, horseback riding, touring, geologic interpretation, and primitive recreation.

- RC-24 **Canaan Mountain SRMA** encompasses 31,395 acres of public land. BLM will apply the following prescriptions related to recreation management. Where further analysis, planning, or resources are required, actual development or implementation will not take place until such analysis is completed and resources become available.
 - a) BLM will maintain the Eagle Crags, Short Creek, and Water Canyon trail head parking areas. With help from volunteers and interested community groups and organizations, BLM will maintain the Eagle Crags, Water Canyon, Canaan Mountain, Squirrel Canyon, and Broad Hollow trails. The

Eagle Crags and Water Canyon trails will be extended to the top of Canaan Mountain.

- b) Commercial use will be limited to groups of 12 persons or less per trip with no more than three commercial permittees using the area at one time to reduce user impacts on the natural values of the area. Pack animals will be limited to 15 head per trip. Weed-free feed for pack animals will be required of the permittee for overnight trips to prevent the further spread of invasive weeds. Additional limits on the amount of use will be developed, as needed, to maintain important resource values throughout the SRMA.
- c) The unit boundaries will be marked in the vicinity of Hildale to reduce unintentional use on adjacent private lands. BLM will install the minimum necessary directional and interpretive signs to provide essential visitor information.

Recreation Opportunity Spectrum Setting Primitive (31,395 acres).

Main Attractions

Canaan Mountain, Eagle Crags, hiking trails, outstanding scenery and landforms, unconfined primitive recreation, Water Canyon Arch, historic windlass and sawmill.

Main Recreation Activities

Hiking, backpacking, primitive recreation, horseback riding, sightseeing, outdoor photography, guided tours, and pack animal use.

Off-Highway Vehicle Management

Within Utah, statewide OHV issues are addressed in a comprehensive fashion by the State Division of Parks and Recreation through the OHV Advisory Council. The Council has effectively addressed numerous OHV issues throughout the state including safety, education,

program funding, community partnerships, and reducing conflicts with resources and other public land users. BLM will apply the studies, analysis, and recommendations of this Council in dealing with OHV issues in Washington County. Moreover, collaboration with user groups, clubs, and community organizations to accomplish user education, program evaluation, and facility planning, development, and maintenance will be essential in meeting objectives for the program and resource protection.

Objectives

BLM's objectives for OHV management on public lands in Washington County will include:

- a) Provide meaningful opportunities for a diversity of motorized recreation experiences on public lands in Washington County while protecting sensitive resources from excessive disturbance, road proliferation, and human encroachment.
- b) Establish working partnerships with local and state agencies, user groups, commercial providers, and other interested parties that will facilitate effective OHV program development including the planning for and implementation of successful trail systems and use areas.
- c) Provide education on OHV safety, etiquette, and environmental awareness, in cooperation with local and state agencies, user groups, schools, and other organizations.
- d) Provide for adequate mapping, signage, and public information to facilitate user awareness, safety, and compliance with land use prescriptions. Collaborate with applicable state agencies and organizations who share responsibility for the preparation of such materials to ensure timely and accurate presentation.
- e) Achieve consistency, to the extent practical, with adjacent land management agencies in making use designations, linking trails, and communicating with the public to provide a seamless transition for OHV users across agency jurisdictions.
- OV-01 All public lands within the administrative boundary of the St. George Field

Office will be designated as Open (89,235 acres), Open for Use on Existing or Designated Roads/Trails (448,066 acres), or Closed to OHV Use (91,704 acres) based on applicable provisions contained in Title 43 of the Code of Federal Regulations. These categories are depicted on Table 2-10, and shown on Map 2.13.

OV-02 Specific recommendations to minimize conflicts from OHV use on various

Canaan Mountain ACEC

resources are described in each corresponding section of this Plan. In large part, public lands in Washington County will remain open to OHV use on existing roads and trails. Several special management areas and watersheds will remain open on designated roads and trails only. Specified public lands west of Veyo, at Sand Mountain, and adjacent to state lands west of Bloomington will remain open without limitation. Existing closures on public

 Table 2-10 ● Off-Highway Vehicle Use Designations

	TOTAL ACRES
Open to Off-Highway Vehicle Use	89,235
Sand Mountain Area	
West of Veyo	
West of state land near Bloomington	
Open for Use on Existing Roads and Trails	335,780
All areas not specifically noted	
Open for Use on Designated Roads and Trails	112.286
Upper Beaver Dam Wash ACEC (in part)	
Beaver Dam Slope ACEC	
Red Bluff ACEC	
Warner Ridge/Fort Pearce ACEC	
Lower Virgin River ACEC	
Santa Clara River-Gunlock ACEC	
Santa Clara River-Land Hill ACEC	
Washington County HCP Reserve (in part)	
Threatened and Endangered Plant Species Habitat	
Candidate Species Plant Habitat	
Portions of the riparian areas along the Virgin River	
near Virgin and Grafton	
Rockville Bench	
Red Cliffs and Baker Dam Recreation Areas	
Closed to OHV Use	91,704
ROS Primitive Areas (except the Volcano Knoll crossing, as permitted)	
River segments with a tentative classification of Wild,	
proposed as suitable for Congressional NWSRS designation	
Upper Beaver Dam Wash ACEC (in part)	
Ripple Arch	
Dinosaur Trackway	
Watchman Area	
Fort Pearce Historical Site	
Red Mountain ACEC	

lands at Ripple Arch, portions of Canaan Mountain, and within the Beaver Dam Mountains Wilderness Area will remain in place to protect special values. New closures will be implemented to protect special resources at the Dinosaur Trackway, the Fort Pearce Historic Site, the Watchman slope adjacent to Zion National Park in Springdale, the roadless watershed immediately north of the upper Beaver Dam Wash, the cliff face of Red Mountain, river segments tentatively classified as wild and found suitable for congressional designation under the Wild and Scenic Rivers Act, and areas classified as primitive in the Cottonwood Canyon portion of the Washington County Habitat Conservation Plan (HCP) Reserve and the Deep Creek, Red Mountain, Canaan Mountain, and LaVerkin/Black Ridge Special Recreation Management Areas (SRMAs).

- OV-03 Off-highway vehicle use will be managed in accordance with the following guidelines and definitions:
 - a) BLM will prepare an activity plan for areas open to designated roads and trails only that will identify roads and trails open to use. Road closures, if any, will be coordinated through applicable county or municipal officials with public notice in accordance with federal regulations and Utah state law, where such is required. Maps of such areas will be disseminated for public use and information. Except as otherwise allowed under the definitions below, off-highway travel in such areas must be approved by BLM's authorized officer in advance, including for holders of valid permits and licenses. Hunters may not use motorized vehicles off the designated roads to retrieve taken animals. Vehicle parking for authorized purposes must occur within 25 feet of the designated roads or trails.
 - b) BLM will not prepare an activity plan for areas open to existing roads and

- trails but will distribute maps for the using public. All authorized land users that hold a valid permit or license including, but not limited to, grazing permits, hunting licenses, wood permits, rights-of-way, mining claims, mineral leases, research agreements, etc., will be allowed to drive off-road only to the extent needed to fulfill the purposes of their permit or license. Motorized vehicles must park within 100 yards of an existing road or trail when required for camping in undeveloped areas.
- c) Off-road travel on public lands must be limited to the minimum necessary to accomplish lawful, intended purposes, to reduce unauthorized road proliferation and widespread cumulative impacts, and to prevent undue or unnecessary degradation to the area. Negligent or willful destruction or degradation of natural resources or facilities will trigger appropriate law enforcement action and penalties.
- d) Off-road travel restrictions currently in place as a result of Federal Register publication, Vol. 45, No. 188, page 63557, Sep. 25, 1980, will remain in effect until approved designations are fully implemented. In addition, closures and restriction orders for motorized vehicles that were previously published in the Federal Register will remain in effect until site specific planning has been completed for those areas. The Federal Register notices are: Volume 63, Number 185, September 24, 1998 for lands formerly known as Smith Ranch; Volume 63, Number 154, August, 11, 1998 for lands within the Washington County HCP Red Cliffs Desert Reserve; Volume 61, Number 123, July 9, 1996 closing lands directly north of the town of Rockville; and Volume 45, Number 188, March 13, 1987 closing lands on the Price City Hills and Red Bluff dwarf bear-poppy areas.
- e) Until activity plans and maps are prepared and made available to the public,

lands classified as "Limited to Designated Roads and Trails" will be managed as "Limited to Existing Roads and Trails" so as to lessen confusion among the using public. Exceptions will occur only where further restrictions were applied by the publication referenced above.

- f) BLM will apply the following definitions to OHV management for public lands in Washington County:
 - 1) "Off-highway vehicle" any motorized vehicle capable of or designed for travel over land or other natural terrain, excluding: (a) any military, fire, search and rescue, or law enforcement vehicle while being used for emergency purposes; (b) any vehicle whose use is expressly approved by the authorized officer; vehicles in official use; and (d) any combat or combat support vehicle when used in times of national defense emergencies.
 - 2) "Official use" use by any employee, agent, contractor, or designated government representative in the course of carrying out required duties.
 - 3) "Trail" a two-track vehicle way such as a "jeep trail," a single track maintained specifically to allow passage by ATVs or motorcycles, and unvegetated dry wash bottoms outside of riparian zones.
 - 4) "Open area" an area of public land where motorized travel is permitted both on and off roads subject to applicable operating regulations and vehicle standards.
 - 5) "Closed area" an area of public land where motorized travel is prohibited, except as expressly provided by law, regulation, or the authorized officer for essential purposes.
 - 6) "Limited to existing roads and trails" an area of public land open to motorized travel on all roads and trails

- unless such roads and trails are reclaimed or otherwise signed as closed. Some off-road travel will be permitted in accordance with the guidelines described above.
- 7) "Limited to designated roads and trails" an area of public land open to motorized travel only on roads or trails that have been identified as open on an official, approved map. Offroad travel is prohibited unless prior approval has been granted by the authorized officer in accordance with the guidelines described above.
- 8) "Limited to seasonal use" an area of public land where prescriptions for motorized travel are regulated by the time of year.
- 9) "Off-road" a term used to define motorized travel that does not take place on existing roads or trails; such travel is often referred to as "crosscountry" travel.
- OV-04 Through additional analysis and land use planning, BLM will collaborate with affected and interested partners in evaluating existing roads and trails for suitability for active OHV management and envisioning potential new trails that will help meet current and future demands. In conducting such evaluations, the following factors will be considered:
 - a) trails suitable for different categories of OHVs including dirt bikes, ATVs, dune buggies, and 4-wheel drive touring vehicles, as well as opportunities for joint trail use;
 - b) needs for parking, trail heads, informational and directional signs, mapping and profiling, and development of brochures or other materials for public dissemination;
 - c) opportunities to tie into existing or planned trail networks on the Dixie National Forest and other areas to the north including the Paiute ATV Trail;

similar opportunities to tie into existing and planned networks on the Arizona Strip and other adjacent BLM units;

d) opportunities to obtain grants or other funding needed for planned developments through the Utah Division of Parks and Recreation and other sources;

e) measures needed to avoid onsite and offsite impacts to current land uses and important natural resources; among others, issues include noise and air pollution, erodible soils, stream sedimentation, nonpoint source water pollution, listed and sensitive species habitats, historic and archeological sites, wildlife, special management areas, grazing operations, fence and gate security, needs of nonmotorized recreationists, and protection of property rights for adjacent landowners;

f) needs for collaborative management agreements between interested communities, agencies, and BLM to authorize jointly developed projects on public lands; and

g) recognition that all needs and expectations of the OHV community may not be satisfied due to limited resources and competing demands from other user groups on public lands in Washington County.

OV-05 Public land roads or trails determined to cause substantial environmental harm or to constitute a nuisance or threat to public safety will be considered for relocation or closure and rehabilitation after appropriate coordination with Washington County or applicable municipal officials and the application of state and federal laws and regulations.

OV-06 BLM will work with user groups, organizations, school officials, and local, state, and other federal agencies in promoting education and public information programs, including the Tread

Lightly initiative, to increase user and potential user awareness of environmental issues, OHV safety, and trail etiquette.

OV-07 Maps and, where needed, trail profiles will be prepared for public dissemination to advise users of where OHV activity is authorized, what land use prescriptions apply, and what levels of user expertise are recommended.

OV-08 BLM will collaborate with state and local agencies and affected user groups in planning staging and parking areas adjacent to the proposed Sand Hollow Reservoir to service OHV users and other recreationists desiring access to the Sand Mountain area. Other than minimal signing needed for safety and essential directions, the area will be left open and unmarked to provide a semiprimitive and unstructured riding experience.

OV-09 BLM will continue to work with OHV sponsors and organizations to authorize competitive events, commercial touring, and organized rides on a case-by-case basis subject to site-specific analysis. Limited administrative capabilities in BLM and the need to provide for critical resource protection and site rehabilitation will restrict the number of large competitive events (up to 300 participants) authorized on public lands. Collaboration with adjacent BLM units on the Arizona Strip will be encouraged to allow joint management or sponsorship of such events, increase options for alternative route selection, and provide for yearly rotation of established routes for large events to promote rehabilitation and reduce long-term cumulative impacts. Limitations on the number of participants and spectators to all competitive events will be applied where warranted based on design of the competition and site capabilities.

OV-10 BLM will continue to authorize low impact motorcycle trials events in the Pahcoon Gulch area. Such events will

be limited to 50 or fewer vehicles. If monitoring of these events determines that substantial impacts are occurring in the area or conflicts develop with other resources or goals and objectives set forth in this Plan, BLM will work with the project sponsors to mitigate those impacts, or to relocate to another area.

Visual Resource Management

Objectives

BLM's objective will be to manage the public lands in such a way as to preserve those scenic vistas which are deemed to be most important: a) in their impact on the quality of life for residents and communities in the area,

b) in their contribution to the quality of recreational visitor experiences, and

c) in supporting the regional tourism industry and segments of the local economy dependent on public land resources.

Moreover, BLM will seek to complement the rural, agricultural, historic, and urban landscapes on adjoining private, state, and tribal lands by maintaining the integrity of background vistas on the public lands.

VR-01 BLM will apply Visual Resource Management (VRM) Class Objectives described in Appendix 5 to public lands in the county. The class objectives will guide decisionmakers in evaluating potential impacts from land use proposals on the public lands and in designing alternatives or measures that will eliminate or reduce undesirable impacts on the quality of the visual resource. VRM classes for public lands in Washington County are summarized in Table 2-11 and depicted on Map 2.14.

VR-02 The classifications reflect the results of scenic quality inventories upgraded in those locations where BLM deemed it necessary to retain desirable landscape

character and achieve the broad management objectives identified previously. BLM managers may use discretion in applying the standards to various land use proposals and grant exceptions where warranted by the public interest or valid development rights, such as those conveyed under the mining and mineral leasing laws. Within excepted areas, BLM will apply appropriate mitigating measures to authorized actions to achieve the lowest feasible level of impact.

VR-03 As Washington County continues to respond to forces of change, the classifications will be reviewed from time to time and modified as needed in response to factors such as new legislation, revisions to local land use plans, unexpected shifts in urbanization, visual objectives in local land use agreements, or determinations that broad planning objectives are not being met. Such changes will be made through the planning process.

VR-04 To protect scenic vistas essential to the integrity of the Zion viewshed along State Scenic Highway 9, public lands within view of the highway from the top of the bench at LaVerkin (lands east of LaVerkin scenic overlook turnoff) to the south entrance of the Park will be classified VRM Class II. Exceptions to the standards will be granted within the designated utility corridor and to allow other essential rights-of-way and public purpose authorizations needed to support the health, safety, and well-being of local communities in the viewshed where the impacts of such uses can be

Table 2-11 • Visual Resource Management Classes

 VRM Class I	40,877 Acres
VRM Class II	111,407 Acres
 VRM Class III	417,925 Acres
VRM Class IV	58,546 Acres

mitigated to satisfactory levels. Mitigation to reduce impacts may include, among others, screening, design modifications, and surface rehabilitation. Exceptions may also be granted as necessary to fulfill the purposes of approved land use and management plans for Zion National Park, community-based partnership efforts, and other objectives of this Plan.

- VR-05 VRM Class IV objectives will be applied to established mineral materials sites.
- VR-06 Except in designated utility corridors, VRM Class I and II areas will be right-of-way avoidance areas to reduce the potential for scenic degradation.
- VR-07 VRM Class II designations will not prevent prescribed burns needed to accomplish other important objectives described in this Plan.
- VR-08 BLM will apply VRM Class III objectives to vegetation treatment areas, communication sites, and utility corridors regardless of the VRM class assigned to the affected lands.

Wilderness Management

- WD-01 The Beaver Dam Mountains Wilderness Area will continue to be managed in accordance with the Paiute and Beaver Dam Mountains Wilderness Management Plan (USDI/BLM, 1990).
- WD-02 As a result of wilderness inventories required by and conducted under the authority of Section 603 of the Federal Land Policy and Management Act (FLPMA), 11 wilderness study areas (WSAs) and one instant study area were identified on public lands administered by the St. George Field Office. Each of these areas was studied and analyzed for wilderness suitability in the 1990 Utah BLM Statewide Wilderness Final Environmental Impact Statement. BLM's recommendations were forwarded to the Secretary of the Interior and on to the President and the Congress in 1991.

Until such time as the Congress acts to designate all or part of these areas as wilderness or releases them from further wilderness consideration, BLM is required by FLPMA to manage the areas so as not to impair their suitability for preservation as wilderness, subject to valid existing rights and provisions affecting grandfathered mining, grazing, and mineral leasing operations. BLM policy for how such lands are to be managed is described in its Interim Management Policy and Guidelines for Lands Under Wilderness Review, BLM Handbook H-8550-1. Public lands within WSAs are also closed to fluid mineral leasing by the 1987 Federal Onshore Oil and Gas Leasing Reform Act.

- WD-03 This Plan addresses how lands in wilderness study areas will be managed if released from such review. By so doing, BLM will have land use prescriptions in place for any lands released without the need for costly and extensive plan amendments. Any lands subsequently designated as wilderness by Congress will be managed in accordance with provisions of the Wilderness Act of 1964 and the terms of the implementing legislation.
- WD-04 The Beaver Dam Wilderness Area, the Joshua Tree Instant Study Area, and the 11 WSAs in Washington County are described in Table 2-12 and shown on Map 2.15.

Cultural and Paleontological Resources

Objectives

In managing cultural and paleontological resources on public lands, BLM will seek to:

a) employ reasonable measures and land use controls needed to reduce impacts from urbanization and human encroachment,

b) apply the principles of conservation management to selected areas to maintain such

Table 2-12 • Wilderness Study Areas and Designated Wilderness in Washington County, Utah

WILDERNESS STUDY AREAS	WSA ACREAGE	BLM PROPOSED ACREAGI
Cougar Canyon	15,968	6,408
Red Mountain	18,290	12,842
Cottonwood Canyon	11,330	9,853
La Verkin Creek Canyon	567	567
Deep Creek	3,320	3,320
Canaan Mountain	42,858 1	32,440 ²
Red Butte	804	804
The Watchman	600	600
Taylor Creek	35	35
Goose Creek	89	89
Bear Trap	40	40
Subtotal	93,901	66,998
Joshua Tree Instant Study Area	1,015	1,015
Beaver Dam Mountains Wilderness Area (Utah Portion) — Designated	2,690	2,690
Grand Total	97,606	70,703

¹ Canaan Mountain WSA acreage total 47,170 acres (42,858 acres in Washington County, 4,312 acres in Kane County)

resources in their present condition for future study and enjoyment,

c) reduce looting and vandalism through increased public education, surveillance, and enforcement,

d) provide for legitimate field research by credible scientists and institutions,

e) ensure compliance with applicable state and federal laws for consultation, assessment, and mitigation including consultation with interested or affected Indian tribes, and f) provide for stabilization, maintenance, and interpretation of selected sites for public enjoyment and education.

CL-01 BLM will collaborate with local communities, organizations, local and state agencies, Indian tribes, and other interested parties in developing and implementing plans for the restoration, stabilization, protection, and/or interpretation of appropriate historical, archeological, or paleontological sites and resources on public lands in Washington County. Specific recom-

² Canaan Mountain BLM Proposed WSA total 33,800 acres (Approx. 32,440 acres in Washington County, 1,360 acres in Kane County)

mendations for the Dinosaur Trackway, Honeymoon Trail, Dominguez-Escalante Trail, and Fort Pearce Historic Site are included in the section on Recreation under prescriptions for the Sand Mountain Special Recreation Management Area. Protection for the Red Cliffs Archeological Interpretive site is provided for in the prescriptions for the Red Cliffs Recreation site described in the same general section.

- Prescriptions for all or portions of four Areas of Critical Environmental Concern will be applied to protect, conserve, or interpret important cultural and paleontological resources. The areas include Santa Clara River/Gunlock, Santa Clara River/Land Hill, Lower Virgin River, and Little Creek Mountain. The prescriptions are described in detail under the section on Special Emphasis Areas. Among other things, the prescriptions will limit off road travel, require site avoidance for fluid mineral leasing, and close the affected areas to fuelwood and mineral materials sales. Concessionaire management of cultural or paleontological resources will be considered inconsistent with the objectives of this Plan and will not be authorized.
- CL-03 BLM will continue to maintain inventories of known sites and evaluate their potential for protection, conservation, research, or mitigation and data recovery when threatened by land use proposals. Under applicable law and regulation, BLM will authorize field research by qualified colleges, universities, and professionals for legitimate purposes. When archeological resources are involved, BLM will ensure compliance with all requirements for Native American consultation and other provisions of law and executive orders including the Native American Graves Repatriation and Protection Act.
- CL-04 BLM will establish a site steward program using trained volunteers to monitor conditions at approved historic,

archeological, and paleontological sites. The site stewards will report violations to appropriate law enforcement officials and, where appropriate, provide onsite information about site values and needed protection to visitors and interested members of the public. Additional surveillance will be provided by BLM rangers and through cooperative programs with local law enforcement offices, the Civil Air Patrol, or other qualified partners.

CL-05 BLM may consider implementation of conservation management on public lands in the Little Creek Mountain Anasazi area, the Cedar Pockets/Bulldog Pass Archaic area, and high density riverine sites to maintain their present condition and reduce potential conflicts. Conservation management entails leaving cultural resources in place without excavation, recovery, or disturbance so that they may be studied onsite by future generations of scientists.

Hazardous Waste Management

Objectives

BLM's objective will be to comply with all applicable state and federal laws and regulations pertaining to the use and storage of hazardous materials and to keep public lands free from unauthorized hazardous material generation, storage, or transport.

- HZ-01 To eliminate potential long-term public liability, BLM policy does not authorize public lands to be used for hazardous waste disposal unless such lands are first transferred out of public ownership.
- HZ-02 Emphasis will be placed on taking appropriate legal and enforcement action necessary to terminate illegal dumping and remove any hazardous wastes deposited on the public lands.
- HZ-03 BLM will ensure that all use authorizations it grants to public land users

involving the generation, storage, or transport of hazardous materials are subject to required coordination and/or permitting from applicable local and state agencies and otherwise conform to applicable state and federal laws and regulations.

- HZ-04 BLM will collaborate with the EPA, the Utah Department of Environmental Quality, and other affected local, state, and federal agencies in assessing sites suspected of containing hazardous wastes or spills and developing strategies for remediation. BLM will continue to seek military assistance in assessing subsurface ordnance contamination adjacent to Hurricane Mesa and collaborate in preparing and implementing a decontamination plan, if warranted.
- HZ-05 In accordance with BLM policy, sanitary landfills will not be permitted under conventional leasing or Recreation and Public Purpose Act authorities where lingering public liability exists.

Fire Management

- FI-01 Fire suppression on public lands in Washington County will be directed by objectives and prescriptions identified in the Dixie Fire Management Plan scheduled for completion in 1999. The highest priorities of fire suppression will be to protect life, firefighter safety, property, and critical resource values. The BLM will coordinate with stakeholders at local and regional levels as well as adjacent land management agencies in formulating and implementing the final Fire Management Plan.
 - a) The Fire Management Plan will identify (a) where wildland fire will be suppressed immediately, such as near private lands or to avoid threats to life and property; (b) where wildland fire will be suppressed to avoid unacceptable impacts to natural resources, such as in key riparian areas or endangered species habitats; c) where fire is desired

- to achieve resource objectives but there are constraints to managing the fire, such as excessive fuel build-up due to lack of fire in the past; and (d) where fire is desired to achieve resource objectives or restore the land to a desired condition and there are no constraints to such management.
- b) The Fire Management Plan will use major vegetative communities to define where the suppression strategies described above will be employed on public lands throughout the county. For each area so identified, the plan will describe (a) existing vegetative and resource conditions, (b) desired future conditions, c) the role fire will play in achieving such conditions, and (d) areas where specific suppression tactics need careful evaluation due to cost, safety, resource issues, or other concerns. The Fire Management Plan will also determine what fire management and suppression resources are needed to meet the goals and objectives identified in the plan.
- c) Until the Dixie Fire Management Plan is approved, BLM will follow protocols established in the BLM Cedar City District's Fire Management Plan and other applicable plans.
- FI-02 The Interagency Annual Operating Plan, which coordinates fire actions between BLM, Washington County, the State of Utah, the Bureau of Indian Affairs (Southern Paiute Field Station), Dixie National Forest, and Zion National Park will continue to provide guidance for fire operations between the agencies. This plan will be updated yearly and will operate on the "closest available forces" concept. It will also establish protocols for notification and initial attack.
- FI-03 The following prescriptions will be applied to fire suppression and prescribed fire activity on public lands:
 - a) Onsite BLM resource advisors will be assigned to extended attack fires where

needed to integrate resource concerns into the development of tactical plans and to evaluate potential for post-fire rehabilitation. Special attention will be given to riparian areas, federally listed plant and animal species habitat, and crucial mule deer winter range. Advisors will be assigned to all fires threatening desert tortoise habitat, wilderness areas, or wilderness study areas.

- b) Wildfires in designated wilderness areas will be managed in accordance with applicable wilderness management plans.
- c) Wildfires in wilderness study areas will be managed in accordance with guidelines in BLM's Interim Management Policy (BLM handbook H-8550-1).
- d) Surface-disturbing suppression activities will avoid known cultural sites to the extent avoidance is feasible.
- e) Although exempt from OHV use designations by regulation, fire suppression activities will be directed so as to give appropriate deference to resources and conditions intended to be protected by such designations.
- f) BLM will manage fire suppression activities in desert tortoise habitat in accordance with applicable biological opinions of the FWS, provisions in the desert tortoise recovery plan, and guidelines in *Fighting Wildfire in Desert Tortoise Habitat: Considerations for Land Managers,* (T. Duck et al, 1995 Desert Tortoise Council Symposium International Symposium of Wildland Fire).
- g) In accordance with the Dixie Fire Management Plan, BLM will conduct prescribed burns and manage prescribed natural fires to achieve vegetation management objectives, improve wildlife habitat, reduce hazardous fuels, and achieve long-term objectives for soil stabilization and water quality.

Prescribed fire will be conducted on 500 acres of wildlife habitat at Potters Peak. Prescribed fire will be considered for use on up to 10 vegetation treatment areas listed in the section of this Plan on Livestock Grazing when necessary to maintain desired vegetation communities in those areas. Fire rehabilitation areas may also be maintained through prescribed fire to achieve these same objectives.

- h) In conducting prescribed burns, BLM will design and time the projects so as to maximize smoke dispersal and protect the high-quality airshed within Zion National Park and other Class I areas in the region. For effective smoke management, ignition will be approved only when the burning index is 500 or greater.
- i) Consultation with permittees, local and state agencies, adjacent land managers, Indian tribes, and nearby private landowners will be required for all prescribed burns during the planning phase to ensure such burns minimize disruption to existing land uses and that affected publics are notified.
- j) BLM will collaborate with local, state, and federal agencies in promoting public education and awareness on fire prevention, protection of rural properties, and the proper role of fire in natural systems.
- FI-04 BLM will conduct rehabilitation of lands affected by wildfire in accordance with provisions of the approved Dixie Normal Fire Rehabilitation Plan (1997). Any rehabilitation will require site-specific analysis including full cultural resource inventories on lands to be disturbed and appropriate consultation. In all cases, BLM will apply standards and guidelines approved for various resources included in Utah BLM's Standards for Rangeland Health and Guidelines for Grazing Management contained in Appendix 3. Deference will be given to the use of least disrup-

tive practices in areas being managed primarily for their natural values, including primitive recreation areas, designated wilderness areas, riparian zones, areas of critical environmental concern, and rivers recommended as suitable for inclusion in the National Wild and Scenic Rivers System.

Special Emphasis Areas

Wild and Scenic Rivers

WR-01 On November 6, 1997, BLM's Utah State Director signed a Memorandum of Understanding (MOU) concerning wild and scenic river studies in Utah. Cosigned by the Governor of Utah, the Regional Forester of the Forest Service, the Regional Director of the National Park Service, and affected local agencies, the MOU established a cooperative relationship among the agencies for conducting wild and scenic river studies for Utah rivers. Under the MOU, the parties will strive to reach consensus regarding recommendations to Congress for inclusion of rivers in the National Wild and Scenic Rivers System. Besides applying consistent criteria across agency jurisdictions, the joint review will avoid piecemealing of river segments in logical watershed units in the state. Actual designation of river segments will only occur through congressional action or as a result of Secretarial decision at the request of the Governor in accordance with provisions of the Wild and Scenic Rivers Act (the Act). Although the MOU was signed too late to be fully implemented for the Dixie Proposed RMP/Final EIS, BLM will seek to work with the agencies involved to coordinate its decisionmaking on wild and scenic river issues and to achieve consistency wherever possible.

WR-02 To facilitate such consistency and coordination, BLM has entered into a separate MOU with the National Park

Service, dated February 1998, for the study of river segments on four isolated tracts of public land adjacent to the north boundary of Zion National Park. These include small portions of Willis Creek, Goose Creek, Beartrap Canyon, and Shunes Creek. In conducting its river inventories, BLM judged these segments not eligible for further study based on the absence of outstandingly remarkable values on the BLM-administered portions of the segments. Because of the configuration of the parcels relative to the park, it is recognized that evaluation of the entire river segment across federal lands may have led to a different conclusion as to eligibility for any of the tracts involved. Zion National Park is currently preparing a General Management Plan and is conducting its own review of river segments within the park for possible inclusion into the National Wild and Scenic Rivers System. BLM's MOU with Zion National Park provides that the four segments previously evaluated by BLM be included in the National Park Service river study. BLM and the National Park Service will strive to reach a joint conclusion as to eligibility, tentative classification, and suitability for the entire segments involved. Such decisions will either affirm or supersede BLM's original conclusions as to those portions on public lands. Two additional public land parcels at the east end of the middle fork of Taylor Creek and on the north rim of the Kolob Creek narrows may also be affected by the Park Service study should the creeks be recommended as suitable for designation. Until such time as the park's General Management Plan is completed, BLM's original conclusions as to eligibility stand.

WR-03 At such time as the supervisor of the Dixie National Forest conducts wild and scenic river studies in a revision of the Dixie National Forest Land and Resource Management Plan, BLM will consider entering into a similar agree-

ment with the Forest Service for streams crossing agency jurisdictions within Washington County. The agreement may call for evaluation of selected stream segments in their entirety where both agencies agree that such will provide a logical and consistent conclusion as to eligibility and suitability. Unless and until an agreement is put into place and a joint planning decision approved, BLM's conclusions regarding eligibility for public land river segments addressed in this Plan will stand.

- WR-04 Using the process described in Appendix 6 of the Draft RMP (1995), BLM determined that portions of nine rivers studied, encompassing 11 segments, were eligible for congressional designation. These determinations are summarized in Appendix 7 and depicted on Map 2.16 of the Proposed RMP/Final EIS (1998).
- WR-05 After careful review of numerous public comments received after publication of the Draft RMP/EIS and coordination with interested local, state, and federal agencies, BLM has concluded it will recommend as suitable for congressional designation parts or all of 5 of the 11 river segments found eligible on public lands. These include Deep Creek/Crystal Creek, North Fork of the Virgin River above Zion National Park, Oak Creek/Kolob Creek, that portion of LaVerkin Creek/Smith Creek from above Zion National Park to the north boundary of the private parcel in Section 18, T. 40 S., R. 12 W., and that portion of Segment B of the Virgin River contained wholly within the Beaver Dam Mountains Wilderness Area. Recommended segments are shown on Map 2.16. All of the above river segments will carry a tentative classification of wild and will cover approximately 25.7 miles.

Congressional designation of any or all of these segments will serve to meet the objective of the Wild and Scenic Rivers Act, which is to preserve in free-flowing condition selected rivers in the nation which possess outstandingly remarkable values and to protect those rivers and their immediate environments for the benefit of present and future generations. Moreover, such designation will bring national recognition to designated river segments in Washington County and elevate river management goals warranting long-term commitments from affected agencies. BLM's recommendations will also conform to objectives and recommendations on the same river segments across federal agency boundaries, thereby promoting consistent land use regulation and shared management opportunities.

- WR-06 Protective management will be implemented under the authority of Section 202 of the Federal Land Policy and Management Act (FLPMA) on those segments recommended as suitable to ensure that eligibility and tentative classification will not be adversely affected. Protective management objectives for public lands recommended as suitable will include (see BLM Manual 8351.32C, 1992):
 - a) maintaining free-flowing character by excluding new impoundments, diversions, channelization, or rip-rapping on public land segments;
 - b) preserving or enhancing outstandingly remarkable values; and
 - c) allowing no developments on public lands within the river corridors that alter the tentative classifications.
- WR-07 For that segment of the Virgin River
 Gorge within the Beaver Dam
 Mountains Wilderness Area, protective
 management will be provided by prescriptions already in place for the
 wilderness area. For all other segments
 tentatively classified as wild, the following prescriptions will apply to lands
 within the affected corridors:
 - VRM Class II
 - Right-of-way avoidance area

- Mining plan of operation required
- Fluid mineral leasing Category 3 (NSO - no waivers)
- Closed to mineral materials sales
- Closed to fuelwood sales
- Closed to OHV and mountain bike use
- WR-08 Limited exceptions to OHV travel restrictions may be made for authorized uses only in accordance with federal regulations at 43 CFR 8340.0-5 (1997) and as described in the section of this Plan on Off-Highway Vehicle Management.
- WR-09 Protective management will remain in place until
 - a) Congress or the Secretary of the Interior designate the segments and apply new provisions,
 - b) Congress or the Secretary release the segments from protection or further consideration, or
 - c) new studies are completed under Sections 5(a), 5(d), or 2(a)(ii) of the Act that change or eliminate the need for protective management on the segments involved.

If released from protective management, the lands will be managed under the same prescriptions applied to the surrounding public lands.

WR-10 As a result of its recommendations for suitability contained in this Plan, BLM will take or approve no action that will abrogate the intent or terms of the Zion National Park Water Rights Settlement Agreement of December 4, 1996. The Zion Water Agreement provides comprehensive protection of Zion National Park rivers. As a result, BLM concludes that the water rights quantification established for Zion National Park in the Agreement is sufficient to satisfy flow requirements needed to maintain those values on public lands above the park in Washington County. The con-

clusion is based on the fact that consumptive uses and resource requirements in the Park, including those for visitor enjoyment, clearly exceed those on the adjacent public lands to the north. In concert with Zion National Park, BLM will support and promote designation of the suitable river segments under the Wild and Scenic Rivers Act above Zion National Park only if the authorizing legislation recognizes the Zion Water Agreement as constituting the reserved water rights for the Park and is explicit in not reserving more water for the BLM suitable segments than is provided in the Zion Water Agreement. In deference to the Agreement, BLM will allow for the development contemplated in each water basin upstream or up gradient from Zion National Park subject to applicable federal laws and regulations while managing for the values which led to recommendations for suitability or subsequent legislative or administrative action.

WR-11 If any or all of the recommended rivers are designated, BLM will work closely with affected local, state, and federal agencies, and Indian tribes in preparing study reports and detailed management plans pertaining to the management of protected river segments. BLM's goal will be to achieve consistency with other land use plans and communitybased efforts to promote sound land use and resource protection within river corridors in and adjacent to Washington County. Should the State of Utah, in cooperation with local governments, pursue Secretarial designation of river segments in Washington County under Section 2(a)(ii) of the Act, BLM will give its full support to such designation where federal policies and planning objectives will be complemented. If necessary, this land use plan may be amended to accommodate such action and cooperative agreements entered into for the planning, administration, and management of public lands which

are within the boundaries of river areas so designated.

WR-12 BLM's intent will be to defer submission of suitability reports to Congress until after studies are completed on adjacent Forest Service and Park Service lands so that joint recommendations may be written and submitted that reflect an interagency, basinwide approach on the Virgin River System in Utah.

Preparation and submission of the reports will follow provisions of the statewide interagency MOU of November 6, 1997, including coordination with state and local agencies.

WR-13 Shall designation occur on any river segment as a result of Secretarial or congressional action, existing rights, privileges, and contracts will be protected. Under Section 12 of the Act, termination of such rights, privileges, and contracts may happen only with the consent of the affected non-federal party. A determination by the BLM of eligibility and suitability for the inclusion of rivers on public lands in Washington County to the Wild and Scenic Rivers System does not create new water rights for the BLM. Federal reserved water rights for new components of the Wild and Scenic Rivers System are established by Congress through amendment of the Wild and Scenic Rivers Act. When a river component is added to the Wild and Scenic Rivers System, water is reserved, from water that is not appropriated at the time of designation, in the amount necessary to protect features which led to the river's inclusion into the system. Section 13 of the Act provides authority for the creation of a federal reserved water right at the time congressional designation is made only in amounts necessary to accomplish the purposes of the Act. Such provisions will be established in the Secretary's Order or the legislation which puts the designation into place. BLM's intent will be to leave existing water rights undisturbed

and to recognize the lawful rights of private, municipal, and state entities to manage water resources under state law to meet the needs of the community. Federal law, including Section 13 of the Act and the McCarren Amendment (43 U.S.C. 666), recognizes state jurisdiction over water allocation in designated streams. Thus, it is BLM's position that existing water rights and existing developments on such streams will not be affected by designation or the creation of the federal reserved water right. BLM will seek to work with upstream water users and applicable agencies to ensure that water flows are maintained at a level sufficient to sustain the values for which affected river segments were designated.

WR-14 Should public land segments of rivers be designated through congressional or Secretarial action, BLM will be required to prepare detailed management plans within 3 years of the designation. By law, the plans will be designed to protect and enhance those values for which the rivers were designated without limiting other uses that do not substantially interfere with public use and enjoyment of those values. Local and state agencies will be encouraged to participate in the formulation of such plans, and where mutual interests will be served, to enter into cooperative agreements for the joint administration of affected river segments. Land use prescriptions developed in the management plans will include all applicable provisions of the Wild and Scenic Rivers Act and the legislation or Secretarial Order that placed the river segments into the National Wild and Scenic Rivers System. Guidelines contained in Appendix 9 contained in the Proposed RMP/Final EIS (1998) will be used in establishing management prescriptions. Where designated river segments are included within areas designated as wilderness, provisions of the Wilderness Act of 1964 will be applied.

WR-15 BLM recognizes that water resources on most segments of the Virgin River system are already fully allocated. Where stream segments are designated on public lands being managed under this Plan, BLM will continue to work with affected local, state, federal, and tribal partners to identify instream flows necessary to meet critical resource needs including values related to the designation. BLM will then seek to jointly promote innovative strategies, community-based planning, and voluntary agreements with water users, under state law, to address those needs.

Areas of Critical Environmental Concern

- AC-01 Where BLM determines that certain public land areas require special management to prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems, it may, with appropriate public participation, designate such lands as Areas of Critical Environmental Concern (ACECs). Ten ACECs will be established by approval of this Plan and are shown on Map 2.17. The proposed City Creek ACEC, described in the 1995 Draft Dixie Resource Management Plan/Environmental Impact Statement to protect watershed values and special status species, is contained wholly within the Washington County Habitat Conservation Plan (HCP) Reserve and will be fully protected under the provisions of the HCP. It is not carried forward in this Plan as an ACEC to avoid duplication in planning and management oversight. Lands within the HCP Reserve are proposed for eventual designation as a National Conservation Area. Management prescriptions for each ACEC follow.
- AC-02 The **Red Bluff ACEC** encompasses 6,168 acres. This area contains the endangered dwarf bear-claw poppy and high-

- ly erodible saline soils at risk from extensive off-road travel, road proliferation, human encroachment from adjacent urban areas, and continued pressure for land transfers to accommodate various forms of development. The following prescriptions will be applied to protect these vulnerable resources:
- a) Category 3 (NSO) stipulations will be applied to fluid mineral leasing to avoid soil loss and irreparable impacts to poppy habitat from exploration, drilling, and lease maintenance operations.
- b) The area will be closed to fuelwood and mineral materials sales and designated a right-of-way avoidance area. Should the Southern Transportation Corridor result in a spur from the area of the proposed Atkinville intersection to Old U.S. Highway 91 between Santa Clara and Ivins, BLM will work with project sponsors to define an environmentally preferred route. Any such development will be subject to further environmental study, consultation with the FWS, and a plan conformance determination.
- c) BLM will recommend the area be withdrawn from mineral entry. Pending Secretarial approval of the withdrawal, mining plans of operation will be required for all mining exploration and activities other than casual use.
- d) Motor travel will be limited to designated roads and trails. Fencing, signing, and barricades will be employed to prevent unauthorized vehicle access and impacts to the resources being protected. Existing fences will be maintained.
- e) Applicable Standards for Rangeland Health, including monitoring and assessment programs, will be employed to determine if objectives developed in the recovery plan for protection and enhancement of the species are being met. If monitoring reveals the objectives and standards are not being met, BLM will work with user groups and

interested parties to develop strategies and make adjustments in permitted land uses to the extent such are determined to be contributing factors.

- f) BLM will continue to fund, conduct, or authorize field studies to monitor bear claw poppy populations, trends, and habitat impacts. Public education programs will be supported in conjunction with the Washington County HCP to build increased understanding of the unique character, importance, and requirements of the plant.
- g) Mountain bike use will be limited to a designated trail. BLM will work with user groups, affected agencies, and interested parties to design a trail and redirect current use to avoid damage to bear-claw poppy populations. Trail approval and reconstruction will be subject to consultation with the FWS.
- h) Because protection of the cryptogamic material occurring on the soil surface is needed to reduce unacceptable soil loss, BLM will manage authorized uses in the area so as to require the best management practices, including the use of special equipment or construction of temporary or permanent protective features.
- i) Special recreation permits may be issued where site specific analysis determines that the authorized activity will not adversely affect the values for which the ACEC was designated.
- j) Public lands in the ACEC will be retained in public ownership. Non-federal lands within the ACEC may be obtained through purchase, exchange, or donation where such will help to achieve management objectives for the area. Lands so acquired will be managed under the same prescriptions as will be applied to the remainder of the ACEC.
- AC-03 The **Warner Ridge/Fort Pearce ACEC** encompasses 4,281 acres. This area contains the endangered dwarf bear-

- claw poppy, the threatened siler pincushion cactus, important riparian values along the Fort Pearce Wash, historic sites, and highly erodible soils, all of which are at risk from off-road travel, road proliferation, urban growth, and human encroachment. The area also contains essential habitat for waterfowl, the gila monster, spotted bat, raptors, and other nongame species which have suffered from habitat loss caused by urbanization and development in the St. George area. The following prescriptions will be applied to protect and improve these values:
- a) Category 3 (NSO) stipulations will be applied to fluid mineral leasing to avoid soil loss and irreparable impacts to poppy habitat from exploration, drilling, and lease maintenance operations.
- b) The area will be closed to fuelwood and mineral materials sales and designated a right-of-way avoidance area. BLM will work with sponsors of the Southern Transportation Corridor to define an environmentally preferred route through the area that will minimize impacts to the resources being protected.
- c) BLM will recommend the area be withdrawn from mineral entry. Pending Secretarial approval of the withdrawal, mining plans of operation will be required for all mining exploration and development activities other than casual
- d) Motorized travel will be limited to designated roads and trails. Fencing, barricading, and signing will be employed as necessary to eliminate unauthorized vehicle access and impacts to protected resources.
- e) Mountain bike use will be limited to designated roads and trails.
- f) Public lands in the ACEC will be retained in public ownership. Non-federal lands within the ACEC may be obtained through purchase, exchange, or

donation where such will help to achieve management objectives for the area. Lands so acquired will be managed under the same prescriptions as will be applied to the remainder of the ACEC.

- g) Special recreation permits may be issued where site specific analysis determines that the authorized activity will not adversely affect the values for which the ACEC was designated.
- h) Additional prescriptions described in the discussion of the Sand Mountain Special Recreation Management Area (SRMA) in the Recreation section of this Plan will be applied to achieve objectives for the area.
- The Santa Clara/Gunlock ACEC encom-AC-04 passes 1,998 acres. This area contains numerous important resource values that need special protection as a result of extensive recreation use, off-road travel, transient camping, and other forms of human encroachment (Utah Department of Natural Resources, 1995). Values include numerous Virgin Anasazi riverine sites, Southern Paiute sites, and rock art sites, many of which have been looted or vandalized. The Santa Clara River supports essential riparian resources, habitat for the Virgin spinedace minnow and migratory and nongame birds, and potential habitat for the listed Southwestern willow flycatcher. Management objectives include protection of cultural resources, improvement and protection of riparian systems and floodplains, and restoration of habitats for listed and sensitive species. The following prescriptions will be applied to offer protection to the resources so identified:
 - a) Selected archeological sites may be managed for public values and interpreted for educational use. Other sites will continue to be managed for information potential unless specific plan prescriptions establish other objectives in accordance with cultural resource policies. Surveillance and other law enforcement

- measures will be increased to deter vandalism. Site steward programs will be employed to bring trained volunteers to monitor the sites and report violations or resource degradation. Cooperative agreements with local Indian tribes, government agencies, or qualified organizations may be used for interpreting, protecting, or otherwise managing archeological resources in their natural context where consistent with ACEC prescriptions.
- b) BLM will collaborate with the Utah Department of Natural Resources, the Washington County Water Conservancy District, the FWS, and other interested parties in implementing the terms of the Virgin Spinedace Conservation Agreement and Strategy (April 11, 1995) as it affects the segment of the Santa Clara River in this ACEC. Among other things, this will include the reestablishment and protection of year-round flows in the Santa Clara River below Gunlock Dam, implementation of habitat improvements, eradication of nonindigenous fish, and monitoring and evaluation.
- c) All applicable management prescriptions listed under the section in this Plan on Riparian Resources will be implemented in full to restore and protect the riparian values and associated habitats within this ACEC.
- d) Lands outside of riparian zones will be placed under Category 2 special stipulations for fluid mineral leasing requiring submission and approval of a plan of development that protects surface and groundwater quality.
- e) The area will be closed to fuelwood and mineral materials sales and designated a right-of-way avoidance area.
- f) Motorized travel will be limited to designated roads and trails to help protect and restore riparian values and sensitive fish habitat.
- g) Mountain bike use will be limited to existing roads and trails.

- h) Mining plans of operation will be required for all mining exploration and activity other than casual use.
- i) Public lands in the ACEC will be retained in public ownership. Any non-federal lands acquired by BLM within this area will be managed in accordance with ACEC prescriptions applied to the surrounding public lands.
- j) This ACEC includes lands within the Red Mountain SRMA. Where land use prescriptions for the two areas conflict on any given parcel, prescriptions for the ACEC will apply.
- k) Special recreation permits may be issued when site-specific analysis determines activities thus authorized will not adversely affect the values for which the ACEC was designated.
- I) BLM will work with water users and affected local agencies to ensure that new or adjusted irrigation diversion points will be designed and located to minimize conflicts with mutual objectives for managing the area.
- AC-05 The Santa Clara River/Land Hill ACEC encompasses 1,645 acres. This area contains numerous important resource values that need special protection as a result of increasing recreation use, vandalism, pressure for land transfers, urban development, and other forms of human encroachment. Values include numerous Virgin Anasazi riverine sites and extensive prehistoric rock art, many of the former having been vandalized. This segment of the Santa Clara River supports essential riparian resources, habitat for the Virgin spinedace and migratory and nongame birds, and potential habitat for the listed Southwestern willow flycatcher. Management objectives include protection of cultural resources through appropriate interpretation, conservation, cooperative management, and research use; enhancement of habitats for the

- Virgin spinedace and other listed or sensitive species; and maintenance of properly functioning riparian values. The following prescriptions will be applied to protect the resources identified:
- a) Selected archeological sites will be managed for public values and interpreted for educational use. Other sites will continue to be managed for information potential unless specific plan prescriptions establish other objectives in accordance with cultural resource policies. Surveillance and other law enforcement measures will be increased to deter vandalism. Site steward programs will be employed to bring trained volunteers to monitor the sites and report violations or resource degradation. Cooperative agreements with local Indian tribes, government agencies, and qualified organizations will be used for interpreting, protecting, or otherwise managing archeological resources and visitor uses in accordance with plans being developed for the proposed Santa Clara River Reserve.
- b) BLM will collaborate with the Utah Department of Natural Resources, the Washington County Water Conservancy District, the FWS, and other interested parties in implementing the terms of the Virgin Spinedace Conservation Agreement and Strategy (April 11, 1995) as it affects the segment of the Santa Clara River in this ACEC. Among other things, this will include the reestablishment and protection of yearround flows in the Santa Clara River below Gunlock Dam, implementation of habitat improvements, eradication of nonindigenous fish, and monitoring and evaluation.
- c) All applicable management prescriptions listed under the section in this Plan on Riparian Resources will be implemented in full to restore and protect the riparian values and associated habitats within this ACEC.

- d) The area will be closed to fuelwood and mineral materials sales and designated a right-of-way avoidance area.
- e) Motorized travel will be limited to designated roads and trails to prevent damage to cultural resource sites and sensitive riparian resources. Mountain bike use will be limited to existing roads and trails including single tracks.
- f) Mining plans of operation will be required for all mining exploration and activity other than casual use. Category 3 (NSO) stipulations will be applied to fluid mineral leasing to protect the fragile resources in this area.
- g) Public lands in the ACEC will be retained in public ownership unless transfer will further management objectives for the area. Any non-federal lands acquired by BLM within the ACEC will be managed in accordance with ACEC prescriptions applied to the surrounding public lands.
- h) Special recreation permits may be issued when site-specific analysis determines activities thus authorized will not adversely affect the values for which the ACEC was designated.
- i) BLM will work with water users and affected local agencies to ensure that new or adjusted irrigation diversion points will be designed and located to minimize conflicts with mutual objectives for managing the area.
- j) The area will have a VRM Class II designation.
- AC-06 The **Lower Virgin River ACEC** encompasses 1,822 acres. This ACEC will be managed to improve and maintain riparian resources, habitat for the endangered woundfin minnow and Virgin River chub, and habitat for migratory and nongame birds, and also to protect cultural resources including numerous Virgin Anasazi sites, Southern

- Paiute sites, and rock art panels. These resources are at risk from increasing vandalism, off-road travel, recreation, pressure for land transfers and urban development, and other forms of human encroachment. The following prescriptions will be applied to protect the resources identified:
- a) Cultural resources will be managed and protected through appropriate interpretation, conservation, cooperative management, and research. Surveillance and other law enforcement measures will be increased to deter vandalism. Site steward programs will be employed to bring trained volunteers to monitor the sites and report violations or resource degradation. Cooperative agreements with local Indian tribes, government agencies, and qualified organizations may be used for interpreting, protecting, or otherwise managing archeological resources and visitor uses.
- b) BLM will collaborate with the Washington County Water Conservancy District, the Utah Department of Natural Resources, the FWS, participating municipalities, and other interested parties in formulating and analyzing the proposed Virgin River Management Plan and the proposed Virgin River Basin Integrated Resource Management and Recovery Program as they affect the segment of the Virgin River in this ACEC. Among other things, BLM will support and pursue the reestablishment and protection of year-round flows, implementation of habitat improvements, eradication of nonindigenous fish, protection of floodplains, measures to improve water quality, and monitoring and evaluation.
- c) All applicable management prescriptions listed under the section in this Plan on Riparian Resources will be implemented to restore and protect the riparian values and associated habitats within this ACEC.

- d) Applicable Standards for Rangeland Health, including monitoring and assessment programs, will be employed to determine if management objectives for this ACEC and objectives of the Virgin River Fishes Recovery Plan are being met. If monitoring reveals the objectives and standards are not being met, adjustments in permitted land uses will be made to the extent such are determined to be contributing factors. If authorized grazing practices are determined to impede attainment of the standards, BLM will work with permittees and other interested parties to develop strategies and adjust grazing use accordingly. Changes may include, but will not be limited to, adjusting the season of use to minimize direct competition, allotment recategorization, and combining allotments or installing range developments to reduce grazing pressure in key areas.
- e) The ACEC will be closed to fuelwood and mineral materials sales and designated a right-of-way avoidance area.
- f) Motorized travel will be limited to designated roads and trails to minimize disturbance to riparian resources and listed species habitats.
- g) Mining plans of operation will be required for all mining exploration and activity other than casual use. Category 3 (NSO) stipulations will be applied to fluid mineral leasing to prevent impacts to the sensitive riparian, wildlife, and cultural resources.
- h) Public lands in the ACEC will be retained in public ownership.
- i) Visitor use will be managed as necessary to achieve objectives for riparian restoration and protection of archeological resources. Special recreation permits may be issued when site-specific analysis determines activities thus authorized will not adversely affect the values for which the ACEC was designated.

j) BLM will work with water users and affected local agencies to ensure that new or adjusted irrigation diversion points will be designed and located to minimize conflicts with mutual objectives for managing the area.

AC-07 The Little Creek Mountain ACEC encompasses 19,302 acres. This ACEC contains extensive archeology consisting primarily of Anasazi structural sites with examples of rock art and shelter sites. Many of the sites have been abused, while many others have been inventoried or studied by local researchers and universities. Up to 100 sites per section have been recorded on the mesa (USDI/BLM, 1988). Management of this area will emphasize protection and interpretation of archeological resources. Selected sites may be designated for educational use and research. Other sites may be identified for conservation to preserve the resources for the enjoyment of future generations and to conform to the cultural and religious desires of presentday Indian tribes. Objectives and prescriptions identified in the section of this Plan under Cultural and Paleontological Resources will be employed as appropriate to the management of cultural resources in the ACEC. Protection will also be afforded through the following management

a) Surveillance and other law enforcement measures will be used to deter vandalism. Site steward programs will be employed to bring trained volunteers to monitor the sites and report violations or resource degradation.

prescriptions:

b) Public lands within the ACEC boundary will be retained in public ownership. Non-federal lands in the ACEC may be acquired through purchase, exchange, or donation to further the accomplishment of resource objectives and to increase manageability of the area. Any lands acquired by BLM with-

in the ACEC will be managed in accordance with applicable ACEC prescriptions.

- c) Full, onsite cultural resource inventories will be required prior to surface disturbing activity and avoidance or mitigation of sites so recorded after consultation with the Utah Historic Preservation Officer.
- d) Mining plans of operation will be required for all mining exploration and development activities other than casual use to allow analysis of potential impacts and development of mitigation.
- e) Motorized travel will be limited to existing roads and trails to lessen impacts to the extensive cultural resources throughout the area. BLM will work with Washington County officials to identify motorized vehicle trails needing closure for safety and resource protection and follow the requirements of Utah State law and federal regulation in implementing the closures.
- f) Except for existing and planned operations at the Cinder Knoll, the area will be closed to mineral materials sales.
- g) Except for approved existing communication sites and associated access, public lands will be designated a right-of-way avoidance area.
- h) Crucial deer winter range within the area will be further protected by Category 2 fluid mineral leasing stipulations closing the lands to exploration and development from November 1 to April 15.
- i) Special recreation permits may be issued where site-specific analysis determines that the authorized activity will not adversely affect the values for which the ACEC was designated.
- AC-08 The **Canaan Mountain ACEC** encompasses 31,355 acres. Canaan Mountain and the associated Vermillion Cliffs con-

- tain some of the most rugged topography and spectacular scenic values in Washington County outside of Zion National Park. The peaks and cliffs form the south gateway to the park and serve as a destination point for an increasing number of outdoor recreationists. Numerous archeological sites are also found along the base of many of the cliffs. Historic structures are found in the higher elevations. This ACEC will be managed to protect these exceptional scenic values, cultural resources, and primitive recreation opportunities. Management prescriptions for the area are defined in this Plan under the section on the Canaan Mountain SRMA which coincides geographically with the ACEC. The following additional prescriptions will also be applied:
- a) Public lands in the ACEC will be retained in public ownership. Non-federal lands within the ACEC may be obtained through purchase, exchange, or donation where such will help to achieve management objectives for the area. Lands so acquired will be managed under the same prescriptions as will be applied to the remainder of the ACEC.
- b) Public lands in the area will be designated a right-of-way avoidance area to protect scenic values and avoid impacts to the natural setting. They will also be assigned a VRM Class I designation.
- c) The area will be closed to fuelwood and mineral materials sales. Category 3 (NSO) stipulations will be applied to fluid mineral leasing to protect scenic and natural values and to preserve the primitive character of the landscape.
- d) All lands within the ACEC have been classified as primitive and will be closed to mountain bike use and motorized travel to preserve natural values and opportunities for primitive recreation.

- e) Mining plans of operation will be required for all mining exploration and activity other than casual use.
- f) Special recreation permits may be issued where site-specific analysis determines that the authorized activity will not adversely affect the values for which the ACEC was designated.
- AC-09 The **Red Mountain ACEC** encompasses 4,854 acres. Red Mountain serves as a spectacular backdrop to the communities of Ivins and Santa Clara and has significance to members of local Indian tribes. The escarpment overshadows the west boundary of the Tuacahn Center and portions of Snow Canyon State Park and, as such, adds to the natural beauty of both developments. The intent of this ACEC is to preserve the scenic cliff face from visible disturbance. Where the ACEC overlaps with the Red Mountain Special Recreation Management Area, recreation prescriptions will be subordinate to ACEC objectives and prescriptions. ACEC prescriptions will be as follows:
 - a) The area will be placed in a fluid mineral leasing Category 3 (NSO) to prevent scarring or disturbance from vehicle access, exploration, or drilling operations.
 - b) Public lands in the area will be closed to off-road travel to preserve the natural appearance of the cliff face.
 - c) Public lands in the area will be closed to fuelwood and mineral materials sales and designated a right-of-way avoidance area.
 - d) Mining plans of operation will be required for all mining exploration and activity other than casual use.
 - e) The lands will be assigned a VRM Class I designation.
 - f) Special recreation permits may be issued where site-specific analysis

- shows that the authorized activity will not adversely affect the values for which the ACEC was designated. BLM will monitor commercial activity in the area and impose additional limits on the amount of such use as will be necessary to preserve such values.
- g) Public lands in the ACEC will be retained in public ownership. Non-federal lands within the ACEC may be obtained through purchase, exchange, or donation where such would help to achieve management objectives for the area. Lands so acquired will be managed under the same prescriptions as will be applied to the remainder of the ACEC.
- AC-10 The Beaver Dam Slope ACEC encompasses 48,519 acres. This ACEC contains critical habitat for the threatened desert tortoise, the proper management of which is considered to be essential for the continued survival of the population in this part of the Northeastern Mojave Recovery Unit (USDI/FWS, 1994). It also contains habitat for a diversity of desert plant and animal species, many of which are listed by state or federal agencies as special status species. Included in the area are the Joshua Tree National Natural Landmark and the Woodbury Desert Study Area. The study area has been the focus of desert wildlife and ecosystem research since the 1930s. Values within the ACEC are at risk from increasing levels of human encroachment, off-road travel, and various forms of outdoor recreation. Although some recent inventories suggest currently stable populations, researchers have noted declines in desert tortoise densities since the 1970s (USDI/FWS, 1994) and cite disease, predation, grazing conflicts, and increased human activity as probable contributing factors. Actions need to be taken to prevent additional habitat loss or disturbance. Further research also needs to be completed to more clearly define the source and

extent of impacts so that land and resource managers may make informed decisions on future management of the area. The following prescriptions/information will be applied:

- a) The boundaries and management prescriptions for the ACEC have been developed in consultation with state and federal agencies in Utah, Arizona, and Nevada to achieve a coordinated approach to managing critical habitats for the desert tortoise and achieving recovery objectives throughout the Northeastern Mojave Unit. BLM will continue to work with local, state, and federal partners, affected user groups, and other interested parties to further define specific objectives and implement planned actions to achieve the goals of the Desert Tortoise Recovery Plan, the Beaver Dam Slope Habitat Management Plan, and other applicable planning efforts. Moreover, BLM will seek to maintain the values associated with the Ioshua Tree National Natural Landmark and the Woodbury Desert Study Area and support additional research related to the management of desert ecosystems in the area.
- b) Detailed prescriptions for desert tortoise management in the ACEC are described in the discussion on desert tortoises under Special Status Species in the section of this Plan on Fish and Wildlife Habitat Management. Such prescriptions will also serve to meet objectives for nontortoise issues identified on the Slope including maintaining the overall health of the desert ecosystem, improving habitats for other special status plants and animals, and preserving the natural values and research capabilities of the Joshua Tree National Natural Landmark and the Woodbury Desert Study Area. The ACEC includes two special management areas and a portion of the Woodbury Desert Study Area where management will focus on nontortoise related issues. In accordance with the outcome of consultation

- with the Utah Division of Wildlife Resources (DWR) and the FWS, all management prescriptions for the ACEC will be applied in these areas except for spring grazing restrictions described in the detailed prescriptions referenced earlier.
- c) BLM will continue to authorize and support research needed to determine habitat requirements, causes of increased mortality, and other essential factors related to the management of the desert tortoise and its eventual recovery. BLM will also collaborate with the Utah DWR, the FWS, university researchers, and other interested parties in developing and implementing monitoring studies that will evaluate population trends, tortoise health, vegetation condition and trend, and other factors needed to assess the effectiveness of management actions. Where it is determined that recovery objectives are not being met, BLM will work with its interested partners to determine the cause of such failure and to adjust its management prescriptions accordingly.
- d) BLM will also work with state and local agencies, school districts, and interested citizen groups to develop educational programs to increase public awareness of habitat requirements, desert ecosystems, reasons for protective management, and other factors related to species recovery.
- AC-11 The **Upper Beaver Dam Wash ACEC** encompasses 33,063 acres. The West Fork of the Beaver Dam Wash maintains good water quality throughout its upper reaches where it flows through granitic bedrock. The stream supports both warm and cold water fisheries, maintains a quality riparian system, and constitutes potential habitat for the Virgin spinedace and the endangered Southwestern willow flycatcher. Beside providing water for agricultural use near the community of Motoqua, it feeds groundwater aquifers being considered

for potential well-field development to provide culinary water for St. George and neighboring communities. High potential for precious metals within the watershed spawns continued interest in exploration and further mineral development. The ACEC will be managed to preserve watershed integrity and water quality and to maintain or improve riparian resources and potential habitats for the Virgin spinedace and Southwestern willow flycatcher. The following prescriptions will be applied:

- a) BLM will collaborate with the Utah DWR, the Nevada Division of Wildlife, the Washington County Water Conservancy District, the FWS, and other interested parties in implementing the Virgin Spinedace Conservation Agreement and Strategy (April 11, 1995) as it affects the segment of the Upper Beaver Dam Wash in this ACEC. Among other things, this will entail habitat enhancement, reintroduction of spinedace to the stream, eradication of nonindigenous fish along appropriate stretches, and monitoring and evaluation.
- b) Applicable Standards for Rangeland Health, including monitoring and assessment programs, will be employed to determine if objectives developed for protection and enhancement of the watershed and special status species are being met. If monitoring reveals the objectives and standards are not being met, BLM will work with user groups and interested parties to develop strategies and make adjustments in land uses to the extent such are determined to be contributing factors.
- c) The area will be closed to mineral materials sales and designated a right-of-way avoidance area.
- d) The area will remain open to fuel-wood disposal in designated areas (Map 2.10) with stipulations to protect watershed and riparian values.

- e) Mining plans of operation will be required for all mining exploration and activities other than casual use. The area will be closed to off-highway travel on 8,325 acres and limited to designated roads and trails on 22,035 acres to protect watershed, riparian, and natural values and potential Southwestern willow flycatcher habitat.
- f) Lands closed to off-road travel will be placed under Category 3 (NSO) stipulations for fluid mineral leasing to maintain the primitive character of the lands and to protect the upper watershed from impacts of exploration and development. Riparian zones will also be placed under Category 3 (NSO) stipulations. All other lands in the ACEC will be placed under Category 2 special stipulations for fluid mineral leasing requiring submission and approval of a plan of development to protect surface and groundwater quality.
- g) All applicable management prescriptions listed under the section in this Plan on Riparian Resources will be implemented to restore and protect the riparian values and associated habitats within this ACEC.
- h) Public lands in the ACEC will be retained. Non-federal lands may be obtained through purchase, exchange, or donation to help to achieve management objectives for the area. Lands so acquired will be managed in accordance with the same prescriptions as will be applied to the remainder of the ACEC.
- i) Special recreation permits may be issued when site-specific analysis determines activities thus authorized will not adversely affect the values for which the ACEC was designated.
- j) BLM will work with water users and affected local agencies to ensure that new or adjusted irrigation diversion points will be designed and located to

minimize conflicts with mutual objectives for managing the area.

Native American Coordination

Objectives

Public lands in Washington County and the surrounding region were used extensively in prehistoric times by Southern Paiute Indians and contain cultural and archeological features that are of great value to current members of the Paiute Tribe (USDI/BLM, 1988). Public lands surround the Shivwits (Paiute) Indian Reservation and provide access to numerous use areas and sites of religious and ceremonial importance, not only to the Shivwits Band, but to other Native American groups associated with the Paiute culture. BLM 's objective for Native American coordination will be to ensure compliance with the numerous laws, executive orders, and directives applicable to consultation and self-determination and to provide continued access to public lands for religious and ceremonial purposes.

- NC-01 BLM will enter into cooperative agreements with the Shivwits Band, the Paiute Tribe of Utah, and/or the Bureau of Indian Affairs to foster improved coordination and, where appropriate, to accomplish programs of mutual interest concerning the use and management of lands containing sacred sites or resources important to members of the tribe.
- NC-02 Public lands containing known sacred sites and important use areas will generally be retained in public ownership unless, as a result of consultation with affected tribes, BLM determines that a change of ownership is in the public interest and accomplishes other objectives that outweigh those served by retention. Where sacred sites are made known to BLM, their locations will be kept confidential to the extent possible under law to avoid desecration or unnecessary encroachment.
- NC-03 Native Americans will be allowed access to public lands for religious or

ceremonial purposes unless the access desired is expressly prohibited by law. This right of access will include the right to collect vegetative and mineral resources (that which can be gathered or carried by hand) needed to accomplish the intended purposes. Motorized access for such purposes into public land areas administratively closed to vehicle use will only be allowed with prior written approval from BLM's authorized officer in accordance with federal regulations at 43 CFR 8340.0-5(h). Such approval will be contingent upon the absence of reasonable alternatives and the ability to avoid impacts to resources being protected.

- NC-04 BLM will continue to work with the Bureau of Indian Affairs, the Shivwits Band, and the Paiute Tribe in providing rights-of-way, land use authorizations, or agreements on public lands needed to accomplish objectives for economic development and self determination or to otherwise ensure the health, safety, and well-being of members of the tribe. Such authorizations will be subject to appropriate environmental analysis and public notification.
- NC-05 BLM will continue to provide assistance to the Bureau of Indian Affairs and the Shivwits Band of Paiutes regarding mineral development, production verification, and other applicable resource management issues to the extent BLM has the capability to do so. Among other things, BLM will continue to support achievement of the goals of the Paiute Indian Tribe's Strategic Economic Development Plan to the extent such are consistent with federal laws, regulations, and the decisions of this Plan.
- NC-06 Where public lands and resources are involved, BLM will ensure compliance with the Native American Graves
 Protection and Repatriation Act and other statutes and associated regulations concerning consultation on and disposition of Native American human remains,

funerary objects, sacred objects, or objects of cultural patrimony.

Zion National Park Coordination

Objectives

It is BLM's objective to manage public lands in the immediate vicinity of Zion National park so as to complement park resources and programs in collaboration with affected communities, agencies, landowners, and citizen groups. The following prescriptions will be applied.

- ZP-01 The scenic area along State Scenic Highway 9 approaching Zion National Park from the west will be preserved by retaining public lands in view of the highway in public ownership from the top of the bench north of LaVerkin (lands east of the LaVerkin scenic overlook turnoff) to the south entrance of the park. Outside of 240 acres identified for transfer in or near the Town of Virgin, land transfers may be approved only to meet essential public and municipal purposes that will not seriously degrade the scenic values of the area. Public lands within the scenic area will be classified VRM Class II. Exceptions to the standard will be granted within the designated utility corridor and to allow other essential rights-ofway and public purposes authorizations needed to support the health, safety, and well-being of local communities in the scenic areas where the impacts of such uses can be mitigated to satisfactory levels. Measures to reduce such impacts to an acceptable level may include, but not be limited to, screening, design modifications, and surface rehabilitation.
- ZP-02 BLM will work with park managers to evaluate potential sites on public lands for a visitor contact station and ranger residence near the park boundary at North Creek to facilitate visitor information and management. After appropriate environmental analysis and a plan conformance determination, public lands may be transferred to Park Service

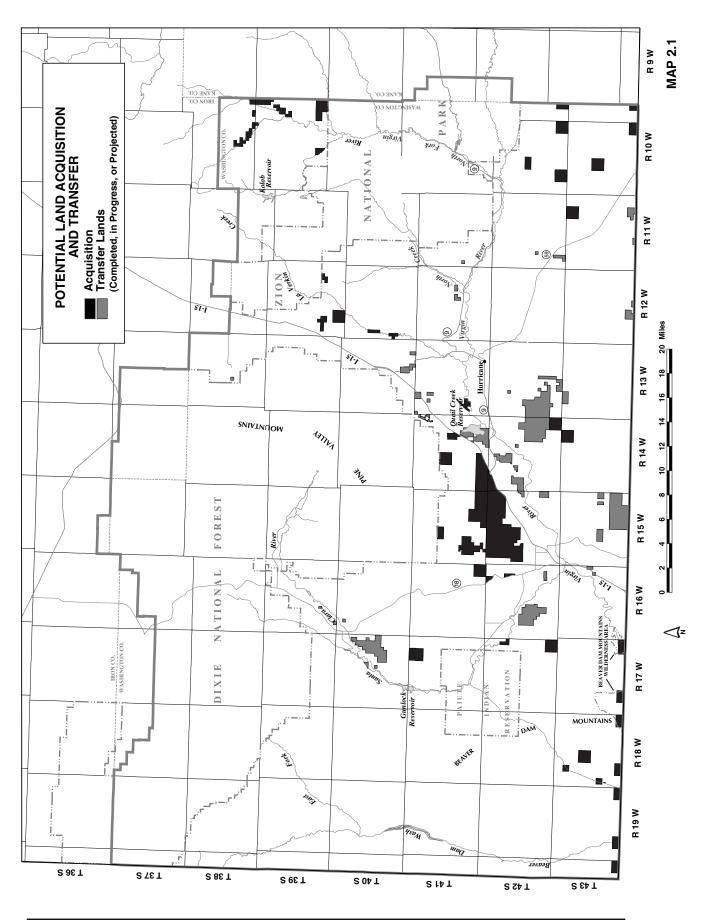
management for such purposes through cooperative agreement, withdrawal, or right-of way.

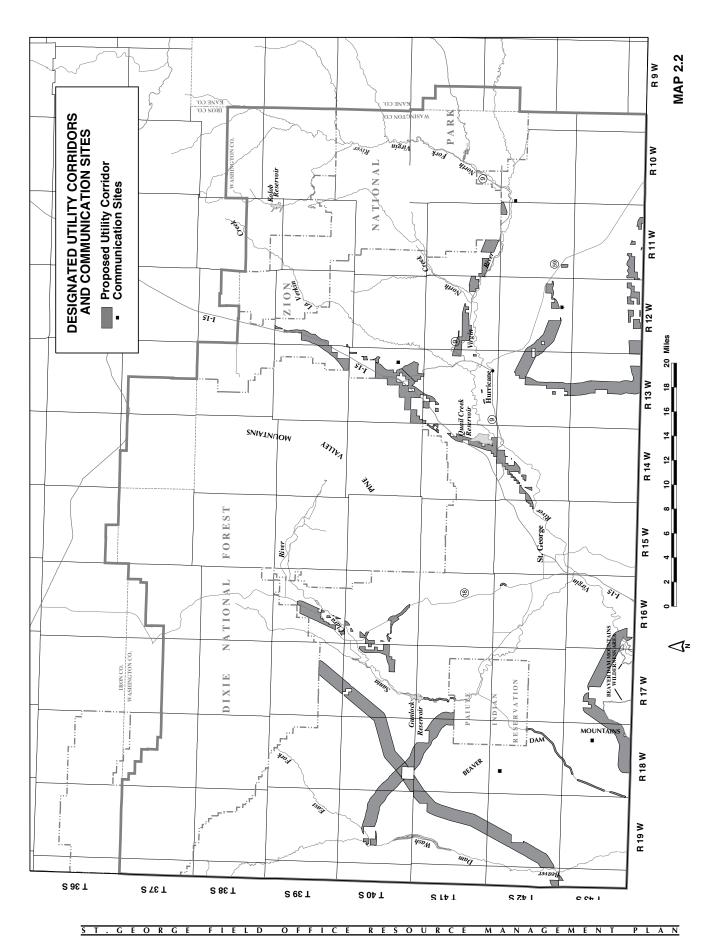
- Small, isolated parcels of public land **ZP-03** contiguous to the park boundary and which are found to be difficult and uneconomic for BLM to manage may be placed under Park Service management through cooperative management agreement or other appropriate mechanism. In such cases, both agencies will jointly determine that the action will be in the public interest and needed to increase on-the-ground presence for visitor management or resource protection. Lands subject to active grazing or mineral use will generally not be considered for such transfer.
- ZP-04 BLM will work with the National Park Service, the Utah Department of Transportation (UDOT), community leaders, nonprofit organizations, and citizen groups in furthering the goals of the park transportation plan. Among other things, BLM will work with members of communities and organizations in the Grafton Heritage Partnership in formulating plans for up to 80 acres of public land immediately north of Grafton for a visitor contact station to provide essential information on the shuttle system and to provide visitor access to the Grafton restoration project and riparian improvement proposal. After appropriate environmental analysis and a plan conformance determination, such lands may be made available through cooperative management agreement, withdrawal, or other applicable mechanism. BLM will work with community partners and the Utah DOT to evaluate relocation or relinquishment of the existing material site right-of-way.
- ZP-05 BLM will work with park managers and other affected local, state, or federal agencies to jointly conduct studies, make land use recommendations, and develop programs needed to achieve objectives called for in this Plan, the

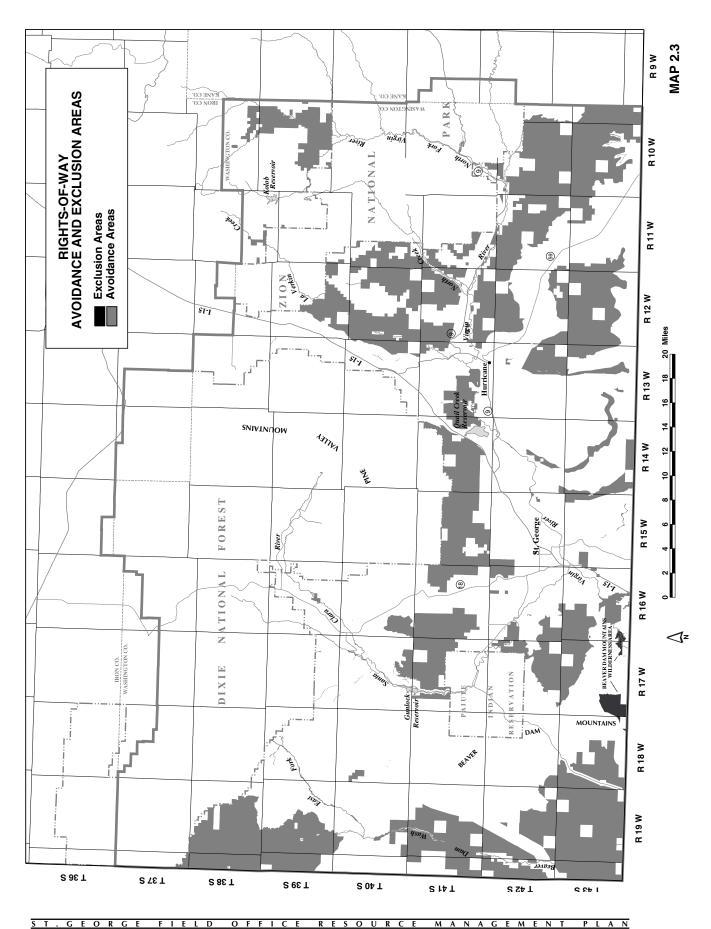
Development Concept Plan, and the Zion National Park Visitor Management and Resource Protection Plan scheduled for completion in 1999.

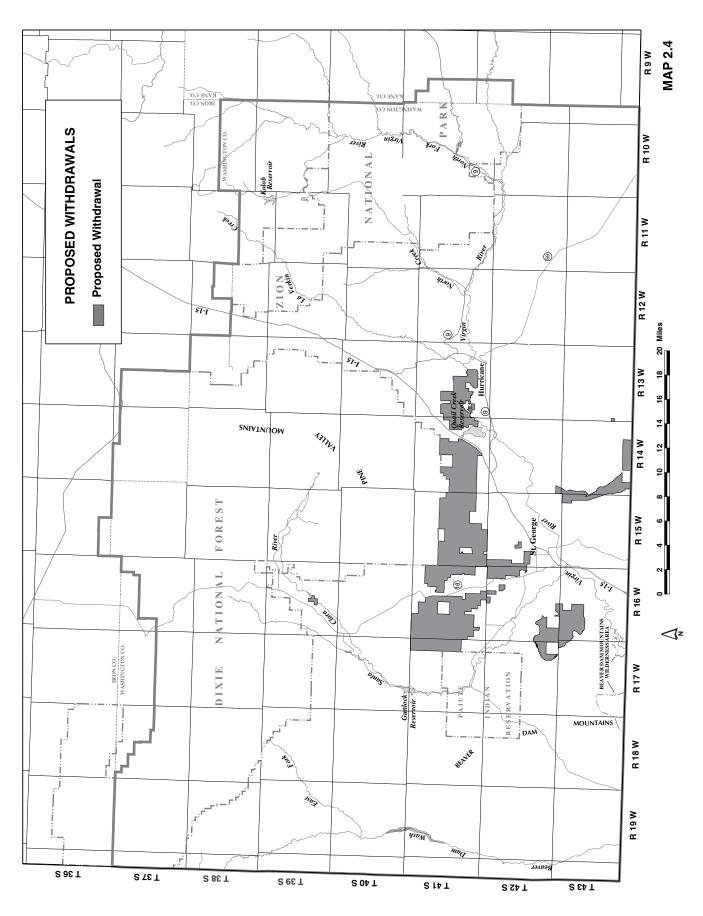
ZP-06 As part of the congressionally mandated Sand Hollow exchange, BLM acquired title in behalf of the United States to private lands known as the Smith Ranch south of the Kolob section of the park.

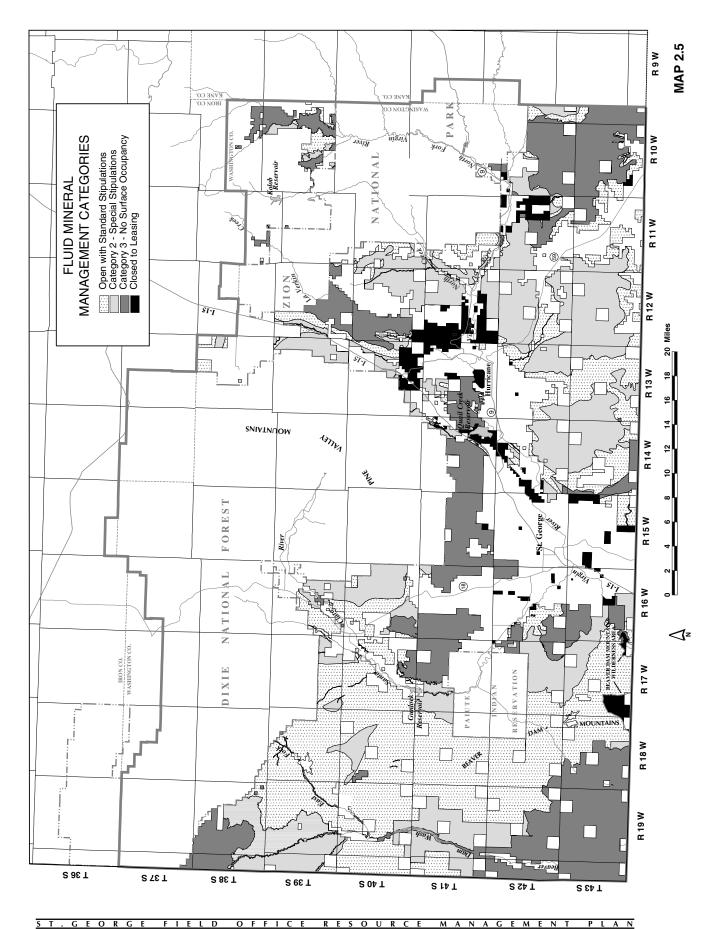
Congressional intent in having BLM acquire this property was to provide park managers with lands that may be used to consummate an exchange that will result in the acquisition of key, privately-owned inholdings on the west side of the park. BLM will continue to support park officials in achieving this important objective.

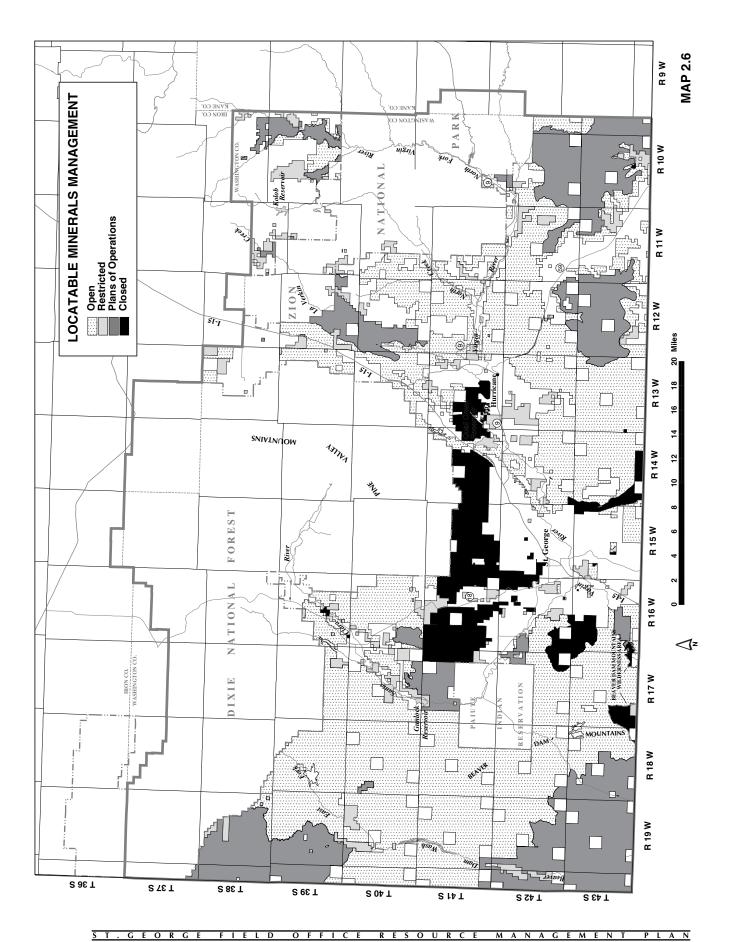


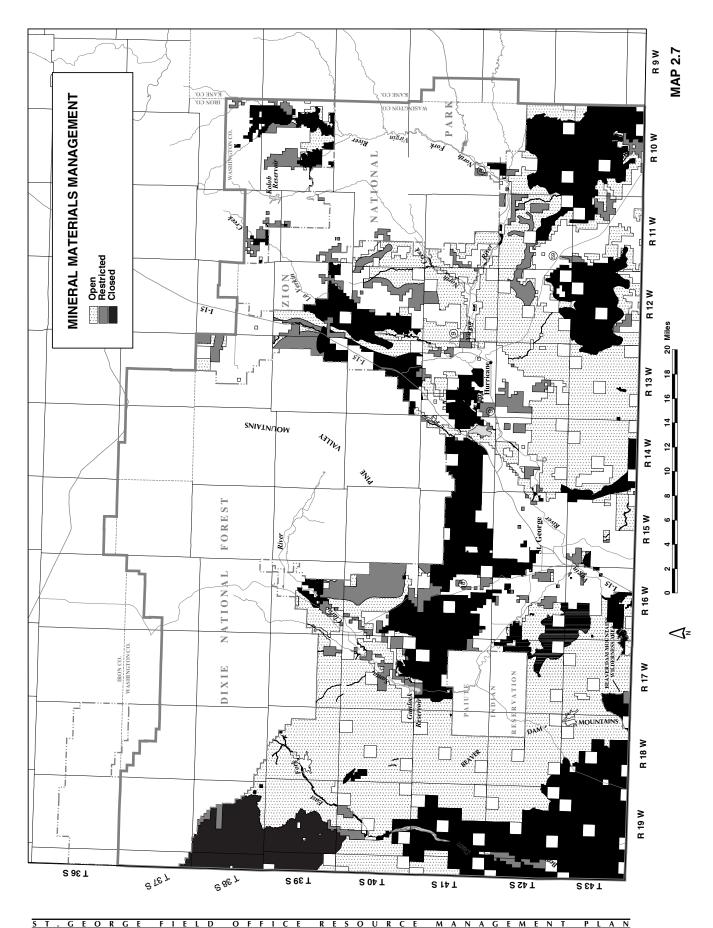


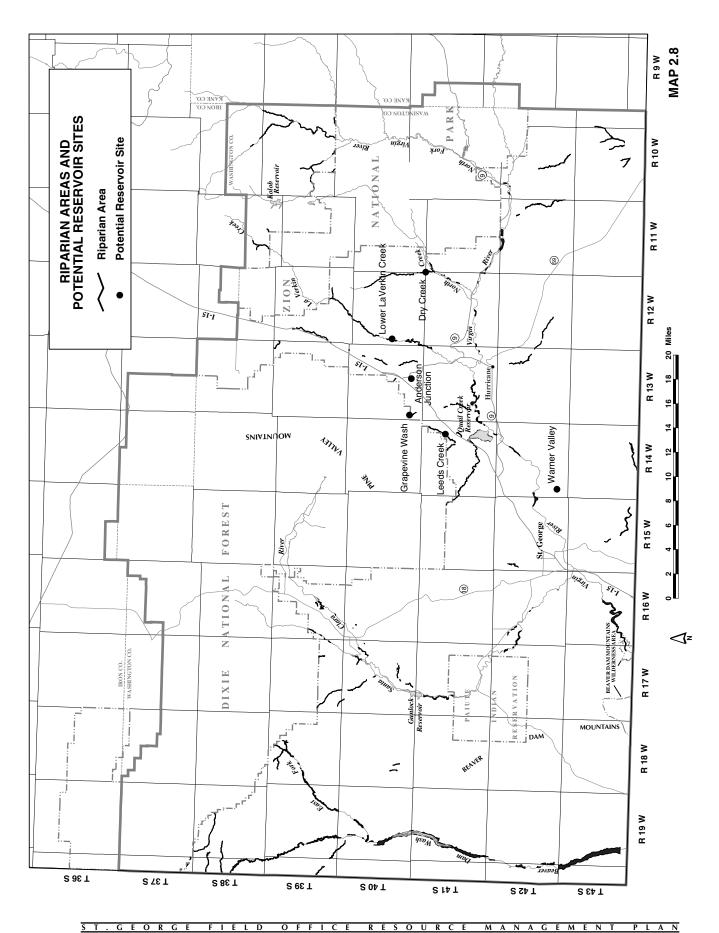


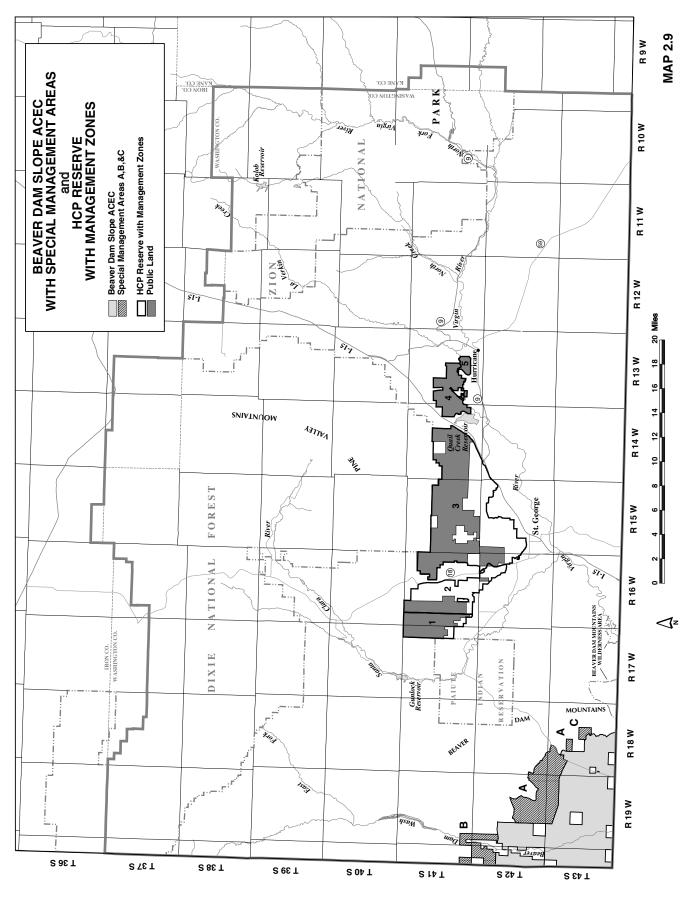


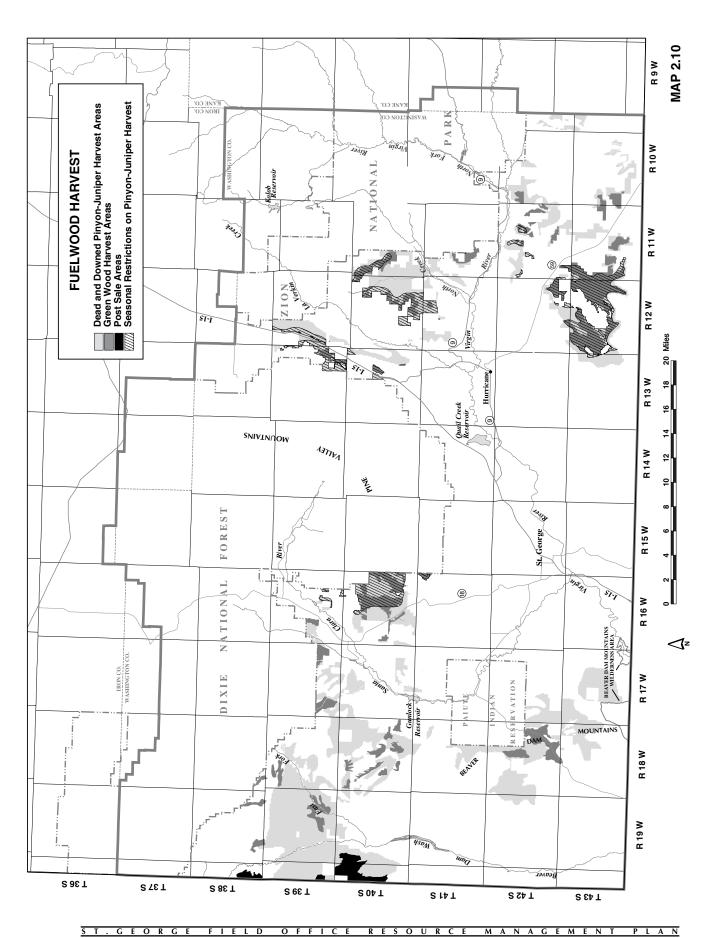


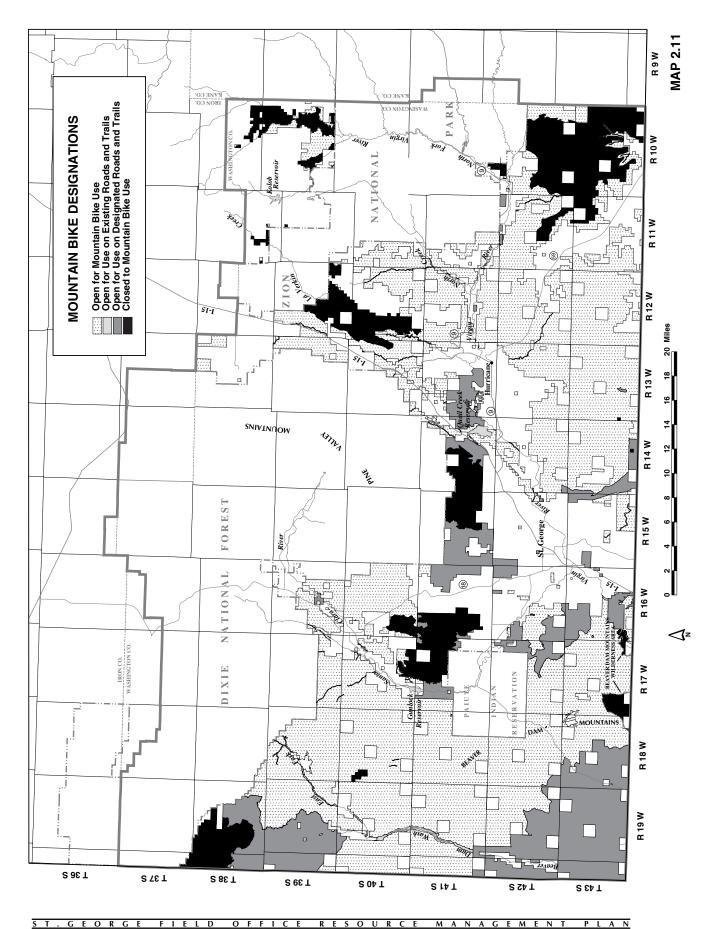


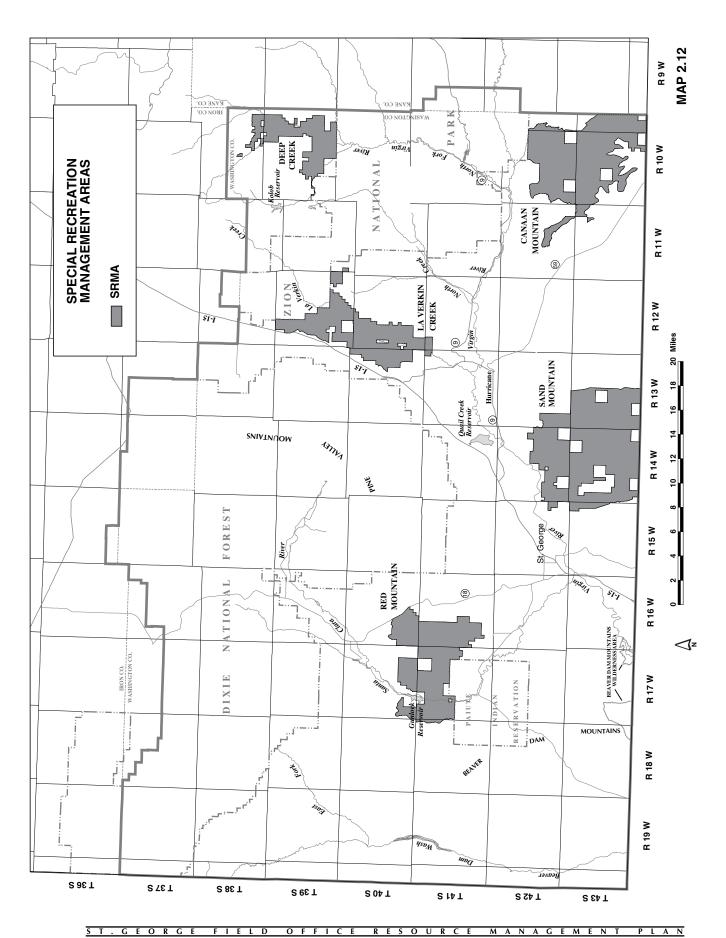


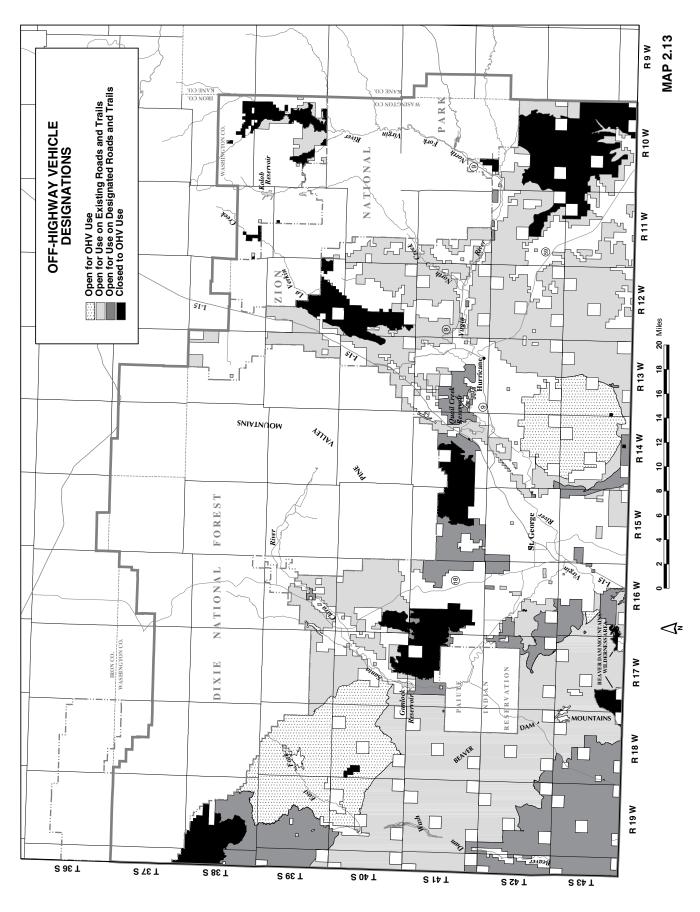


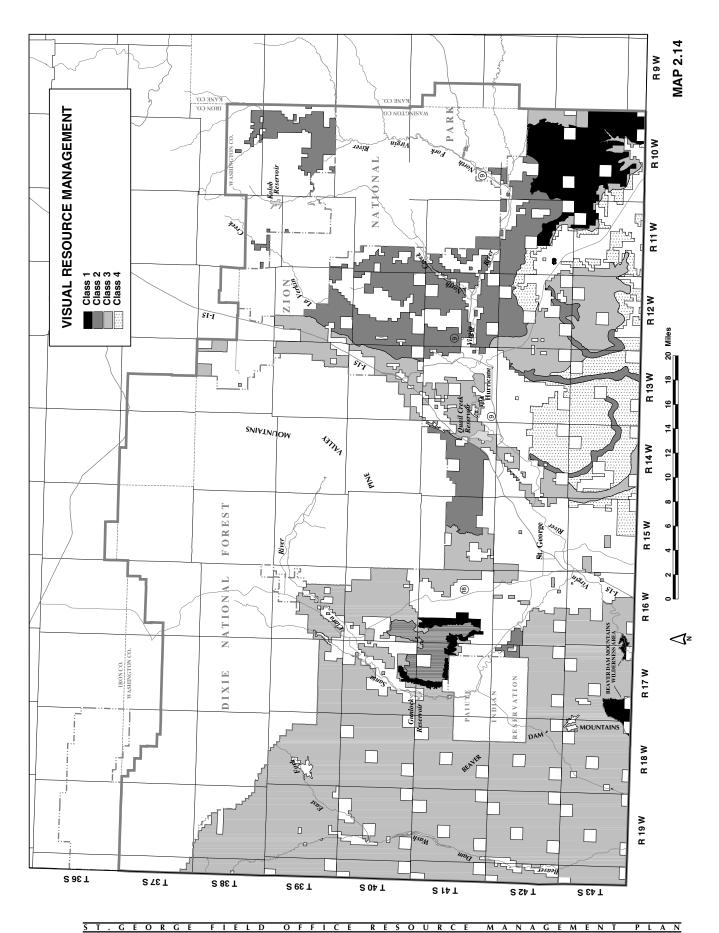


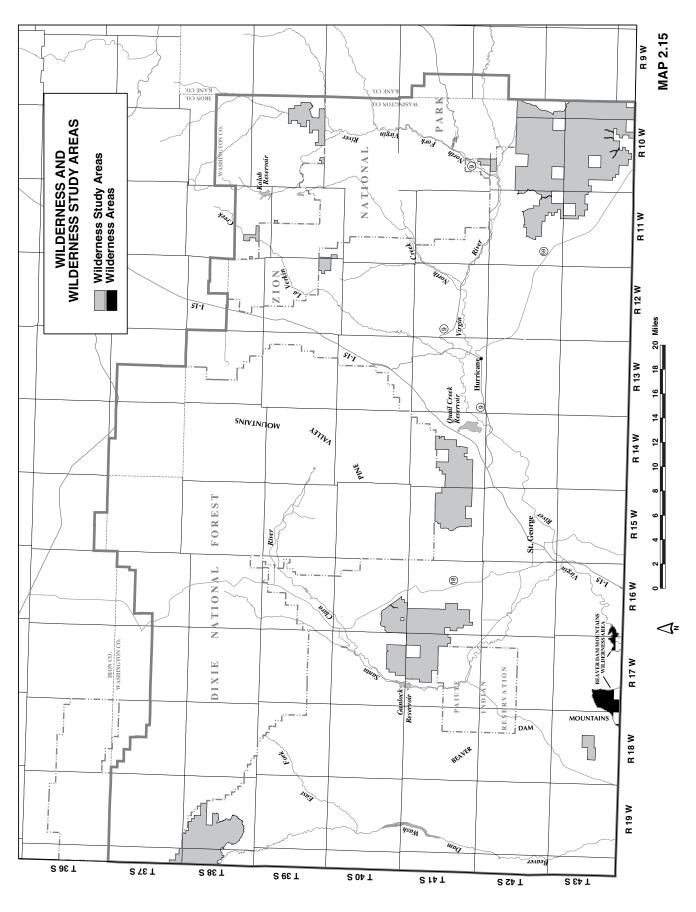


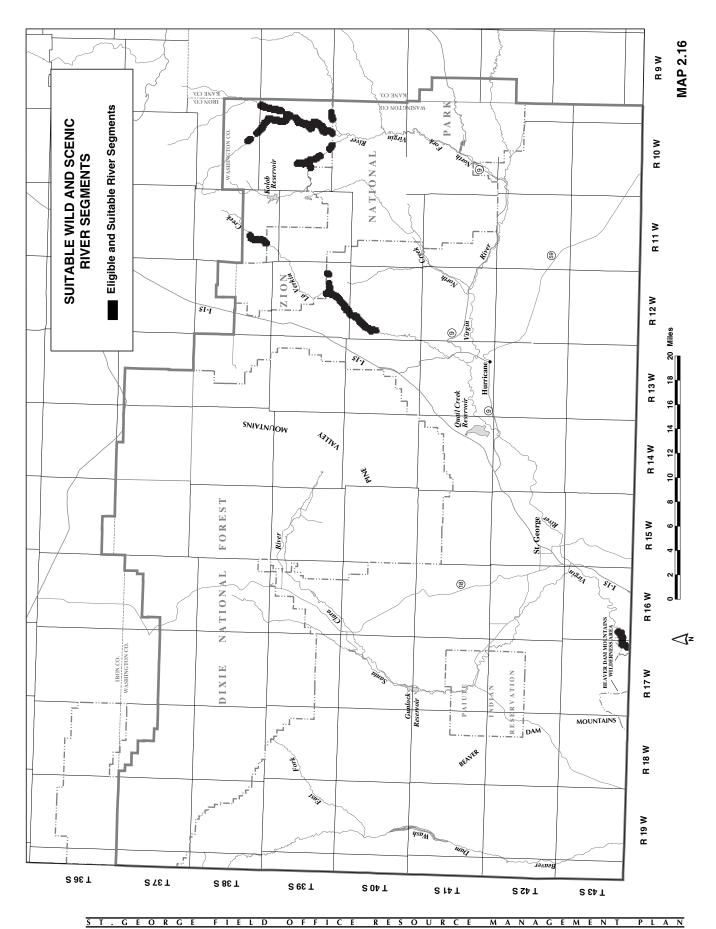


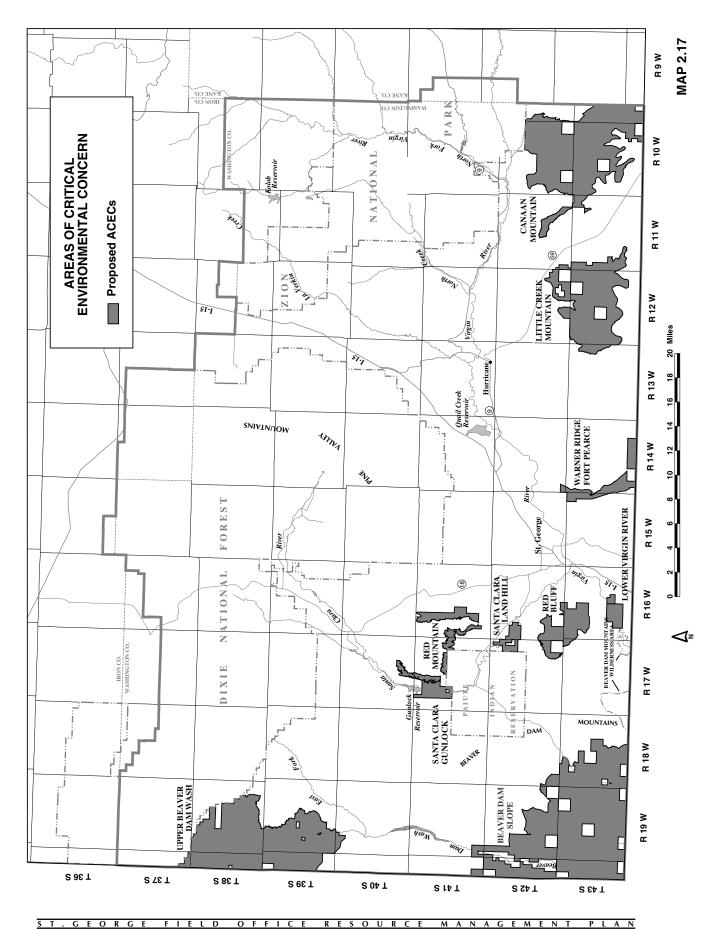








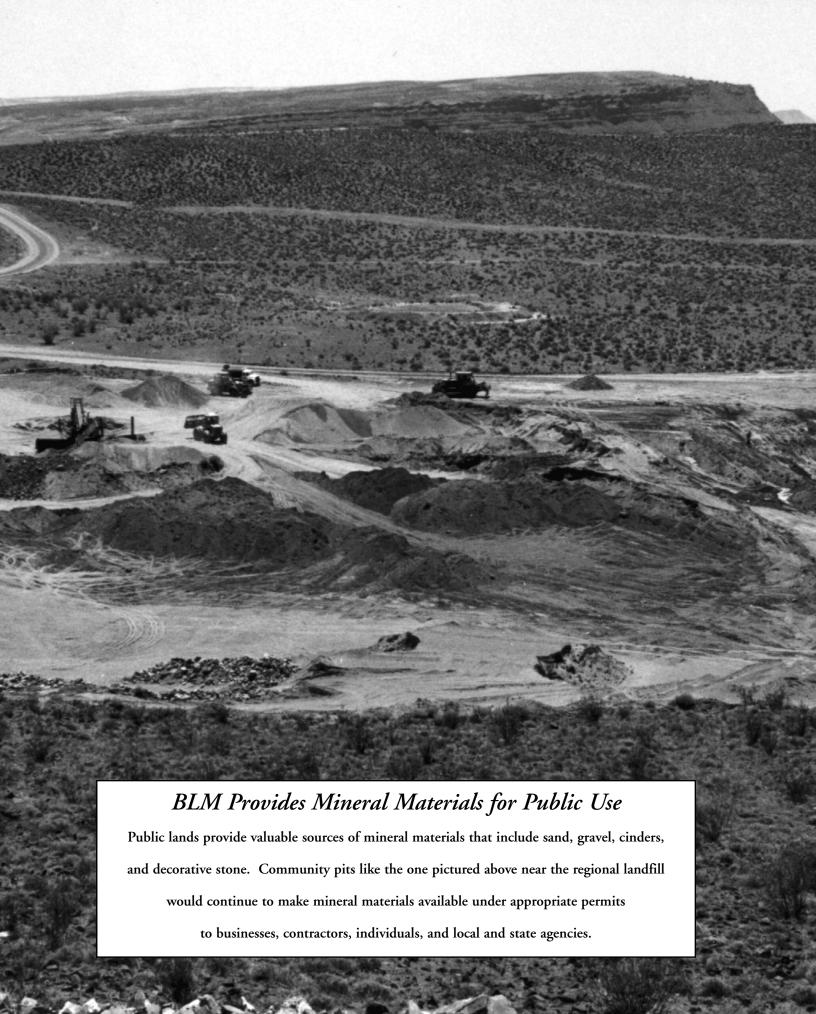




Wildfires Would Be Managed According to Plans

Wildland fires caused by lightning or human error occur with modest frequency on public lands within the county. BLM priorities for wildfire management and suppression would be to protect life, property, and critical resource values. Suppression strategies would be guided by approved fire management plans and would allow natural and prescribed fires where appropriate conditions, limitations, and safety precautions are in place.





APPENDIX 1 Standard Procedures Applied to Surface Disturbing Activities

The following are standard operating procedures applied to surface disturbing activities. These measures are applied, when necessary, to reduce environmental impacts. Some projects may require construction use plans and/or reclamation plans.

General

Areas subject to surface disturbance would be evaluated for the presence of cultural resources or values. This is usually accomplished through the completion of a cultural clearance. An onthe-ground inspection by a qualified archeologist, historian, or paleontologist is required.

In cases where cultural resources are found, the preferred response would be to modify the proposed action to avoid the cultural resource (avoidance). If avoidance is not possible, actions would be taken to preserve the data or value represented by the cultural resource (mitigation).

Areas subject to surface disturbance would be evaluated for the presence of threatened, endangered, or candidate animal or plant species. This is usually accomplished through the completion of a biological clearance. An on-theground inspection by a qualified biologist is required.

In cases where threatened, endangered, or candidate species are effected, the preferred response would be to modify the proposed action to avoid species or their habitat (avoidance). If avoidance of a threatened, endangered, or candidate species or its habitat is not possible, a Section 7 Consultation with the U.S. Fish and Wildlife Service (FWS) would be required, and a biological assessment would be prepared to recommend actions to protect the species or its habitat.

Roads

Recognized roads, as shown on the Cedar City District Office Transportation Plan, will be used

when the alignment is acceptable for the proposed use. At a minimum, vehicle use will be limited to existing roads and trails in fragile soil areas. Generally, new roads will be required to follow natural contours, be constructed in accordance with the standards described in BLM Road Standards and BLM Manual section 9113, and be reclaimed to BLM standards.

In order to control or reduce sediment from roads, proper road placement and buffer strips to stream channels, graveling, proper drainage, seasonal closure, and in some cases, redesign or closure of old roads, will be required. Construction may be prohibited during periods when soil material is saturated, frozen, or when watershed damage is likely to occur.

On newly constructed roads and permanent roads, the placement of topsoil, seeding, and stabilization will be required on all cut and fill slopes (unless conditions prohibit this, e.g., rock). No unnecessary sidecasting of material (e.g., maintenance) on steep slopes will be allowed. In areas of higher elevation within the resource area, snow removal plans may be required while a road is used for access so that snow removal does not adversely affect reclamation efforts or resources adjacent to the road.

Reclamation of abandoned roads will include requirements for reshaping, recontouring, resurfacing with topsoil, installation of water bars, and seeding on the contour. The removal of structures such as bridges, culverts, cattleguards, and signs will be required. Stripped vegetation will be spread over the disturbance for nutrient recycling where practical. Fertilization or fencing of these disturbances will not normally be required. Additional erosion control measures (e.g., fiber matting) and road barriers to discourage travel will be required if necessary.

Temporary road closures may be needed during spring runoff periods, in elk wintering areas, or other critical areas to protect resources.

Well Pads And Facilities

Any sediment control structures, reserve pits, or disposal sites would be designed to contain a 100-year flood, 6-hour storm event. Storage volumes within these structures would have a design life of 25 years.

Abandoned sites must be satisfactorily rehabilitated by the lessee in accordance with a plan approved by the BLM.

Before reserve pits and production pits are reclaimed, all residue will be removed and trucked off-site to an approved disposal site.

All surface use plans covering reclamation will be adhered to. This plan will include objectives for successful reclamation covering soil stabilization, plant community composition, and desired vegetation density and diversity.

No surface disturbance is allowed on slopes in excess of 25 percent unless erosion controls can be ensured and adequate revegetation is expected. Detailed engineering proposals and revegetation and restoration plans will be required in these areas.

On producing locations, operators will be required to reduce slopes to original contours (not to exceed 3:1 slopes). Terraces or elongated water breaks (erosion control measures) will be required after slope reduction. Facilities will be required to approach zero runoff from the location until the area is stabilized to avoid contamination and water quality degradation downstream. All unused portions of facilities or producing well locations will be resurfaced with topsoil and seeded with soil stabilizing species. Mulching, erosion control measures, and fertilization may be required to achieve acceptable stabilization.

Abandoned locations will be required to be recontoured to conform to the surrounding terrain. Construction of erosion and runoff control measures and placement of topsoil will be required after recontouring. All sediment will be retained on site.

The collection and analysis of soil samples from disturbed areas may be required to determine

reclamation potential, appropriate seed mixtures, and nutrient deficiencies. This will be the responsibility of the grantee or lessee. Testing (as determined by the BLM) may include pH, mechanical analysis, limiting salt content, nitrogen, phosphorus, and potassium.

Fertilization may be required if there is evidence of a nutrient deficiency. If needed to produce adequate germination and growth, the topsoil and selected seed species would be inoculated with soil microorganisms. The site will be seeded if slopes exceed 30 percent or contain 35 percent surface rock content. Mulching and fencing, unless deemed unnecessary due to low grazing pressure, will be required. Fences will be required to remain until reclamation is successful.

Reshaping to create shallow depressions (to catch surface runoff) may be required in areas receiving 10 inches or less of annual precipitation.

No sour gas (natural gas containing dangerous levels of hydrogen sulfide) lines will be located closer than 1 mile to a populated area or sensitive receptor. The applicants must use the best available engineering design (i.e., alignment, block valve type and spacing, pipe grade, etc.), and best construction techniques (i.e., surveillance, warning signs, etc.) as approved by the authorized officer to minimize both the probability of rupture and radius of exposure in the event of an accidental pipeline release of sour gas. A variance from the 1-mile distance may be granted by the authorized officer based on detailed site-specific analysis that would consider meteorology, topography, and special pipeline design and/or construction measures. This analysis would ensure that populated areas and sensitive receptors would not be exposed to an increased level of risk.

Pipelines and Communication Lines

Existing crowned and ditched roads will be used where possible to minimize surface disturbances.

Where possible, clearing of pipeline and communication line rights-of-way will be accom-

plished with the least degree of disturbance to topsoil. Where topsoil removal is necessary, it will be stockpiled (windrowed) and respread over the disturbance after construction and backfilling are completed. Vegetation removed from the right-of-way will also be required to be respread to provide protection, nutrient recycling, and a natural seed source.

To promote soil stability, the compaction of backfill will be required (not to extend above the original ground level after the fill has settled). Water bars, mulching, and terracing will be required, as needed, to minimize erosion. Instream protection structures (e.g., drop structures) may be required in drainages crossed by a pipeline to prevent erosion.

The fencing of linear disturbances near livestock watering areas (distance determined on sitespecific basis) may be required.

If linear facilities follow the same right-of-way for all or part of the route, they will generally be required to be constructed so that only one reclamation effort is required. Generally, they will be required to be constructed either concurrently or during the same field season.

Applicants constructing water pipelines across public lands may be asked to supply a small water tap for use by wildlife or livestock.

Air Quality Protection Measures

Special air quality protection-related stipulations may be added to BLM grants of rights-of-way necessary for construction. In addition, BLM will coordinate with the Utah Department of Environmental Quality (Utah DEQ) during the issuance of permits to construct emission sources. This coordination may result in the addition of stipulations to these permits.

BLM will require the applicant to prepare a detailed analysis of the risks involved with the development of sour gas pipelines and treatment facilities. These analyses are designed to project impacts both to the public and to resource values. Plant siting will be scrutinized to ensure

that only areas with the least potential for the transport of pollutants are considered. To aid in achieving these goals, BLM will consult with the State of Utah, the Forest Service, industry, and the public to ensure that the most technically sound, environmentally balanced, and economically feasible decisions are made.

Reclamation

The objectives for reclamation efforts emphasize: 1) stabilization through establishment of ground cover, 2) establishment of vegetation consistent with land use objectives, 3) reduction of visual contrast, and 4) reshaping to natural contour.

Reclamation will be required on all disturbed areas. On roads left intact for access purposes, the stabilization of all disturbed areas, except the running surface, will be required.

Only areas needed for construction will be allowed to be disturbed. Reclamation (by the lessee or grant holder) will be initiated as soon as possible after a disturbance occurs. Continued efforts will be required until satisfactory vegetation cover is established and the site is stabilized.

Topsoil

Before a surface disturbing activity is authorized, BLM will determine total topsoil depth. The amount of topsoil to be removed, along with topsoil placement areas, will be specified in the authorization. The uniform distribution of topsoil over the area to be reclaimed will be required, unless conditions warrant a varying depth. On large surface disturbing projects, topsoil will be stockpiled, mulched, and seeded to reduce erosion. Where feasible, topsoil stockpiles will be required to be designed to maximize the surface area to reduce impacts to soil microorganisms. Areas used for spoil storage will be required to be stripped of topsoil before spoil placement. The replacement of topsoil after spoil removal will be required.

Temporary disturbances which do not require major excavation (e.g., pipelines and communication lines) may be stripped of vegetation to ground

level using mechanical treatment, leaving topsoil intact and root mass relatively undisturbed.

Seeding

Only plant species adaptable to local soil and climatic conditions will be utilized in revegetation efforts. On all areas to be reclaimed, seed mixtures will be required to be site-specific and to include species promoting soil stability. Livestock palatability and wildlife habitat needs will be given consideration in seed mix formulation. Interseeding, secondary seeding, or staggered seeding may be required to accomplish revegetation objectives. A friable, but firm seed bed will be required prior to seeding. Drill seeding will be required unless conditions indicate that broadcast seeding is necessary (e.g., greater than 30 percent slope or greater than 35 percent rock content). During rehabilitation of areas in important wildlife habitat, provisions will be made for the establishment of native browse and forb species, if determined to be beneficial for the habitat affected.

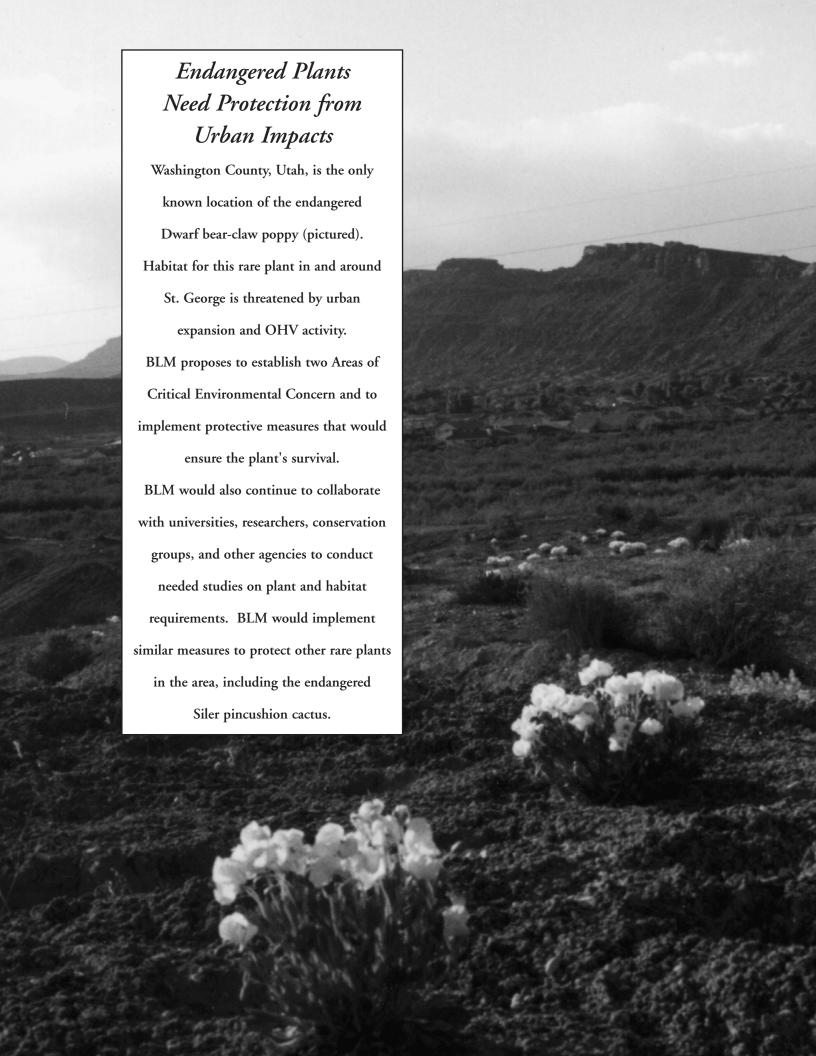
Follow-up seeding or corrective erosion control measures will be required on areas of surface disturbance which experience reclamation failure.

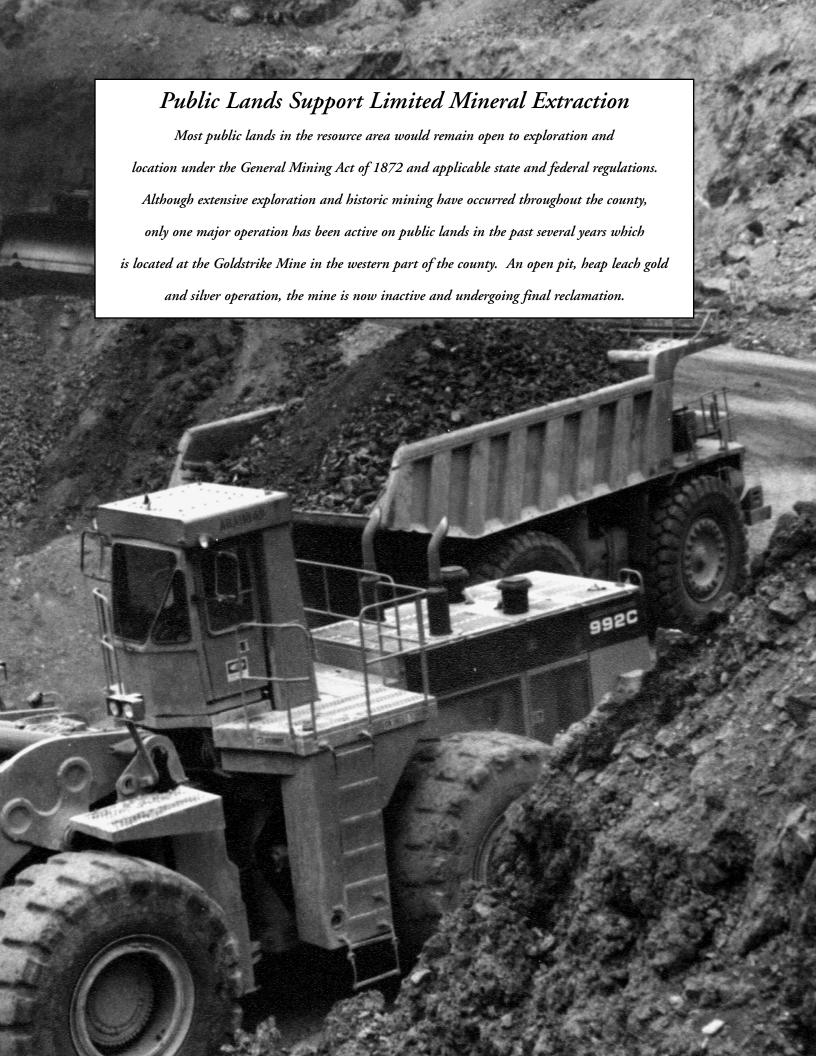
Treatments

Trees, shrubs, and ground cover (not to be cleared from rights-of-way) will require protection from construction damage. Backfill will be required to be replaced in a similar sequence and density to preconstruction condition. The restoration of normal surface drainage will be required.

Any mulch used will be free from mold, fungi, or noxious weed seeds. Mulch may include native hay, small grain straw, wood fiber, live mulch, cotton, jute, synthetic netting, and rock. Straw mulch should contain fibers long enough to facilitate crimping and provide the greatest cover.

The grantee or lessee will be responsible for the control of all noxious weed infestations on surface disturbances. Control measures will adhere to those allowed in the Final Environmental Impact Statement for Vegetation Treatment on BLM Lands (1991).





APPENDIX 2 Oil and Gas Leasing Stipulations

Introduction

One of the goals of this Proposed Plan is to allow appropriate oil and gas exploration and development. It is recognized that oil and gas operations must be analyzed under FLPMA and NEPA and mitigated to prevent unnecessary impacts to the human environment and natural resources.

This Proposed Plan contains two elements which would control oil and gas leasing and operations. The first is the classification of all of the lands in the Dixie Resource Area and the application of stipulations where appropriate. This appendix details which stipulations would be applied to each parcel of land. The second element is addressed in Appendix 1, which lays out standard operating procedures for all surface disturbing activities.

Oil and gas leasing and operations are regulated by 43 CFR 3100. These regulations are applicable on all leases and surface operations. Onshore Oil and Gas Orders also provide extensive protection for specific lease operations and are not repeated in this Proposed Plan.

Lease terms are attached to every Offer to Lease and Lease for Oil and Gas (Form 3100-11), which provide resource protection for land, water, and air, along with cultural, biological, and visual resources. The lease terms also address bonding and reclamation requirements.

In addition to the federal regulations, there are also state regulations controlling oil and gas operations. These can be found in the Oil and Gas Conservation Act in Title 40-6 of the Utah Code. Counties may also regulate oil and gas operations through various ordinances, although they cannot prevent operations on a valid federal lease.

Oil And Gas Leasing Categories

The proposed RMP has four categories of leasing: 1) closed to leasing, 2) no surface occupan-

cy, 3) open with stipulations, and 4) open. The closed to leasing category is established by 43 CFR 3100.0-3, which exempts some specified lands from leasing. Some withdrawals and segregations also close lands to leasing, depending on the specific language in the withdrawal or segregation decision. No surface occupancy and open with stipulations are more fully described under "Oil and Gas Stipulations" in the following section. The open category is the remainder of the federal land for which no special concerns were noted that would require stipulations.

Oil And Gas Stipulations

Utah BLM policy (IM UT 90-157, January 24, 1990) requires that oil and gas stipulations follow the format developed by the interagency Rocky Mountain Regional Coordination Committee (RMRCC) in 1989. This format has four basic parts: 1) the description of the stipulation, 2) the legal description of the lands on which it applies, 3) the purpose of the stipulations, and 4) modifications, exemptions, or waivers to the stipulation.

Three categories of stipulations were developed by RMRCC. These are: 1) No Surface Occupancy (NSO), 2) Timing Limitations (TL), and 3) Controlled Surface Use (CSU).

The RMRCC also recognized that occasionally more detailed information concerning limitations that already exist in law, lease terms, regulations, or operational orders may be needed. This information may be provided to the operator in a Lease Notice. A Lease Notice may address special items the lessee should consider when planning operations, but does not impose new or additional restrictions.

Lease Notices (LN) should not be confused with Notices to Lessees (NTL), which are described in 43 CFR 3164.2. A Notice to Lessee is a written notice issued by the authorized officer. NTLs implement regulations and operating orders, and serve as instructions on specific items of importance within a state, district, or area.

In accordance with the RMRCC format, each stipulation may contain Modifications, Exceptions, and Waivers. These allow operations where subsequent field studies or administrative actions render the stipulation wholly or partly unnecessary for the protection of the human environment or natural resources.

- A Modification is defined as a "fundamental change to the provisions of a lease stipulation, either temporarily or for the term of the lease. A modification may, therefore, include an exemption from or alteration to a stipulated requirement. Depending on the specific modification, the stipulation may or may not apply to all other sites within the leasehold to which the restrictive criteria applied."
- An Exemption is defined as a "case-bycase exemption from a lease stipulation.
 The stipulation continues to apply to all other sites within the leasehold to which the restrictive criteria applies."
- A Waiver is defined as a "permanent exemption from a lease stipulation. The stipulation no longer applies anywhere within the leasehold."

Table A2-1 outlines oil and gas stipulations for No Surface Occupancy, Table A2-2 profiles Conditional Use Surface Stipulations for oil and gas development, Table A2-3 provides Timing Limitation Stipulations, and Table A2-4 denotes Lease Notice items for the Proposed Plan.

Split-Estate Lands

Split-estate lands are lands in which the surface and mineral estates are owned by different entities. The lands of concern are where the surface is owned by either a private entity or the state, but oil and gas rights are retained by the federal government.

Split-estate lands are open to leasing unless one of the exemptions in 43 CFR 3100.0-3 apply; however, the Proposed Plan may apply stipulations as needed to protect surface resources.

The BLM policy for oil and gas leasing and approval of lease operations was set forth in

Washington Office IM-89-201, January 4, 1989. This policy states:

- BLM need only consider the planning and management of federal minerals under the Federal Land and Policy Management Act (FLPMA). Activities and use of the surface are not subject to FLPMA planning requirements, and the BLM has no authority under FLPMA over use of the surface by the surface owner. The same standard for environmental protection will be applied on split-estate lands as would be used for federal surface.
- BLM's National Environmental Protection Act (NEPA) responsibilities are basically the same as for federal surface. The fact that impacts will occur on private surface does not diminish the BLM's responsibility to consider alternatives or the BLM's authority to impose mitigation measures since the impacts will be caused as a direct consequence of activity approved by the BLM and conducted pursuant to a federal oil and gas lease. The BLM should carefully consider the views of the surface owner and the effect on the owner's use of the surface from implementation of possible mitigation measures, as well as the effect such measures would have on attaining other program goals.
- Under the National Historic Preservation Act, BLM is responsible for consulting with the State Historic Preservation Officer to identify and mitigate the effects of its actions and authorizations on historic properties and, if effects would occur, for giving the Advisory Council on Historic Preservation an opportunity to comment. These responsibilities are the same on split-estate lands as on public lands.
- Oil and gas leasing and operations on split-estate lands constitute federal actions under the Endangered Species Act (ESA). As such, the requirements and procedures of the ESA apply to split estate lands just as they do to federal lands including, as appropriate, preparation of biological assessments and the conduct of consultations.

 If the surface owner refuses access, it may be feasible to obtain the needed information without actual entry onto the private surface.

In order to prevent problems with incompatible development, the Proposed Plan includes a no surface occupancy stipulation for split-estate lands with authorized residential subdivisions, just as it does for surface structures and improvements on federal land. In all other

cases, split-estate lands in the Dixie Resource Area will be categorized and have the same stipulations applied as the nearby federal lands. For example, if there is a riparian zone and critical deer winter range on the parcel, the parcel would be categorized as open with stipulations. The no surface occupancy stipulation would be applied to the riparian zone and the timing limitation stipulation would be applied to the winter range, just as if the surface was in federal ownership.

TABLE A2-1	TABLE A2-1 • No Surface Occupancy Stipulations	Stipulations		
STIP	PROTECTED RESOURCE	AREAS PROTECTED	ACRES PROTECTED	STIPULATION DESCRIPTION AND PURPOSE
NSO-01	Surface structures and developments	FS Admin Site (T. 39 S., R. 16 W., sec.3 S2SWSESE)	ιO	Surface structures and developments. These sites have surface developments or features which are not compatible
		Public Water Reserves	1,137	with oil and gas drilling or production.
		Baker Dam Developed Recreation Area	290	EXCEPTION: None MODIFICATION: None
		Red Cliffs Developed Recreation Area	1,085	WAIVER: A waiver may be granted by the Area Manager if the surface structure or development being protected is removed, relinquished, or abandoned.
		R&PP Leases and Patents	620+	
		Dinosaur Trackway	40	
	Desert lortoise Critical Habitat in Special Management Areas	Beaver Dam Slope ACEC Washington County HCP Reserve	45,270	Desert Jortoise critical habitat: These sites encompass the habitat which has been determined to be critical to the survival of the Desert Tortoise population. The Desert Tortoise is a listed species under the Endangered Species Act. EXCEPTION: The Authorized Officer may grant an exception (allow surface occupancy) upon completion of formal consultation with the U.S. Fish and Wildlife Service that yields a no-jeopardy opinion if a plan of development is submitted that does not significantly impact tortoise habitats or populations. The plan of development may demonstrate no significant impact will occur through mitigation of impacts, compensation (in accordance with Bureau policy), and restoration of the land to predisturbance condition.
				MODIFICATION: The Authorized Officer may modify the area of this stipulation to accommodate approved minor changes in the Washington County HCP Reserve boundary.
				WAIVER: None

TABLE A2-1	TABLE A2-1 (continued) • No Surface Occupancy Stipulations	Occupancy Stipulations		
STIP	PROTECTED RESOURCE	AREAS PROTECTED	ACRES PROTECTED	STIPULATION DESCRIPTION AND PURPOSE
NSO-03	Natural, scenic, and primitive recreational values associated with special management areas	Closed OHV areas: Primitive ROS areas (Beartrap Canyon, Taylor Creek Canyon, LaVerkin Creek Canyon, Cottonwood Canyon, Canaan Mountain, Red Mountain, LaVerkin Creek/Black Ridge, Deep Creek/ Segments of rivers classified as wild and proposed as suitable under the W&S River Act. Canaan Mountain SRMA	91,704 total: All areas listed are included within the OHV Closed designation	Natural, scenic, and primitive recreational values associated with special management areas: These sites have primitive recreational values which are not compatible with oil and gas drilling or production. EXCEPTION: The Authorized Officer may grant an exception for roads, pipelines, or power lines to cross these areas if there is no practical alternative route and mitigation can be applied to reduce impacts to a satisfactory level. MODIFICATION: None.
NSO-0-04	Back Country Byway Scenery	0.5 mile either side of centerline of the Smithsonian Butte National Back Country Byway	2,366	Back Country Byway scenery: Oil and Gas exploration and development activities would be incompatible with the purpose of maintaining the scenic quality of the designated National Back Country Byway. EXCEPTION: The Authorized Officer may grant an exception if a plan of development is submitted demonstrating the activity would be fully screened from the byway, and the values for which the Back Country Byway was established would be preserved. MODIFICATION: The Authorized Officer may modify the width (to less than 0.5 mile from the centerline) if it is demonstrated a narrower width would allow the activity to be fully screened from the byway, and the values for which the Backcountry Byway was established would be preserved.

TABLE A2-1	TABLE A2-1 (continued) • No Surface Occupancy Stipulations	Occupancy Stipulations		
STIP	PROTECTED RESOURCE	AREAS PROTECTED	ACRES PROTECTED	STIPULATION DESCRIPTION AND PURPOSE
NSO-05	ACEC Values	Warner Ridge/ Ft. Pearce ACEC	4,281	ACEC values:
		Red Bluff ACEC	6,186	Values to be protected are:
		Canaan Mountain ACEC	31,355	wanter Nugert. reace - Endangeled riant species, sainte sons, riparian system, candidate animal species, waterfowl, raptors, and nongame species.
		Red Mountain ACEC	4,854	Red Bluff - Endangered plant species and saline soils.
		The part of the Upper Beaver	15,968	Canaan Mountain - High scenic values and cultural resources
		DAIII WASH ACEC CIOSEG 10 OHV		Red Mountain - High scenic values.
		Lower Virgin River ACEC	1,822	Upper Beaver Dam Wash - Watershed and riparian values
		Santa Clara River/Land Hill ACEC	1,645	Lower Virgin River - Riparian values, endangered fish habitat, cultural resources, and wildlife habitat
				Santa Clara River/Land Hill - Cultural resources, candidate fish species, riparian values, and wildlife habitat
				These values are incompatible with surface or visual disturbances resulting from oil and gas exploration and development.
				EXCEPTIONS: The Authorized Officer may grant an exception for specific, lowimpact actions if a plan of development is submitted which demonstrates the project will preserve the values for which the ACEC was established.
				MODIFICATIONS: None
				WAIVER: None.

TABLE A2-	TABLE A2-1 (continued) • No Surface Occupancy Stipulations	Occupancy Stipulations		
STIP	PROTECTED RESOURCE	AREAS PROTECTED	ACRES PROTECTED	STIPULATION DESCRIPTION AND PURPOSE
NSO-06	Riparian zone	All mapped riparian zones in Dixie Resource Area	4,600	Riparian zone: The need to improve and maintain vegetation and functional conditions of riparian zones in the Dixie Resource Area is incompatible with the disturbances resulting from oil and gas exploration and development. No surface occupancy restrictions would protect important biological components and habitats of resident and migratory species listed under the Endangered Species Act or otherwise at risk from declining habitat quality or availability.
				For the protection of impoundments and streams, and/or riparian wetland vegetation zones, activities associated with oil and gas exploration and development, including roads, transmission lines, and storage facilities, are restricted to an area beyond the riparian vegetation zone
				EXCEPTION:
				The Authorized Officer may grant an exception for roads, pipelines, or power lines if there is no practical alternative route and mitigation can be applied to reduce impacts to a satisfactory level.
				MODIFICATION: None
				WAIVER: None
NSO-07	Split-Estate lands	Lands with oil and gas rights	24,136	Split-Estate Lands:
		retained by rederal govern- ment, with surface in private ownership, and with a county		The impacts of oil and gas development are generally incompatible with residential subdivisions.
		approved residential subdivision (planned or existing)		EXCEPTIONS: None
				MODIFICATIONS: A modification may be granted by the Authorized Officer if the operator provides written documentation that lease operations are approved by the surface owner.
				WAIVER: A waiver may be granted by the Authorized Officer if the operator provides written documentation that lease operations are approved by the surface owner.

TABLE A2-2	TABLE A2-2 • Conditional Surface Use Stipulations	se Stipulations		
STIP CODE	PROTECTED RESOURCE	AREAS PROTECTED	ACRES PROTECTED	STIPULATION DESCRIPTION AND PURPOSE
CSU-01	Fragile soils	Severely erodible soils as mapped	121,865	Fragile Soil Areas: Prior to surface disturbance of fragile soils, it must be demonstrated to the Authorized Officer through a plan of development that the follow performance objectives will be met.
		Curly Hollow watershed	11,210	Performance Objectives:
		Frog Hollow watershed	092′9	Majntaja tho coil productivity of tho cita
		Slopes equal to or greater than 25 percent	various	II. Protect office areas by preventing accelerated soil erosion (such as landsliding, gullying, rilling, piping, etc.) from occurring. III. Protect water quality and quantity of adjacent surface and groundwater sources. IV. Select the best possible site for development in order to prevent impacts to the soil and water resources.
				EXCEPTION: None.
				MODIFICATION: None.
				WAIVER: None

TABLE A2-2	TABLE A2-2 (continued) Conditional Surface	l Surface Use Stipulations		
STIP	PROTECTED RESOURCE	AREAS PROTECTED	ACRES PROTECTED	STIPULATION DESCRIPTION AND PURPOSE
CSU-02	Surface and ground- water quality	Municipal watersheds High recharge areas of Navajo aquifer Lower part of Upper Beaver Dam Wash ACEC Santa Clara River/ Gunlock ACEC	3,116 22,650 17,095 1,998	Surface and Ground Water Quality: Prior to authorizing surface disturbance, the Authorized Officer may require the proponent to submit a plan of development which would demonstrate the proposed action would not: (1) result in a net increase in sediment contribution, and/or (2) degrade existing water quality parameters, including but not limited to specific conductance, turbidity, organic/inorganic contaminant levels, and dissolved oxygen. If approval is granted, and developments result in these standards being exceeded, additional measures would be required to correct the deficiencies. The proponent may be required to monitor surface and ground water throughout the life of the project. EXCEPTION: None MODIFICATION: None.
CSU-03	FERC and powersite with- drawals	Federal Energy Regulatory Commission withdrawals Powersite withdrawals	2,138	FERC and Powersite Withdrawals: Withdrawals will be subject to Special Stipulations required by the Federal Energy Regulatory Commission (see BLM Form 3730-1). EXCEPTION: None MODIFICATION: None WAIVER: The Authorized Officer may waive this stipulation if the withdrawals are relinquished or terminated.

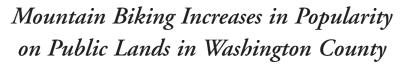
TABLE A2-3	TABLE A2-3 ◆ Timing Limitation Stipulations	lations		
STIP	PROTECTED RESOURCE	AREAS PROTECTED	ACRES PROTECTED	STIPULATION DESCRIPTION AND PURPOSE
TL-01	Mule Deer	Crucial mule deer winter range	45,897	Mule Deer: This area encompasses mule deer winter range designated as crucial by the Utah Division of Wildlife Resources. No development activity is allowed from November 1 through April 15. (Development is allowed between April 15 and October 31.) EXCEPTIONS: (1) The Authorized Officer may grant an exception if an environmental analysis indicates the proposed action could be conditioned so as not to interfere with habitat function or compromise animal condition with the project vicinity. (2) An exception may be granted if the proponent, BLM, and Utah DWR negotiate compensation that would satisfactorily offset anticipated impacts to mule deer winter activities or habitat condition. (3) Under mild winter conditions, when prevailing habitat or weather conditions allow early dispersal of animals from all or portions of the project area, an exception may be granted to suspend no more than the last 60 days of this sasonal limitation. Severity of winter will be determined on the basis of snow depth, snow crusting, daily mean temperatures, and whether animals were concentrated on the winter range during the winter months. (4) Exceptions may also be granted for actions specifically intended to enhance the long- term utility or availability of suitable habitat. MODIFICATIONS: (4) The Authorized Officer may modify the size and timeframes of this stipulation if Utah DWR monitoring information indicates current animal use patterns are no longer consistent with habitat function or compromise animal condition. (2) Modifications may be authorized if the proposed action could be conditioned so as not to interfere with habitat function or compromise animal condition. (3) The limitation may be waived to the extent the Utah DWR determines that all or specific promises and longer constitute real or prospective critical deer winter range.

TABLE A2.3	TABLE A2.3 (continued) Timing Limitation Stipulations	nitation Stipulations		
STIP	PROTECTED RESOURCE	AREAS PROTECTED	ACRES PROTECTED	Stipulation Description and Purpose
TL-02	EIK	Elk calving areas	2,900	Elk Calving Areas: This area encompasses elk calving areas. No development activity is allowed from May 1 through July 30 to prevent disruption to calving and subsequent loss of animals. (Development is allowed between August 1 and April 30.)
				 EXCEPTIONS: (1) The Authorized Officer may grant an exception if an environmental analysis indicates the proposed action could be conditioned so as not to interfere with habitat function or compromise animal condition within the project vicinity. (2) An exception may be granted if the proponent, BLM, and Utah DWR negotiate compensation that would satisfactorily offset anticipated impacts to elk calving activities or habitat condition. (3) Exceptions may also be granted for actions specifically intended to enhance the condition.
				MODIFICATION: (1) The Authorized Officer may modify the size and timeframes of this stipulation if Utah DWR monitoring information indicates that current animal use patterns are no longer consistent with dates established for animal occupa-
				 tion. (2) Modifications may be authorized if the proposed action could be conditioned so as not to interfere with habitat function or compromise animal condition. (3) Modifications may be authorized if the proponent, BLM, and Utah DWR agree to habitat compensation that satisfactorily offsets detrimental impacts to activity and habitat condition.
				WAIVER: This stipulation may be waived to the extent the Utah DWR determines that all or specific portions of the area no longer constitute real or prospective elk calving areas.

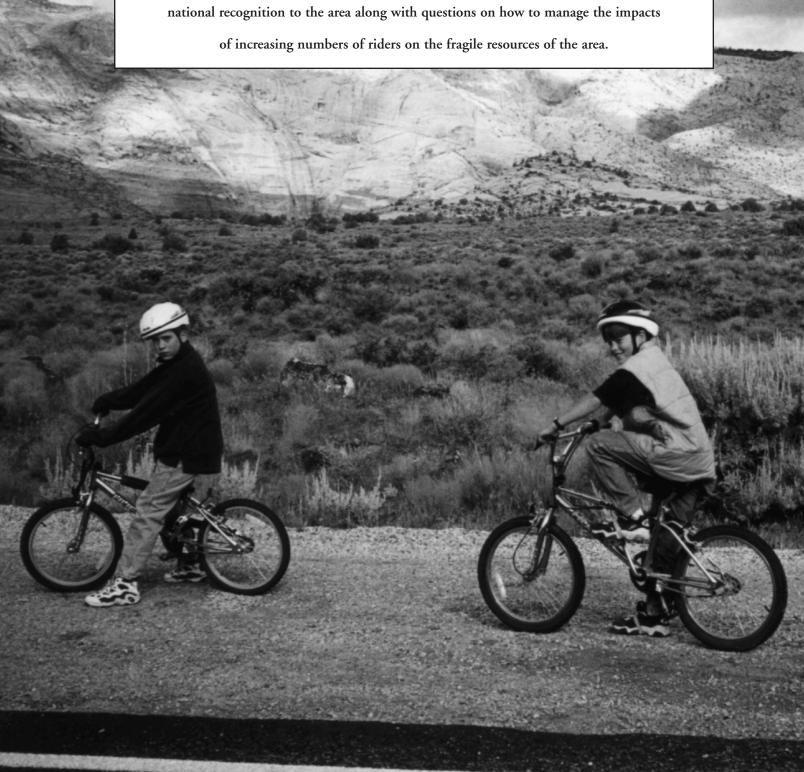
TABLE A2.3	TABLE A2.3 (continued) • Timing Limitation Sti	itation Stipulations		
STIP	PROTECTED RESOURCE	AREAS PROTECTED	ACRES PROTECTED	STIPULATION DESCRIPTION AND PURPOSE
TL-03	Desert Tortoise	Desert Tortoise habitat outside of the Washington County HCP Reserve and the Beaver Dam Slope ACEC	15,183	Desert Tortoise: This area encompasses identified Desert Tortoise habitat outside of the Washington County HCP reserve and Beaver Dam Slope ACEC. No development is allowed between March 16 and October 14. (Development is allowed from October 15 to March 15 subject to on-site biological evaluation and consultation with the U.S. Fish and Wildlife Service.)
				EXCEPTION: The Authorized Officer may grant an exception (allow development during the closed period) if formal consultation with the U.S. Fish and Wildlife Service reveals no adverse impact to the tortoise habitat and yields a no-jeopardy opinion.
				MODIFICATION: None
				WAIVER: None
TL-04	Golden Eagle	Nest sites	various	Golden Eagle Nest Sites: This area encompasses identified Golden Eagle nest sites. No development is allowed within 0.5 mile of identified nests from February 1 to June 30, or until the fledging and dispersal of the young. (Development is allowed July 1 through January 31.)
				 EXCEPTION: (1) An exception may be granted if an environmental analysis of the proposed action indicates the nature or conduct of the activity could be conditioned so as to not impair the utility of the nest for current or subsequent nesting activity or occupancy. (2) An exception may be granted if the nest is unattended or remains unoccupied by April 15 of the project year.
				 MODIFICATION: (1) The Authorized Officer may modify the size of the stipulation area if an environmental analysis indicates that a portion of the area is nonessential to nest utility or function. (2) The Authorized Officer may modify the size of the stipulation area if the proposed action could be conditioned so as not to impair the utility of the nest site for current or subsequent nest activities or occupation.
				WAIVER: A waiver may be granted if there is no reasonable likelihood of site occupation over a minimum 10-year period.

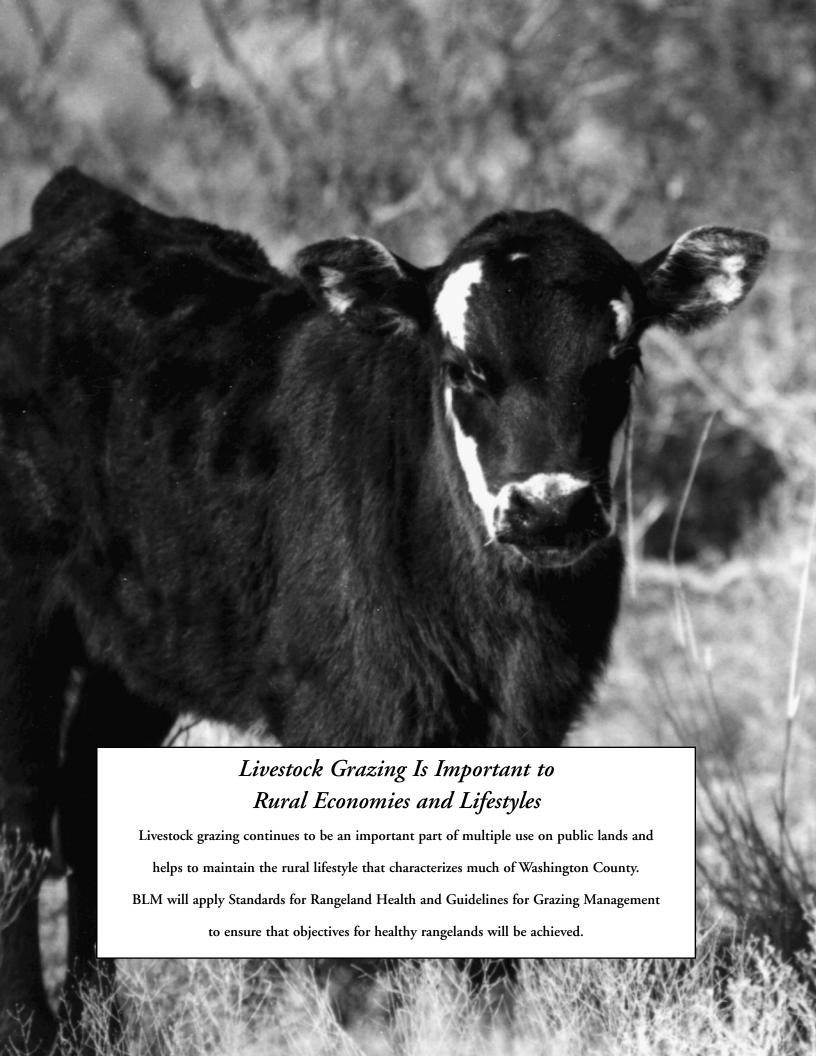
Peregrine Falcon Nest sites various Mexican Spotted Owl Nest sites 1,812	TABLE A2.	TABLE A2.3 (continued) • Timing Limitation Sti	0	ACDES	TOO TO THE TOOL OF
Peregrine Falcon Nest sites warious Mexican Spotted Owl Nest sites 1,812	CODE	PROTECTED RESOURCE	AREAS PROTECTED	ACRES PROTECTED	STIPULATION DESCRIPTION AND PURPOSE
Mexican Spotted Owl Nest sites 1,812	TL-05	Peregrine Falcon	Nest sites	various	Peregrine Falcon Nest Sites: This area encompasses identified Peregrine Falcon nest sites. No development is allowed within 0.5 mile of identified nests from March 15 to June 30, or until the fledging and dispersal of the young. (Development is allowed July 1 through March 14.)
Mexican Spotted Owl Nest sites 1,812					EXCEPTION (after FWS consultation): (1) An exception may be granted if an environmental analysis of the proposed action indicates the nature or conduct of the activity could be conditioned so as to not impair the utility of the nest for current or subsequent nesting activity or
Mexican Spotted Owl Nest sites 1,812					
Mexican Spotted Owl Nest sites 1,812					MODIFICATION (after FWS consultation): (1) The Authorized Officer may modify the size of the stipulation area if an environmental analysis indicates that a portion of the area is nonessential to nest utility or function
Mexican Spotted Owl Nest sites 1,812					
Mexican Spotted Owl Nest sites 1,812					WAIVER (after FWS consultation): A waiver may be granted if there is no reasonable likelihood of site occupation over a minimum 10-year period.
EXCEPTION (after FWS consultation): (1) An exception may be granted if an environmental analysis of the proposed action indicates the nature or conduct of the activity could be conditioned so a to not impair the utility of the nest for current or subsequent nesting activity of cupancy. (2) An exception may be granted if the nest is unattended or remains unoccupied by May 15 of the project year. MODIFICATION (after FWS consultation): (1) The Authorized Officer may modify the size of the stipulation area if an environmental analysis indicates that a portion of the area is nonessential to nest utility of function. (2) The Authorized Officer may modify the size of the stipulation area if the proposed action could be conditioned so as not to impair the utility of the nest site for current or subsequent nest activities or occupation. WANVER (after FWS consultation): A waiver may be granted if there is no reasonable likelihood of site occupation ove a minimum 10-year period.	JL-06	Mexican Spotted Owl	Nest sites	1,812	Mexican Spotted Owl Nest Sites: This area encompasses identified Mexican Spotted Owl nest sites. No development is allowed within 0.5 mile of identified nests from February 1 to August 31, or until the fledging and dispersal of the young. (Development is allowed September 1 through January 31.)
					EXCEPTION (after FWS consultation): (1) An exception may be granted if an environmental analysis of the proposed action indicates the nature or conduct of the activity could be conditioned so as to not impair the utility of the nest for current or subsequent nesting activity or occupancy.
O					
WAIVER (after FWS consultation): A waiver may be granted if there is no reasonable likelihood of site occupation over a minimum 10-year period.					\sim
					WAIVER (after FWS consultation): A waiver may be granted if there is no reasonable likelihood of site occupation over a minimum 10-year period.

TABLE A2-4	TABLE A2-4 • Lease Notices			
LEASE NOTICE CODE	PROTECTED RESOURCE	AREAS PROTECTED	ACRES PROTECTED	NOTICE DESCRIPTION AND PURPOSE
LN-01	Reservoirs and perennial streams	Mapped reservoirs Identified perennial streams	various	To protect reservoirs and perennial streams from unnecessary pollution and sedimentation, 43 CFR 3101.1-2 (the 200 meter rule) will be applied to prevent surface disturbance within 100 yards of the high water line of permanent water bodies.
LN-02	Special Status Species habitat	Mapped habitat for proposed and listed threatened and endangered species	103,218	Leasing activity other than casual use will be subject to appropriate consultation or conference with the U.S. Fish and Wildlife Service.
LN-03	Riparian and riparian-related resources	200 meters adjacent to ripari- an areas	various	43 CFR 3101.1-2 allows the Authorized Officer to require activities to be moved up to 200 meters to protect specific resources. The authorized officer may apply this regulation adjacent to riparian zones where site-specific analysis shows a need to further protect riparian- related resources including Southwest willow flycatcher habitat and nesting sites.



Mountain bikers are looking more and more to the numerous trails and scenic attractions of Washington County for individual and group riding. Large, organized events are bringing national recognition to the area along with questions on how to manage the impacts of increasing numbers of riders on the fragile resources of the area.





APPENDIX 3

Standards for Rangeland Health and Guidelines for Grazing Management for BLM Lands in Utah

Standards for Rangeland Health

STANDARD 1. UPLAND SOILS EXHIBIT PER-MEABILITY AND INFILTRATION RATES THAT SUSTAIN OR IMPROVE SITE PRODUCTIVITY, CONSIDERING THE SOIL TYPE, CLIMATE, AND LANDFORM.

As indicated by:

- a.) Sufficient cover and litter to protect the soil surface from excessive water and wind erosion, promote infiltration, detain surface flow, and retard soil moisture loss by evaporation.
- b.) The absence of indicators of excessive erosion such as rills, soil pedestals, and actively eroding gullies.
- c.) The appropriate amount, type, and distribution of vegetation reflecting the presence of (1) the Desired Plant Community (DPC), where identified in a land use plan conforming to these Standards, or (2) where the DPC is not identified, a community that equally sustains the desired level of productivity and properly functioning ecological conditions.

STANDARD 2. RIPARIAN AND WETLAND AREAS ARE IN PROPERLY FUNCTIONING CONDITION. STREAM CHANNEL MORPHOLOGY AND FUNCTIONS ARE APPROPRIATE TO SOIL TYPE, CLIMATE AND LANDFORM.

As indicated by:

- a.) Streambank vegetation consisting of, or showing a trend toward, species with root masses capable of withstanding high streamflow events. Vegetative cover adequate to protect stream banks and dissipate streamflow energy associated with high-water flows, protect against accelerated erosion, capture sediment, and provide for groundwater recharge.
- b.) Vegetation reflecting: Desired Plant Community, maintenance of riparian and wet-

land soil moisture characteristics, diverse age structure and composition, high vigor, large woody debris when site potential allows, and providing food, cover, and other habitat needs for dependent animal species.

- c.) Revegetating point bars; lateral stream movement associated with natural sinuosity; channel width, depth, pool frequency and roughness appropriate to landscape position.
- d.) Active floodplain.

STANDARD 3. DESIRED SPECIES, INCLUDING NATIVE, THREATENED, ENDANGERED, AND SPECIAL-STATUS SPECIES, ARE MAINTAINED AT A LEVEL APPROPRIATE FOR THE SITE AND SPECIES INVOLVED.

As indicated by:

- a.) Frequency, diversity, density, age classes, and productivity of desired native species necessary to ensure reproductive capability and survival.
- b.) Habitats connected at a level to enhance species survival.
- c.) Native species re-occupy habitat niches and voids caused by disturbances unless management objectives call for introduction or maintenance of non-native species.
- d.) Habitats for threatened, endangered, and special-status species managed to provide for recovery and move species toward de-listing.
- e.) Appropriate amount, type, and distribution of vegetation reflecting the presence of (1) the Desired Plant Community, where identified in a land use plan conforming to these Standards, or (2) where the DPC is not identified, a community that equally sustains the desired level of productivity and properly functioning ecological processes.

STANDARD 4. BLM WILL APPLY AND COM-PLY WITH WATER QUALITY STANDARDS ESTABLISHED BY THE STATE OF UTAH (R.317-2) AND THE FEDERAL CLEAN WATER AND SAFE DRINKING WATER ACTS. ACTIVITIES ON BLM LANDS WILL FULLY SUPPORT THE DESIGNATED BENEFICIAL USES DESCRIBED IN THE UTAH WATER QUALITY STANDARDS (R.317-2) FOR SURFACE AND GROUNDWATER. 1

As indicated by:

- a) Measurement of nutrient loads, total dissolved solids, chemical constituents, fecal coliform, water temperature and other water quality parameters.
- b) Macro invertebrate communities that indicate water quality meets aquatic objectives.

Guidelines for Grazing Management

- Grazing management practices will be implemented that:
 - a) Maintain sufficient residual vegetation and litter on both upland and riparian sites to protect the soil from wind and water erosion and support ecological functions;
 - b) Promote attainment or maintenance of proper functioning condition riparian/wetland areas, appropriate stream channel morphology, desired soil permeability and infiltration, and appropriate soil conditions and kinds and amounts of plants and animals to support the hydrologic cycle, nutrient cycle and energy flow.
 - c) Meet the physiological requirements of desired plants and facilitate reproduction and maintenance of desired plants to the extent natural conditions allow;
 - d) Maintain viable and diverse populations of plants and animals appropriate for the site;
 - e) Provide or improve, within the limits of site potentials, habitat for Threatened or Endangered species;

- f) Avoid grazing management conflicts with other species that have the potential of becoming protected or special status species;
- g) Encourage innovation, experimentation and the ultimate development of alternative to improve rangeland management practices; and
- h) Give priority to rangeland improvement projects and land treatments that offer the best opportunity for achieving the Standards.
- 2. Any spring and seep developments will be designed and constructed to protect ecological process and functions and improve livestock, wild horse and wildlife distribution.
- 3. New rangeland projects for grazing will be constructed in a manner consistent with the Standards. Considering economic circumstances and site limitations, existing rangeland projects and facilities that conflict with the achievement or maintenance of the Standards will be relocated and/or modified.
- 4. Livestock salt blocks and other nutritional supplements will be located away from riparian/wetland areas or other permanently located, or other natural water sources. It is recommended that the locations of these supplements be moved every year.
- 5. The use and perpetuation of native species will be emphasized. However, when restoring or rehabilitating disturbed or degraded rangelands non-intrusive, non-native plant species are appropriate for use where native species (a) are not available, (b) are not economically feasible, (c) can not achieve ecological objectives as well as nonnative species, and/or (d) cannot compete with already established non-native species.
- 6. When rangeland manipulations are necessary, the best management practices, including biological processes, fire and intensive grazing, will be utilized prior to the use of chemical or mechanical manipulations.
- 7. When establishing grazing practices and rangeland improvements, the quality of the out-

¹ BLM will continue to coordinate monitoring water quality activities with other Federal, State and technical agencies.

door recreation experience is to be considered. Aesthetic and scenic values, water, campsites and opportunities for solitude are among those considerations.

- 8. Feeding of hay and other harvested forage (which does not refer to miscellaneous salt, protein, and other supplements), for the purpose of substituting for inadequate natural forage will not be conducted on BLM lands other than in (a) emergency situations where no other resource exists and animal survival is in jeopardy, or (b) situations where the Authorized Officer determines such a practice will assist in meeting a standard or attaining a management objective.
- 9. In order to eliminate, minimize, or limit the spread of noxious weeds, (a) only hay cubes, hay pellets, or certified weed-free hay will be fed on BLM lands, and (b) reasonable adjustments in grazing methods, methods of transport, and animal husbandry practices will be applied.
- 10. To avoid contamination of water sources and inadvertent damage to non-target species, aerial application of pesticides will not be allowed within 100 feet of a riparian/wetland area unless the product is registered for such use by EPA.
- 11. On rangelands where a standard is not being met, and conditions are moving toward meeting the standard, grazing may be allowed to continue. On lands where a standard is not being met, conditions are not improving toward

- meeting the standard or other management objectives, and livestock grazing is deemed responsible, administrative action with regard to livestock will be taken by the Authorized Officer pursuant to CFR 4180.2(c).
- 12. Where it can be determined that more than one kind of grazing animal is responsible for failure to achieve a standard, and adjustments in management are required, those adjustments will be made to each kind of animal, based on interagency cooperation as needed, in proportion to their degree of responsibility.
- 13. Rangelands that have been burned, reseeded or otherwise treated to alter vegetative composition will be closed to livestock grazing as follows: (1) burned rangelands, whether by wildfire or prescribed burning, will be ungrazed for a minimum of one complete growing season following the burn; and (2) rangelands that have been reseeded or otherwise chemically or mechanically treated will be ungrazed for a minimum of two complete growing seasons following treatment.
- 14. Conversions in kind of livestock (such as from sheep to cattle) will be analyzed in light of Rangeland Health Standards. Where such conversions are not adverse to achieving a standard, or they are not in conflict with land BLM use plans, the conversion will be allowed.

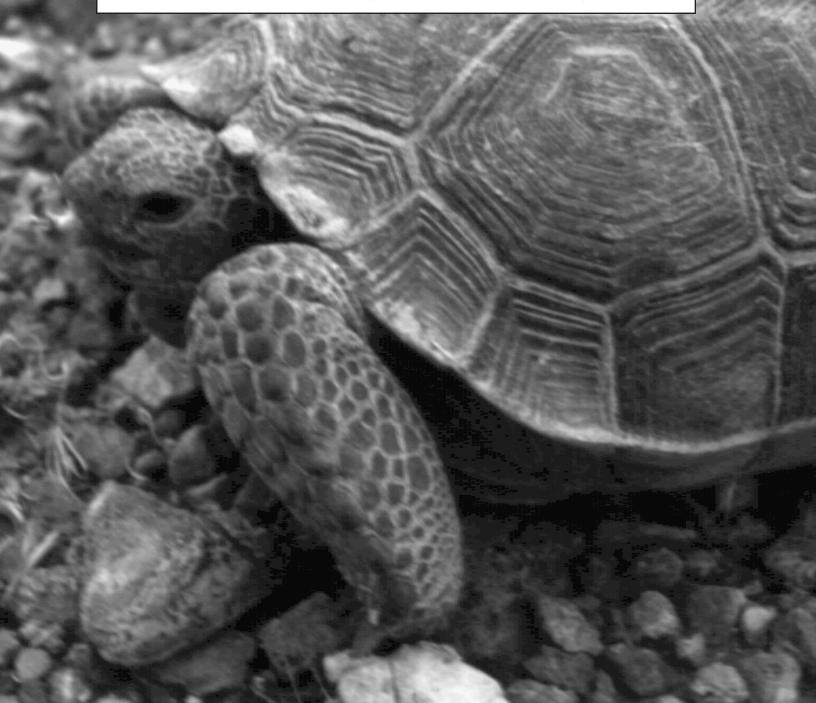
Excerpted from Standards for Rangeland Health and Guidelines for Grazing Management for BLM Lands in Utah, May 1997, pp 4-8.

BLM Proposals are Designed to Protect Desert Tortoise Habitat

The threatened desert tortoise is at the northern end of its range in Washington County.

BLM proposes to establish the Beaver Dam Slope Area of Critical Environmental Concern and to continue its collaboration in the Upper Virgin River Recovery Unit within the Red Cliffs Desert Reserve to preserve the tortoise and its habitat.

Plans for tortoise management and survival have been coordinated with state and federal agencies across the four-state area affected by the Northeastern Mohave Recovery Unit.



APPENDIX 4

U.S. Fish and Wildlife Service Terms and Conditions for Authorized Activities Within Desert Tortoise Habitat

Biological Opinion # ES/6-UT-98-F-005

Incidental Take Statement

Section 9 of the ESA prohibits the take of listed species without special exemption. Taking is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering (50 CFR 17.3). Harass is defined in the same regulation as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering. Incidental take is any take of a listed animal species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or the applicant. Under the terms of sections 7(b)(4) and 7(o)(2) of the ESA, taking that is incidental to and not intended as part of the agency action is not considered to be prohibited under the ESA provided that such taking is in compliance with this incidental take statement.

The measures described below are non-discretionary, and must be implemented by the agency so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply. The Bureau has a continuing duty to regulate the activity covered by this incidental take statement. If the Bureau (1) fails to require any applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

Amount or Extent of Take

The Service anticipates the following forms of take as a result of the proposed action (a tortoise refers to one desert tortoise or one clutch of desert tortoise eggs):

- 1) Five desert tortoises every ten years in the form of direct mortality or injury resulting from Bureau-authorized operation, construction, and maintenance of range improvement projects; trampling of tortoises by cattle; mining activities; road maintenance; recreation activities; wildlife management; and law enforcement.
- 2) Ten desert tortoises every five years in the form of harm associated with loss or degradation of habitat resulting from grazing by livestock or burros, or setting backfires during fire suppression activities.
- 3) Twenty desert tortoises per year in the form of harassment associated with excavation of occupied burrows and movement of desert tortoises out of harm's way during any Bureau authorized construction or maintenance (including, but not limited to, construction and maintenance of range improvements, rights-of-ways and temporary use permits, fences, signs, interpretive kiosks, road construction or upgrading, road maintenance, etc.), mining, fire suppression, habitat reclamation, route closures, and cleaning up dump sites.
- 4) Ten desert tortoises every two years in the form of direct mortality or injury resulting from the following fire suppression activities: a) operation of vehicles and equipment, b) development of campsites, c) aircraft landing/fueling sites, d) equipment staging areas, e) construction of fire lines, f) use of retardants, and g) setting backfires.

This Biological Opinion does not authorize any form of take not incidental to implementation of the Dixie [St. George Field Office] RMP. If the incidental take authorized by this opinion is met, the Bureau shall immediately notify the Service in writing. If the incidental take authorized by this Opinion is exceeded, the Bureau must immediately reinitiate consultation with the Service to avoid a violation of section 9 of the ESA. In the interim, the Bureau must cease the activity resulting in the take if it is determined that the impact of additional taking will cause an irreversible and adverse impact on the species. The Bureau should provide to this office an explanation of the cause of the taking.

Effect of the Take

In this Biological Opinion, the Service finds the anticipated level of take is neither likely to result in jeopardy to the species nor in destruction or adverse modification of critical habitat.

Reasonable and Prudent Measures

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize take of the desert tortoise:

- 1. Personnel education programs, defined construction areas, well-defined operational procedures, and movement of tortoises out of harm's way shall be implemented for any activity that results in disturbance of desert tortoise habitat or may result in death or injury of a desert tortoise.
- 2. Measures shall be taken to limit the extent of projects authorized by the Bureau in the DWMA and the ACEC.
- 3. Measures shall be taken to eliminate or minimize take of desert tortoises resulting from livestock grazing.

- 4. Preconstruction surveys shall be conducted to locate desert tortoises that may be injured or killed as a result of proposed activities. Projects shall be altered or tortoises in harm's way shall be relocated to avoid lethal take of tortoises in project areas.
- 5. Programs to inform and educate the public about the DWMA and ACEC shall be implemented to facilitate compliance with their regulations that protect the tortoise and to build support for desert tortoise recovery efforts.
- 6. Implementation of the proposed action and any incidental take shall be monitored and reported to the Service.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the ESA, the Bureau must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are nondiscretionary. Many of the terms and conditions are adapted from the Bureau's proposed action. Terms and conditions from the Service's March 6, 1996, programmatic Biological Opinion on fire suppression activities (2-21-95 F-379) are included here by reference. These terms and conditions shall apply to any desert tortoise habitat in the Dixie Resource Area [public lands administered by the St. George Field Office], unless otherwise indicated.

- 1. The following terms and conditions implement reasonable and prudent measure number 1:
 - a. For each authorized project¹, the Bureau shall designate a field contact representative (FCR) who shall be responsible for overseeing compliance with these terms and conditions and for coordination on compliance

[&]quot;Project" in regard to reasonable and prudent measure 1 and terms and conditions 1a-x means any surface-distrubing activities proposed by the Bureau and described in the "DESCRIPTION OF PROPOSED ACTION" that may cause disturbance of desert tortoise habitat and/or death or injury of a desert tortoise, with the exception of activities associated with fire suppression (addressed in Biological Opinion 2-21-95-F-379) and grazing by livestock ("projects" include range improvement projects; see terms and conditions implementing reasonable and prudent measure 3 for measures specifici to grazing).

with the Service. The FCR, qualified biologist(s) approved by the Bureau, and authorized biologist (see term and condition 1.i.) shall have the authority and the responsibility to halt all project activities that are in violation of these terms and conditions. These individuals shall have a copy of the terms and conditions of this Biological Opinion while on the work site.

- b. A desert tortoise education program shall be presented to all project personnel that may encounter tortoises, such as employees, inspectors, supervisors, contractors, and subcontractors, prior to initiation of activities that may result in disturbance of desert tortoise habitat or death or injury of desert tortoises. The education program shall include discussions of the following:
 - legal protection of the desert tortoise and sensitivity of the species to human activities;
 - a brief discussion of desert tortoise distribution and ecology;
 - 3. the terms and conditions of this opinion;
 - project features designed to reduce adverse effects to desert tortoises and their habitat, and to promote the species' long-term survival;
 - protocols during encounters with desert tortoises and associated reporting requirements; and
 - 6. the definition of take and penalties for violations of Federal and State laws.
- c. To the extent possible, project features shall be located in previously-disturbed areas or outside of desert tortoise habitat.
- d. Project vehicle use shall be limited to designated routes (existing routes prior to designation) to the extent possible.
- e. Areas of new construction or disturbance shall be flagged or marked on the ground prior to construction. All construction workers shall strictly limit their activities and vehicles to areas that have been marked. Construction personnel shall be trained to

recognize markers and understand the equipment movement restrictions involved.

- f. Blading of work areas shall be minimized to the extent possible. Disturbance to shrubs shall be avoided if possible. If shrubs cannot be avoided during equipment operation or vehicle use, wherever possible they shall be crushed rather than excavated or bladed.
- g. During the tortoise active season (March 15 through October 15), project features that might trap or entangle desert tortoises such as open trenches, pits, open pipes, etc., shall be covered or modified to prevent entrapment.
- h. To the extent possible, project activities shall be scheduled when tortoises are inactive (October 15 through March 15). The following project activities shall only occur from October 15 through March 15: surface disturbance associated with mineral leasing; organized, non-speed vehicular events in the DWMA and/or ACEC; construction and non-emergency maintenance activities in rights-of-ways; and non-emergency maintenance of existing roads.
- i. If a tortoise or clutch of tortoise eggs is found in a project area, to the extent practicable activities shall be modified to avoid injuring or harming it. If activities cannot be modified, the tortoise/clutch shall be moved from harm's way by an authorized biologist the minimum distance possible within appropriate habitat to ensure its safety from death, injury, or collection associated with the project or other activities. The authorized biologist shall be allowed some discretion to ensure that survival of each relocated desert tortoise/clutch is likely. Desert tortoises/clutches shall not be translocated to lands outside the administration of the Federal government without the written permission of the landowner. Handling procedures for desert tortoises and their eggs shall adhere to protocols outlined in Desert Tortoise Council (1994 with 1996 revisions).

Only biologists authorized by the Service and Utah Division of Wildlife Resources shall

handle desert tortoises. The Service authorizes Timothy A. Duck of the Bureau to handle desert tortoises in accordance with these terms and conditions. If the Bureau desires other biologists be authorized, the name(s) of the proposed authorized biologist(s) shall be submitted to the Service for review and approval at least 15 days prior to the onset of activities that could result in a take. Minimum requirements for authorized biologists include attending the Desert Tortoise Council's training course for handling desert tortoises and/or training by an authorized biologist. The authorized biologist shall maintain a record of all desert tortoises encountered during project activities. This information shall include for each desert tortoise:

- The locations and dates of observation
- General condition and health, including injuries and state of healing and whether animals voided their bladders
- Location moved from and location moved to
- Diagnostic markings (i.e., identification numbers of marked lateral scutes)

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

Desert tortoises that are handled shall be marked for future identification. An identification number (using the acrylic paint/epoxy technique) shall be placed on the 4th costal scute (Service 1992).

- j. At no time shall vehicle or equipment fluids be dumped on public lands. All accidental spills must be reported to the Bureau and cleaned up immediately, using the best available practices according to the requirements of the law. All spills of federally or State-listed hazardous materials that exceed reportable quantities shall be promptly reported to the appropriate State agency and the Bureau.
- k. For surface-disturbing activities conducted from March 15 to October 15 in desert tortoise habitat, construction and operation activities shall be monitored by a qualified

desert tortoise biologist approved by the Bureau. The biologist shall be present during all activities in which encounters with tortoises may occur. The biologist shall watch for tortoises wandering into construction areas, check under vehicles, check at least three times per day any excavations that might trap tortoises, and conduct other activities necessary to ensure that death or injury of tortoises is minimized.

- I. Unleashed dogs shall be prohibited in project areas.
- m. In DWMAs/ACECs, vehicles associated with Bureau-authorized projects traveling on unpaved roads in desert tortoise habitat shall not exceed speed limits established by the Bureau as necessary to protect desert tortoises. These speed limits will generally not exceed 40 mph even on the best unpaved roads, but may be much less than this on some roads.
- n. Temporary fencing, such as snow fencing, chain link, and other suitable materials shall be used in designated areas as determined by the Bureau to reduce encounters with tortoises from March 15 to October 15 on short-term projects, such as construction of power lines, burial of fiber optic cables, etc, where encounters with tortoises are likely.
- o. Long-term or permanent project sites in which continued encounters with desert tortoises are expected, such as construction of schools under an R&PP lease, roads, power plants, office buildings, and other permanent or long-term projects shall be enclosed with desert tortoise barrier fencing to prevent tortoises from wandering onto the project site where they may be subject to collection, death, or injury. Barrier fencing should consist of wire mesh with a maximum mesh size of 1-inch (horizontal) by 2-inch (vertical) fastened securely to posts. The wire mesh shall extend at least 18 inches above the ground and preferably 12 inches below the surface of the ground. Where burial is not possible, the lower 12 inches shall be folded outward, away from the enclosed site, and fastened to the ground so as to prevent tortoise entry.

Any gates or gaps in the fence shall be constructed and operated to prevent desert tortoise entry (such as installing "tortoise guards" similar to cattle guards, and/or keeping gates closed). Specific measures for tortoise-proofing gates and gaps shall be addressed project by project. Construction of the barrier fence should be in compliance with term and condition 4. Once fence construction is complete, all tortoises within the fence shall be relocated outside the fence in accordance with term and condition 1.i. If more than 20 tortoises would be relocated from any one area enclosed by a fence, the Bureau shall contact the Service in regard to disposition of the animals. After the area within the fence has been cleared of tortoises, construction and operation activities may occur within the fence without the presence and monitoring of a biologist (see term and condition 1.k.)

- p. New paved roads and highways in desert tortoise habitat (only authorized outside of the DWMA and ACEC) or major reconstruction or modifications of existing paved roads through desert tortoise habitat shall be fenced with desert tortoise barrier fencing (see 1.o. above). Culverts, to allow safe passage of tortoises, shall be constructed approximately every mile of new or reconstructed paved road (culverts can also serve the more typical purpose of conducting water under roads). The culvert diameter needed to encourage tortoise use is correlated with culvert length, but generally short culverts of large diameter are most likely to be used. The floor of the culvert shall be covered with dirt and maintenance should be performed as necessary to maintain an open corridor for tortoise movement. Culvert design shall be coordinated with and approved by the Service.
- q. Use of new roads constructed for specific non-public purposes, such as access routes to microwave towers, shall be limited to administrative use only.
- r. Temporary access routes created during project construction shall be modified as necessary to prevent further use. Closure of

- access routes could be achieved by ripping, barricading, posting the route as closed, and/or seeding and planting with native plants.
- s. In regard to locatable minerals in the DWMA and ACEC, the Bureau shall require plans of operation and bonding for any activity above the level of casual use, pursuant to the surface management regulations (43 CFR 3809). The Bureau shall approve plans of operation that reduce the chance of take occurring in accordance with these terms and conditions.
- t. In regard to new rights-of-way within the Beaver Dam Slope ACEC and the Upper Virgin River DWMA, such rights-of-way shall be routed away from high-density tortoise populations, and along the edges of DWMAs/ACECs. Linear right-of-ways shall be placed adjacent or parallel to existing rights-of-way and share vehicular access. Utilities shall be co-located with other utility projects whenever feasible.
- u. To reduce attraction of potential desert tortoise predators, project sites in desert tortoise habitat shall be maintained in a sanitary condition at all times; waste materials at those sites shall be placed in covered receptacles and disposed of promptly at an appropriate waste disposal site. "Waste" refers to all discarded matter, including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment. All reasonable effort shall also be taken to reduce or eliminate water sources associated with project activities that might attract ravens and other predators.
- v. After completion of the project, trenches, pits, and other features in which tortoises could be entrapped or entangled, shall be filled in, covered, or otherwise modified so they are no longer a hazard to desert tortoises.
- w. After project completion, measures shall be taken to facilitate restoration. Restoration techniques shall be tailored to the characteristics of the site and the nature of project

- impacts. Techniques may include removal of equipment and debris; recontouring; and seeding, planting, transplanting of cacti and yuccas, etc. Only native plant species, preferably from a source on or near the project area, shall be used in restoration.
- x. Exchanges or sales of desert tortoise habitat out of public ownership shall be preauthorized by the Service, and may not fall within the ACEC or DWMA boundaries, or within any designated critical habitat for desert tortoise. The Bureau shall inform prospective future owners of any properties where tortoises may be present, and of the fact that the tortoises are protected by the ESA. Future owners shall be advised to contact the Service in regard to compliance with the ESA.
- 2. The following terms and conditions implement reasonable and prudent measure number 2:
 - a. The Bureau shall only authorize mineral leasing in the DWMAs/ACECs with the stipulation of no surface occupancy. All activities associated with surface occupancy for mineral leasing within DWMAs/ACECs shall be limited to the period October 15 to March 15 and subject to terms and conditions 1.a. through f., 1.h. through j., 1.l., 1.m., 1.p., 1.q., 1.r., 1.u., 1.v., 1.w., and 4.
 - b. The DWMA and ACEC shall be closed to mineral sales.
 - c. The Bureau shall prohibit live vegetation harvest in the DWMA and ACEC, except salvage in areas where surface disturbance has been authorized.
 - d. The Bureau shall prohibit mechanical treatment or vegetation conversion within the DWMA and ACEC unless such treatments benefits or improves desert tortoise management. A mitigation plan for each treatment or conversion shall be developed and approved by the Service. A determination that such treatment or conversion benefits or improves desert tortoise management shall require concurrence by the Service.

- e. Within the DWMA and ACEC, the Bureau shall limit public collection of dead and down wood to personal camp use only.
- f. The Bureau shall authorize no R&PP land leases, airport leases, or military maneuvers; and no entries under the Desert Land Entry Act, Carey Act, and Indian Allotments Act in the DWMA or ACEC.
- g. All Bureau lands within the DWMA and ACEC shall be retained in public ownership.
- h. The Bureau shall seek to acquire non-Federal lands in the DWMA and ACEC from willing sellers through sale or exchange.
- i. No new landfills or sewage treatment ponds shall be authorized in the DWMA or ACEC, or on adjacent Bureau land where negative impacts (e.g., increased raven and/or coyote population) would be likely, as determined by the Service, to impact tortoise recovery within the DWMA or ACEC.
- j. The Bureau shall strongly discourage new rights-of-way and temporary use permits within the Beaver Dam Slope ACEC and the Upper Virgin River DWMA; such rights-of-way and temporary use permits within the DWMA or ACEC shall only be authorized if no reasonable alternative exists and impacts to tortoises and their habitat can be mitigated. Surface disturbance (before restoration) resulting from all new rights-of-ways and temporary use permits in the DWMAs/ACECs shall not exceed 40 acres through the life of the project.
- k. The Bureau shall close the DWMA and ACEC to authorization or renewal of material site rights-of-way.
- I. The Bureau shall, in coordination with the Service, complete a proposal to close roads and designate routes in the DWMA and ACEC by December 31, 1999. The proposal shall be finalized and implementation shall begin by December 31, 2000. Roads targeted for closure shall include those that 1) have no purpose, 2) are duplicative or redundant, or 3) are causing high levels of mortali-

- ty of tortoises. Vehicles shall be restricted to existing roads and trails prior to route designation. After designation, vehicles shall be restricted to designated routes only. The closure/route designation plan shall be approved by the Service. Implementation of the closure/designation plan shall include the following actions 1) sign entry portals/major intersections with signs that read "Limited to Designated Roads and Trails", 2) sign all designated routes as open, 3) and sign along designated routes indicating that driving off of designated routes is not permitted.
- m. No new paved roads shall be authorized in the DWMA or ACEC. Temporary upgrading of existing roads, and construction of new unpaved roads in the DWMA or ACEC could be authorized only if positive benefits to tortoise management occur. Concurrence from the Service that positive benefits would accrue is required prior to authorizing new roads in DWMAs/ACECs.
- n. The Bureau shall seek funding and cooperate with Washington County, Utah Department of Transportation, Federal Highway Administration, and others on opportunities to erect tortoise barrier fencing along highways or other routes on the Beaver Dam Slope or Upper Virgin River DWMA where desert tortoise mortality is or becomes significant.
- o. The Bureau shall maintain or authorize maintenance of existing roads in desert tortoise habitat in accordance with the schedules and specifications in the completed Dixie [St. George Field Office] RMP. Nonemergency maintenance activities shall be conducted from October 15 to March 15. Operators of road graders and other maintenance equipment shall attend the education program described in term and condition 1.b. Maintenance activities shall be limited to previously disturbed areas, unless cleared by a qualified biologist in accordance with term and condition 4.
- p. The Bureau shall restrict vehicle-based camping in the DWMA or ACEC to within 50 ft of designated routes. Before route designation, vehicle-based camping shall be limited

- to within 50 ft of existing routes. No camping shall be authorized for longer than 14 consecutive days in any one area within the DWMA and ACEC.
- q. No competitive speed vehicle events shall be authorized in either the DWMA or the ACEC.
- r. Within the desert tortoise DWMA and ACEC, the Bureau shall apply the following stipulations to any non-speed motor vehicular events (or non-speed portions of speed events) requiring permitting by the Bureau:
 - 1. No organized non-speed events shall occur from March 15 through October 15.
 - 2. Permits shall be required for events with 50 or more participants.
 - 3. Vehicle travel shall be limited to designated routes, or before route designation, to existing routes.
 - 4. Vehicles shall not exceed the legal speed limit (posted or unposted) of the road in which they are on during the event.
 - 5. No more than 400 motorcycles or all terrain vehicles, or 300 three- or four-wheeled vehicles shall be allowed in any one event.
 - 6. Events shall have enough monitors to ensure compliance with regulations.
- s. The Bureau shall ensure that wildlife management activities do not contribute to the proliferation of predators within desert tortoise habitat.
- t. New wildlife guzzlers shall be permitted in desert tortoise habitat only if 1) they are designed so as to exclude desert tortoises, and 2) the Bureau and the Service conclude that the existence of such guzzlers will not benefit species known to prey on desert tortoises (e.g., ravens and coyotes).
- u. The Bureau shall authorize no translocations of desert tortoises from private to public lands unless 1) prior authorization from the Service and the Division is obtained, 2) the desert tortoise population in the area to which a tortoise(s) would be moved is

depressed, 3) testing of animals to be translocated is conducted to ensure that spread of URTD or other diseases is not facilitated as a result of translocations, 4) handling of desert tortoises is in compliance with term and condition 1.i., and 5) protocols are followed to ensure that translocated animals have the greatest chance for survival and do not disrupt the behavior of resident animals.

- v. The Bureau shall continue to monitor and patrol the DWMA and ACEC and desert tortoise habitat, and to investigate illegal activities on public lands in the area. The Bureau shall provide law enforcement presence in the DWMA and ACEC at a level adequate to promote public compliance with use regulations.
- w. If law enforcement, signing, and public education fail to control illegal public use and violations of DWMA and ACEC regulations, the Bureau shall develop other options, including fencing areas as needed to enhance compliance with regulations.
- x. The Bureau shall cooperate with other agencies and groups to identify areas where uncontrolled dogs are causing desert tortoise mortality. If predation of tortoises by dogs is discovered, the Bureau shall encourage Washington County to enforce ordinances prohibiting uncontrolled dogs in those areas.
- y. The Bureau shall authorize no discharge of firearms in the DWMA or ACEC, except for hunting of big game or upland game birds from September through February, and in association with official Bureau duties, such as law enforcement or euthanasia of sick or injured burros or cows.
- z. The Bureau shall assess compensation at the category 1 rate for any proposed projects in the ACEC or DWMA.
- 3. The following terms and conditions implement reasonable and prudent measure number 3:
 - a. Beginning March 1, 1998, livestock grazing shall be authorized in the Upper Virgin

River DWMA only by existing permittees. As these permittees willingly relinquish their permits, such permits shall not be reissued. Beginning in 1998, no livestock grazing shall be authorized in portions (outlined in the Dixie [St. George Field Office] RMP) of the Castle Cliffs, beaver Dam Slope, and Scarecrow Peak allotments on the Beaver Dam Slope ACEC from March 15 to October 15. Approximately 11,470 acres within the ACEC comprising three special management areas recommended by the Division and the Bureau will emphasize non-tortoise issues and would not require any livestock restrictions. Although portions of the special management areas contain critical desert tortoise habitat, coordinated efforts with federal and state governments have determined that only grazing on portions of the three aforementioned allotments need to be deferred. Livestock use within these non-restricted areas would be in accordance with the three applicable AMPs for Scarecrow Peak, Beaver Dam Wash, and Castle Cliffs allotments. The season of use for the three listed allotments is from 11/1 to 5/31. In general, the AMPs prescribe rotational grazing between pastures which would provide periodic rest to areas outside the grazing restriction zone. The non-restricted areas within the ACEC, which contain low densities of tortoise, represent only a small portion of larger pastures and as such, would be managed the same as the other lands within those pastures.

Just north of the Beaver Dam Slope ACEC, approximately 15,000 acres of critical habitat would remain open for spring grazing use for those portions of the Scarecrow Peak and Jackson Wash Allotments in accordance with the AMPs for the allotments. Studies have determined that this area contains very low densities of tortoises. Cattle use in this area is from November 16 to May 20 on Jackson Wash and November 1 to May 31 on Scarecrow Peak, and rotational grazing occurs between pastures.

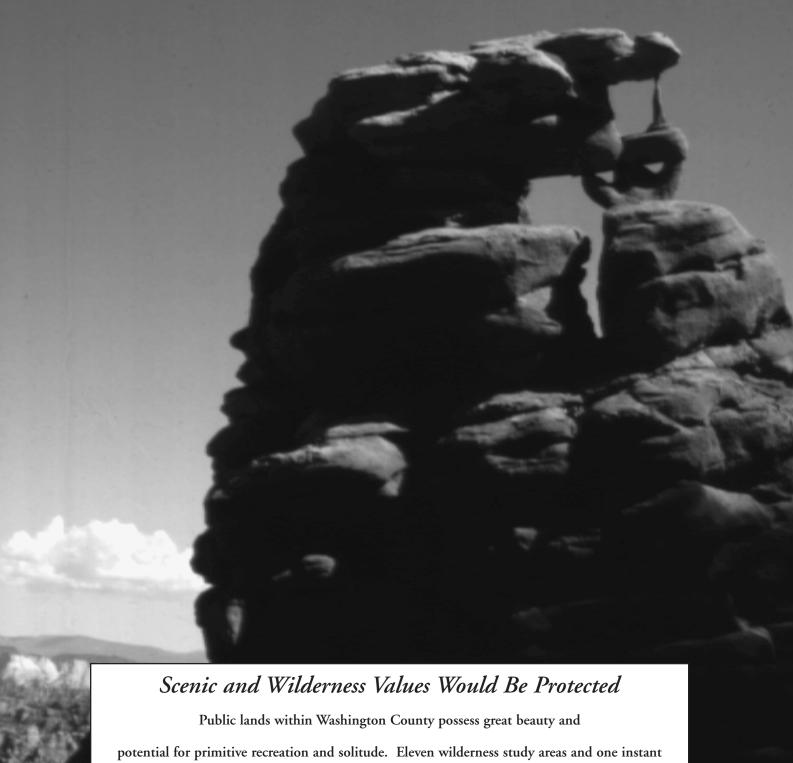
b. Livestock grazing in the Beaver Dam ACEC and Upper Virgin River DWMA between October 15 and March 15, and outside of the DWMA and ACEC in desert tortoise habitat, shall be in compliance with the reasonable and prudent measures and terms and conditions in the Service's two Biological Opinions on cattle grazing dated March 17, 1994 (6-UT-90-F-004 and 6-UT-90-F-002).

4. The following term and condition implements reasonable and prudent measure number 4:

Prior to any surface-disturbing activities associated with "projects", as defined in footnote 1, work sites shall be surveyed for desert tortoises by a qualified biologist approved by the Bureau. Areas of new disturbance shall be surveyed with 100-percent coverage. For project activities occurring during the desert tortoise active season (March 15 through October 15), surveys shall be conducted within 24 hours of initiation of surface-disturbing activities. Between October 15 and March 15, any new disturbance shall be preceded by 100-percent surveys conducted within one week of the proposed activities. During surveys, occupied desert tortoise burrows in or within 40 feet of areas to be disturbed shall be excavated using hand tools under the supervision of an authorized biologist. Burrows discovered in areas to be disturbed by project activities shall be collapsed or blocked to prevent entry by tortoises (any tortoises in those burrows shall be relocated first). Desert tortoises and any desert tortoise eggs found in areas to be disturbed shall be relocated in accordance with term and condition 1.i. All handling of desert tortoises and their eggs shall be in accordance with term and condition 1.i.

- 5. The following terms and conditions implement reasonable and prudent measure number 5:
 - a. The Bureau shall, upon implementation of the route designation/closure plan (term and condition 2.l.), make available to the public a route designation map that displays all open routes, and explains vehicle, camping, recreational, and other public use regulations and opportunities in the DWMA and ACEC, and explains the purpose of the DWMA and ACEC.

- b. The Bureau shall use various mechanisms of public outreach to inform the public about the DWMA and ACEC and recovery of the desert tortoise. These mechanisms may include interpretive displays at the Interagency Information Center in St. George, interpretive kiosks at entry points to the DWMA and ACEC, news releases, open houses to answer questions about the DWMA and ACEC designation and management, and/or other actions.
- 6. The following terms and conditions implement reasonable and prudent measure number 6:
 - a. The Bureau shall work with the Service, the Division, USGS-Biological Resources Division, and others in further developing a monitoring program and adapting line-distance sampling (or other MOG-approved techniques) to the unique characteristics and needs of the Dixie Resource Area's [public lands administered under the St. George Field Office's] tortoise habitat. The Bureau shall also act through the MOG to assist in seeking funding to implement the monitoring program.
 - b. The Bureau shall submit annual monitoring reports to the Utah Ecological Services Field Office by March 15 of each year beginning in 1999. These reports shall briefly document for the previous calendar year actions taken to implement the RMP amendment, surface-disturbing activities authorized, the effectiveness of these terms and conditions at reducing take of desert tortoise, actual acreage of desert tortoise habitat disturbed, numbers of tortoises taken, including animals injured or killed, the number of desert tortoises excavated from burrows, the number of desert tortoises moved from construction sites, and information on individual desert tortoise encounters as stipulated in term and condition 1.i. The report shall make recommendations for modifying or refining these terms and conditions to enhance desert tortoise protection and reduce needless hardship on the Bureau and users of public lands.



Public lands within Washington County possess great beauty and potential for primitive recreation and solitude. Eleven wilderness study areas and one instant study area are being managed to preserve their wilderness character until Congress acts to designate the lands as wilderness or releases them from further study. This interesting arch and rock formation is typical of what can be found on the popular Canaan Mountains, which would be managed for their scenic and primitive recreational values.

APPENDIX 5 Visual Resource Class Objectives

In accordance with BLM Manual Handbook 8410-1 (January 17, 1986), visual resource management classes are established through the resource management planning process for all BLM-administered lands. During the RMP process, the class boundaries are adjusted as necessary to reflect the resource allocation decisions made in RMPs. Visual management objectives, as detailed below, are established for each class.

Class I Objective

The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

Under this class most surface disturbing activities would not be authorized.

Class II Objective

The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Under this class, surface disturbing activities could be authorized if when they are completed the disturbed area could be returned to a condition of being unnoticeable and or natural appearing to those seeing the area for the first time.

Class III Objective

The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Under this class, most surface disturbing activities could be authorized subject to the reclamation standards noted in Appendix 1.

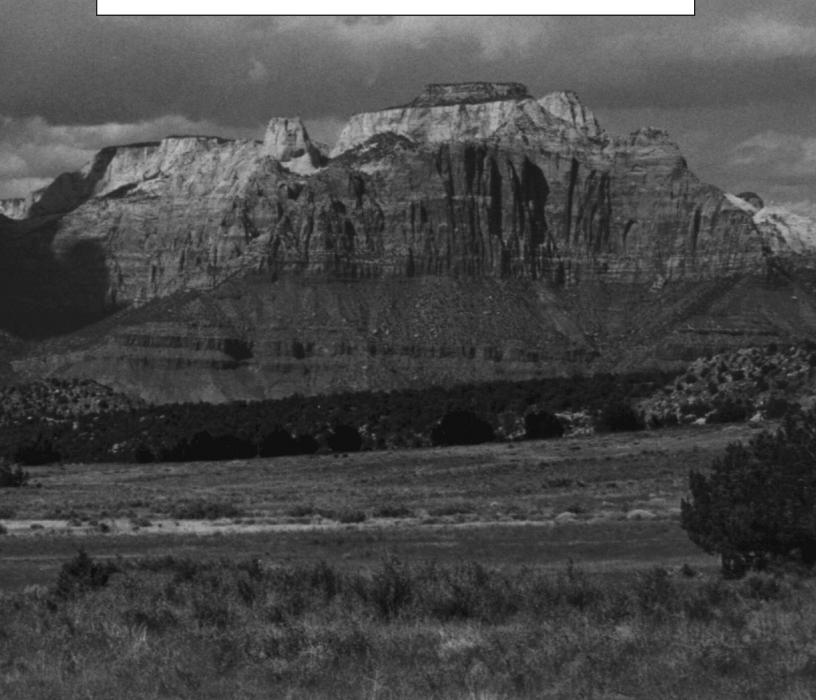
Class IV Objective

The objective of this class is to provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

Under this class, visual values would not be limiting to proposed developments but would be subject to the reclamation standards noted in Appendix 1.

BLM Would Collaborate With Zion National Park Managers

Zion National Park is an important economic and ecologic asset within Washington County and draws up to 2.5 million visitors a year. BLM would continue to work with park managers and local communities in developing collaborative programs to minimize impacts to park resources from overutilization and lack of management presence at remote park boundaries while meeting community needs for economic health. Cooperative management agreements with the park would be employed where needed to implement programs to benefit management of both public lands and park lands and to promote the use of shared resources and cost savings.



APPENDIX 6 St. George Field Office Wild and Scenic Rivers Suitability Overview

Based on extensive public and agency comments submitted on the 1995 Draft RMP, BLM has refined its preliminary suitability determinations and made appropriate changes to this Appendix. Of the 11 river segments found eligible in the Dixie Resource Area, all or portions of 5 river segments have been found suitable for designation under the Wild and Scenic Rivers Act. BLM considered the following factors in arriving at its decision to recommend or not recommend the segments as suitable:

- The characteristics which do or do not make the area a worthy addition to the National Wild and Scenic Rivers System.
- Current status of land ownership and human use of the area.
- The reasonably foreseeable potential uses of land and water which would be enhanced, foreclosed, or curtailed if the river were designated; also includes values which could be lost or diminished if the area is not protected as part of the system.
- Interest from local, state, or federal agencies, Indian tribes, and other publics in designation or nondesignation of the river; also the extent to which river administration, including costs thereof, may be shared by state and local agencies or other potential partners.
- The estimated cost to the government of land acquisition and administration if the river is designated.
- The ability of BLM to manage and protect the river segment as a Wild and Scenic River, and alternatives identified to protect values other than through designation under the Wild and Scenic Rivers Act.
- Other issues identified during the planning process including takings, which may entitle owners to just compensation,

or existing rights, which may be adversely affected because of designation.

BLM recognizes that the near absence of state and local government and community support outside of conservation groups for wild and scenic river designations in Washington County presents a dilemma in deciding whether to recommend eligible segments as suitable. Without extensive local partnerships and public support, the human and financial resources currently and prospectively available to the Dixie Resource Area are inadequate to implement and enforce the higher level of management required of public land segments placed into the National Wild and Scenic River System. Wild and scenic river designations work well when there is widespread support for and ownership of the process of evaluating and managing affected river segments. This is obviously the case where private lands dominate the ownership along the river stretches. It is equally true for those river segments within solidly blocked public lands in the western United States where communities are used to and, in many cases, very much dependent upon full access to and use of river corridors and associated resources in proximity to those communities.

In southern Utah, conflicting interests and lack of trust have impeded the formulation of broadbased consensus and substantial progress in settling disputes related to wild and scenic river studies and other issues including wilderness designation and access across public lands. In the midst of this contention, however, excellent results are being realized by grass-roots initiatives to protect important resources along the Virgin River and major tributaries in the urban corridors of Washington County. These include effective partnerships in which communities have teamed with local conservation groups, land trusts, interested state and federal agencies, Indian tribes, and private citizens and organizations to provide open space, protect floodplains, restore historic structures and degraded environments, provide linked greenbelts, trail systems, and recreation opportunities, protect wildlife

species at risk, and improve public safety in specific locations or along the entire river system. Such efforts include the Three Rivers Trail Initiative, the Grafton Heritage Partnership, the Virgin River Management Plan, the Virgin River Basin Integrated Resource Management and Recovery Program, the Virgin River Focus Area Plan, the Santa Clara River Reserve, and the Virgin Falls Park Cooperative Management Agreement. Other significant community-based initiatives involving public and nonpublic lands near the Virgin River corridor include the development of the Snow Canyon State Park Resource Management Plan and the Washington County Habitat Conservation Plan and associated Red Cliffs Desert Reserve.

As these examples are demonstrating, tremendous gains can be made from bottom-up initiatives when a broad spectrum of interests, including local governments, is involved from the start. The Dixie Resource Area is a contributing partner in all of the above examples and fully supports additional efforts to preserve natural assets and the high quality of environment and human life prevalent throughout the county. If allowed to mature to fruition, these efforts have the potential of leading to community recognition that the entire river system could be managed with shared control in a spirit of trust, harmony, and mutual interest without imposed mandates that might, otherwise, reek havoc on local culture, economics, and long-standing community infrastructure. Wild and scenic river designation could then be viewed by local and state officials and the public-at-large in light of what it could do for the community and how it could sustain and complement present initiatives and benefit economic interests as well as ecologic objectives. The Wild and Scenic Rivers Act envisions and encourages just such an approach to river management.

In light of the above, BLM would proceed to recommend as suitable those eligible river segments in solidly-blocked public land areas where it generally finds that a) designation would not require significantly elevated costs and management intensity above that needed to implement management prescriptions proposed in other sections of this plan, b) designation would not substantially foreclose the community's ability to plan for and manage the appropri-

ate conservation and development of water resources to support reasonable current and anticipated needs within the community, c) resources available to BLM internally and through other interested agencies and partnerships would be adequate to provide the level of management required, d) designation would conform to recommendations of other federal offices and land management agencies on adjacent segments of the same rivers, and e) the free-flowing character and outstandingly remarkable values of the segments are deemed to represent a worthy addition to the national system.

BLM recognizes that other river studies within the Virgin River Basin could be authorized that might complement or supersede the study completed in this proposed plan. Such could include a) a basinwide study as directed by Congress in accordance with the Assistant Secretary's request of April 16, 1997, or b) an interagency study under the statewide MOU of November 1997, or c) a state-initiated study under Section 2(a)(ii) of the Wild and Scenic Rivers Act which provides for participation of local and state agencies under the direction of the Utah Governor.

Where not previously constrained by Congressional or Secretarial action, BLM would also give consideration to reassessing its suitability determinations during major revisions of this proposed plan based on changes that may have occurred which impact on manageability, cost of administration, land use constraints, availability of interested partners, state and local government support, and other applicable factors. Where suitability determinations for river segments on adjacent lands managed by other federal agencies or BLM units are not consistent with the determinations of this Plan for any given river, BLM would promote a joint reconsideration and could alter its determinations accordingly as to eligibility, tentative classification, values to be protected, or suitability.

At such time as a revision of the Land and Resource Management Plan is prepared for the Dixie National Forest, BLM would consider entering into an agreement with the Forest Supervisor to assess those streams crossing both National Forest Lands and public lands to reach joint agency determinations of eligibility and suitability. Such determinations would either affirm or amend the determinations made on affected streams in this Proposed Plan, taking into consideration outstandingly remarkable values for entire stream segments across all involved federal lands. BLM has already entered into such an agreement with National Park Service officials for certain isolated public land tracts adjacent to Zion National Park.

It is also anticipated that prior to submitting joint recommendations for designation to the Secretary of the Interior and Congress, BLM would carefully examine issues related to manageability and total costs of its cumulative recommendations. Despite factoring cost and manageability issues into the analysis for each river segment evaluated in this Plan, total costs above current levels for all segments found suit-

able amount to \$700,000 for minimum recommended land acquisition, \$183,000 for initial implementation, and \$23,000 for yearly administration thereafter. These costs represent a significant increase above funding levels traditionally available to BLM in the Dixie Resource Area and would be in addition to costs incurred as a result of river studies in other BLM field offices in Utah and adjoining states. Full implementation would require a long-term commitment from Congress for adequate yearly appropriations or a corresponding diversion of funding and personnel from other, ongoing resource management programs.

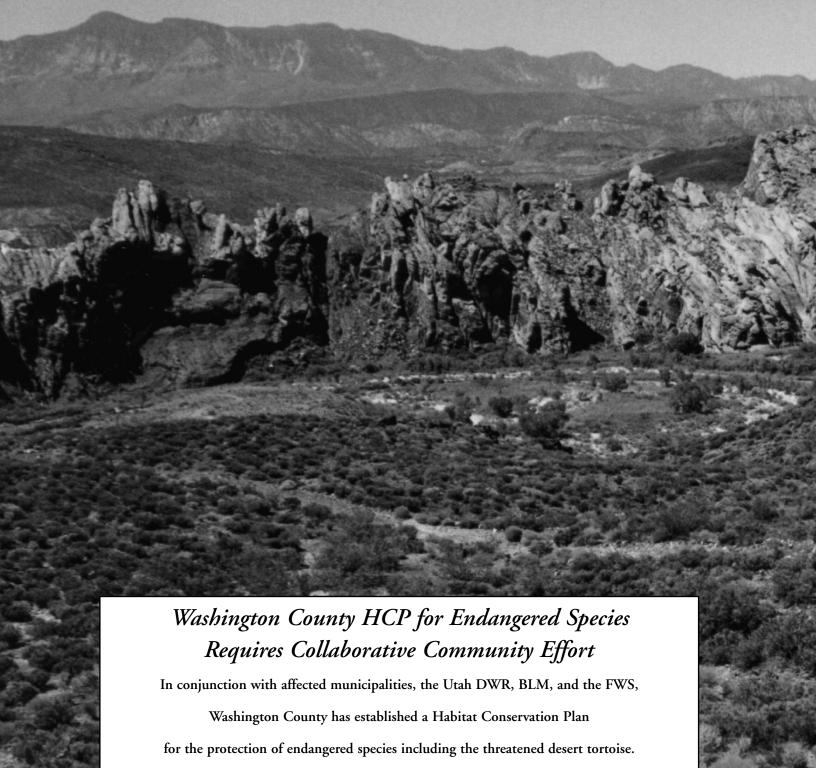
Table A6-1 provides a summary of the river segments determined suitable through this planning effort for inclusion into the National Wild and Scenic Rivers System.

MILES SUITABLE

TABLE A8-1 • Suitable Wild and Scenic Rivers

SUITABLE RIVER SEGMENT (PUBLIC LANDS ¹)	LOCATION	TENTATIVE CLASSIFICATION	BLM FREE-FLOWING RIVER MILES
Deep Creek/Crystal Creek	Crystal Creek: Public land portion to confluence with Deep Creek	Wild	4.01
	Deep Creek: Public land from DRA boundary to the north boundary of Zion National Park	Wild	7.37
LaVerkin Creek/Smith Creek	Smith: Public land from source to Smith Creek's confluence with LaVerkin Creek	Wild	1.25
	LaVerkin: Public land north of Zion National Park to northernmost private land parcel south of Zion National Park	Wild	7.38
North Fork Virgin River	BLM-managed portion north of Zion National Park	Wild	0.74
Oak Creek/Kolob Creek	Oak Creek: Public land portion to Kolob Creek confluence	Wild	0.98
	Kolob Creek: Public Land east of Kolob Narrows to north boundary of Zion National Park	Wild	2.65
Virgin River	Portion of Segment B within the Beaver Dam Mountains Wilderness Area	Wild	1.34
			OTAL: 25.72

¹ Suitability recommendations apply only to portions of the river that are associated with lands under BLM jurisdiction. BLM has no authority to make such determinations outside of its jurisdiction. River segment lengths are approximate and include public lands only.



The plan established a 61,022-acre reserve north of St. George and Hurricane called the Red Cliffs Desert Reserve to provide permanent habitat for listed and sensitive plant and animal species. BLM would remain integrally involved in the management of the

Reserve and in the acquisition of state and private inholdings.

Collaboration with local communities, schools, user groups, and interested organizations will be essential for the Reserve to achieve its objectives.

