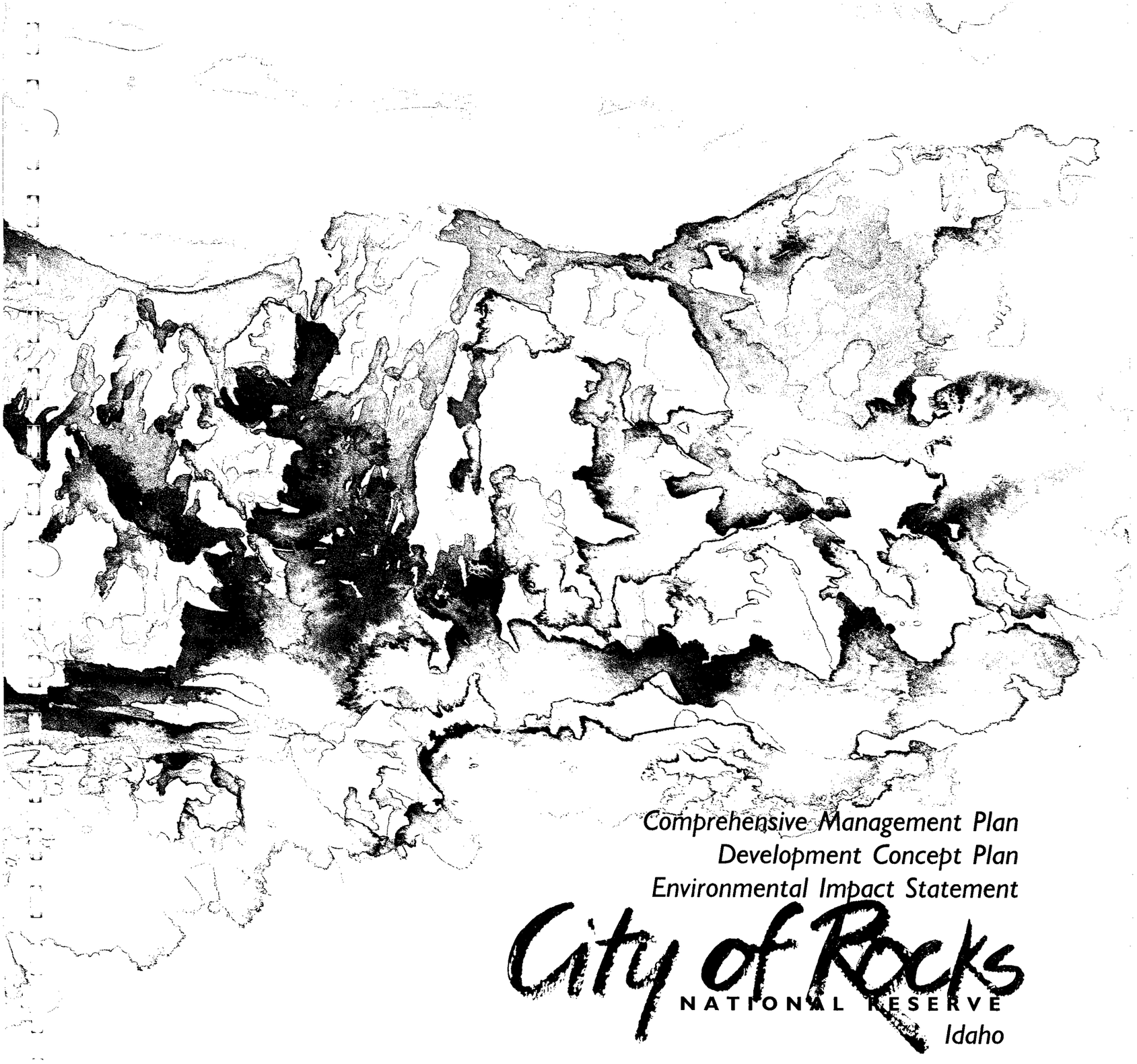

Comprehensive Management Plan
Development Concept Plan
Environmental Impact Statement

City of Rocks

NATIONAL RESERVE

Idaho

Final
Comprehensive Management Plan
Development Concept Plan
Environmental Impact Statement

CITY OF ROCKS

National Reserve
Cassia County, Idaho

This *Final Comprehensive Management Plan/Development Concept Plan/Environmental Impact Statement* presents a proposal and two alternatives for the management, use, and development of City of Rocks National Reserve. The proposal, which constitutes the draft comprehensive management plan for the reserve, calls for the preservation and interpretation of exceptional and important resources to preserve and protect the significant historical and cultural resources, to manage recreational use, to protect and maintain scenic quality, and to interpret the nationally significant values of the reserve. The plan's focus is on remnants of the California Trail, distinctive rock outcrops and associated habitats, and a historic rural setting reminiscent of the American West, while accommodating the traditional use of livestock grazing, trailing, sport hunting, and recreation. Uses would be directed to different zones to minimize conflicts among potentially incompatible activities. Grazing and recreational use would be managed to avoid unacceptable degradation of resource values, placing greatest emphasis on protection of historic fabric, natural rock surfaces, habitats for species of special concern, and riparian areas and wetlands. Portions of the reserve would remain in private ownership, and some public land would remain under grazing allotments, where traditional ranching activities would perpetuate the historic rural setting existing at the time of the reserve's establishment. Private commercial and residential development would be regulated by county zoning ordinance and may be limited by the acquisition of interests in lands on an opportunity basis necessary to protect reserve resources. Implementation of the proposal would be a partnership among the National Park Service, the Idaho Department of Parks and Recreation, the Cassia County commissioners, and private landowners.

An overview of changes that have been made in the proposal since the draft plan follows:

- The decision on how climbing would occur outside the foreground of the California Trail would be deferred to the climbing management plan.
- Some additional areas would be closed to grazing to protect wetland and riparian areas. Some decisions on where grazing would occur would be deferred to the grazing management plan.
- Prescriptions for uses of zones, subzones, and areas within the subzones would be eliminated in favor of more general guidance.
- The proposed road around the south end of the reserve would be eliminated.
- The Twin Sisters formation would be managed to emphasize resource protection and to exclude active recreational uses, including climbing, picnicking, and camping.
- A Statement of Findings on Wetlands has been added.

A more detailed list of changes are in the plan summary and in appendix I.

The alternatives under consideration, in addition to the proposal, include the no-action alternative, which would continue to emphasize unrestricted private use and public recreational use, sometimes to the detriment of exceptional cultural and natural values, and an alternative that would emphasize the preservation and interpretation of the California Trail and the rock outcrops to the exclusion of traditional land use and the historic rural setting.

The environmental consequences of the proposed action and the other alternatives were fully documented in the DEIS and are represented with modifications in the FEIS. The public review period on the DEIS ended February 1, 1994. The results of the public comment on the DEIS are included in the FEIS. The no-action period on this final plan and environmental impact statement will end 30 days after the Environmental Protection Agency has accepted the document and published a notice of availability in the *Federal Register*. For further information, contact: Regional Director, National Park Service, Pacific Northwest Region, 909 First Ave., Seattle, WA 98104-1060, (206) 220-4010.

SUMMARY

SUMMARY OF CHANGES FROM DRAFT TO THE FINAL PLAN

Two management plans for monitoring grazing and rockclimbing would provide direction on managing these uses. In the case of Twin Sisters rock formation, active recreational use, including climbing, picnicking, and camping, would be excluded from the foreground of the California Trail. Grazing use would be discontinued in some areas to protect wetlands.

The management zoning for City of Rocks has changed from two zones (Preservation and Public Education Zone and Development Zone) to three zones (Historic and Natural Preservation Zone, Historic Rural Setting Zone, and Public Use and Development Zone). Emphasis would be placed on preserving the foreground of the California Trail and preserving outstanding features outside the foreground of the corridor. Rather than allowing specific recreational activities and grazing on public and private lands as described under the zones in the draft plan, climbing and grazing use would be determined by climbing and grazing management plans. The Public Use and Development Zone would contain facilities needed to support visitor use and reserve opportunities.

Landownership has changed because private land has been obtained since the draft.

Certain recreational activities would change. Vehicle camping would be clustered in multiple areas to provide walk-in access to campsites, most of the climbing in the reserve would continue to occur in the natural and recreational resource area, and mountain biking would be limited to designated secondary roads or bicycle trails.

Facilities inside and outside the reserve would change. Generally, parking would increase in Circle Creek basin and more trails would be added. Outside the reserve, the visitor center/administrative office space would be increased by 2,000 square feet and include a museum and 15- to 30-seat multipurpose room. The 100-seat amphitheater would be expandable to 200 seats. The RV campground would be a developed campground.

To improve access to the reserve, orientation/information signs would be requested on interstate and state highways.

The phasing of development chart was changed to provide more detail. The primitive campground has been added. There would be short, medium, and long-term phases as in the draft plan, but the time frame would be open-ended.

COOPERATIVE MANAGEMENT OF A UNIQUE ENVIRONMENT

City of Rocks, an extraordinary encirclement of granite rising out of the gently rolling sagebrush country in south-central Idaho, has attracted and intrigued people since they first entered this region. The Shoshone camped here, as did the emigrants traveling along the California Trail, and they and the settlers who followed have overlaid a rich human history onto this dramatic natural backdrop. For all the area's significant natural and cultural values (it is a national historic landmark, a national natural landmark, and contains segments of the California National Historic Trail), it did not receive national attention at a time when many of the other natural and cultural wonders of the West were withdrawn as federal reserves. Instead, the area was homesteaded, and most of the land in the heart of the City of Rocks passed into private ownership. Generations of Cassia County residents have made their living here and found recreation and inspiration in the great wealth of the area's natural and historic resources. Local traditions run deep at City of Rocks, and local residents are strongly tied to this place. Increasingly, people from outside the region, most notably sightseers but also rockclimbers and other recreationists, have discovered the area. Concerns about growing use of the area prompted local residents to support efforts to designate City of Rocks as a national reserve, a national historic landmark, and a national natural landmark, and the area was added to the national park system in 1988.

Congress recognized, in establishing the reserve, that local interest in this area and its traditional use was strong, and it specified that though the area was to remain a unit of the national park system, the reserve should ultimately be turned over to the state or an appropriate local governing body for management. Congress also indicated, through the type of zoning it specified, that some private use would continue within the reserve in accordance with a comprehensive plan developed in cooperation with state and federal agencies, local units of government, and local residents.

The overriding issue to be resolved by this comprehensive management plan for the reserve is finding a balance between historic and natural resource preservation, public education and recreation, and private use within a relatively small geographic area where significant values overlap and the potential for competing interests is great. Successful implementation of the plan will require the cooperative efforts of the National Park Service, the Idaho Department of Parks and Recreation, Cassia County, and private landowners. Unlike most units of the national park system, this federal reserve will not, in all probability, be directly managed by the National Park Service. Instead, it is proposed that the reserve be managed by the Idaho Department of Parks and Recreation in cooperation with the National Park Service. Because a portion of the national reserve will remain in private ownership, county zoning will play a critical role in ensuring that the reserve achieves its intended purpose.

During the course of developing the draft plan, a number of alternatives were developed, reviewed by the federal, state, and county governments and the general public, and revised to reflect a realistic range of management options. Two alternatives in addition to the proposal (alternative 2) were analyzed in detail. The no-action alternative (alternative 1) would continue to emphasize private and public recreational use, potentially to the detriment of exceptional cultural and natural values. Alternative 3 would emphasize the preservation and interpretation of the California Trail and the rock outcrops with less area devoted to preserving the historic rural setting (where traditional ranching occurs) and the exclusion of some recreational uses.

THE PLAN (ALTERNATIVE 2)

Description

The final comprehensive management plan recognizes the three principal resource values of the reserve as the California Trail, the exceptional rock outcrops and the habitats associated with them, and the historic rural setting reminiscent of the American West. Recognition of these important values and the need to provide recreational opportunities and facilities for visitors provided a framework for developing the principal components of the plan and for determining the management classifications for zoning throughout the reserve.

Regarding the California Trail, the plan proposes to preserve the major landmarks, trail remnants, and inscription rocks.

Visitors would be given the opportunity to walk the entire length of the California Trail within the reserve and to walk around within the entire Circle Creek encampment area. Minimal modern intrusions would be allowed in the foreground of the views from the California Trail to allow visitors to experience a landscape reminiscent of the historic trail period. The plan would also preserve the crescent-shaped rock outcrops and protect the raptor and bat habitats they provide. The crescent would be managed in ways that would protect the significant resource values. A potential loop tour would link sites outside the reserve.

Some of the reserve would remain in private ownership. Most of the private lands in the reserve, along with some public lands (primarily those outside the exceptional resource areas), would be managed to preserve and let visitors experience the remnants of historic farm and ranch buildings and the ongoing ranching activities, such as grazing and cattle drives, that characterized the historic rural setting of the reserve at the time of its establishment.

Opportunities for some types of recreational use would be expanded. Climbing, hiking, and camping would be supported in prime recreational areas, such as the southern arm of the rock crescent (including section 36) and the Indian Grove area.

Unlike most units of the national park system, hunting would be permitted within certain public areas of the reserve and within private lands where prior permission from the owner has been obtained.

Only those modest facilities essential to visitor enjoyment of resources, such as access roads, interpretive overlooks, parking pulloffs, trails, picnic sites, tent campsites, and comfort facilities, would be included inside the reserve. Reserve managers would work with federal and state government to replace or realign roads inside the reserve. A visitor center and developed campground, employee housing, and all administrative and maintenance functions would be placed outside the east boundary near the Almo junction on existing public land.

In cooperation with the local community, air, water, biological, geological, and scenic resources would be maintained at the highest quality possible, using a resource management plan to guide management of these resources.

Environmental Consequences of the Plan

Generally, the plan would promote conservation of natural and cultural resources and provide for public education and recreation and private livestock grazing.

Historic sites and structures and a small number of archeological sites related to the California Trail and other periods of the reserve's history would be stabilized and preserved. Some historic sites and structures would be interpreted. Continued deterioration or damage to other archeological sites caused by vandalism, collecting, or construction activities would create losses that are irreversible. Modern developments and incompatible activities in the historic views from the California Trail and the reserve's historic rural setting would be reduced and would be managed to minimize the potential for future intrusions.

The proposed action would have generally beneficial effects on the reserve's biological and physical resources. Natural quiet in the reserve would be protected by prohibiting the use of motorized equipment, motor vehicles, or sound devices outside the development zone. Discharge of fire arms during hunting season would be excepted. Sensitive cliff-dwelling species, including two candidate species, rock formations, and associated vegetation and soils in the reserve would benefit from a climbing management program emphasizing the protection of resources. Soil, vegetation, wildlife habitat, rare plants, and fragile wetlands and riparian areas would benefit from phasing out grazing on certain lands within the reserve identified through a grazing management program directed at protecting resources. Wetlands and riparian areas would benefit from actions described in appendix J. However, domestic livestock grazing and water uses would adversely affect up to 244 acres of wetlands and riparian habitat, but to a lesser extent than they do now. Proposed grazing use and development would be mitigated where necessary to protect floodplains and wetlands. The fire management plan might contain provisions to allow natural fires to burn, which would help ensure habitat diversity. Disturbance from proposed development within the reserve combined with the restoration of disturbance from dispersed campsites, roads, and trails would result in a net loss of about 24 acres of vegetation. Outside the reserve an estimated 77 acres would be disturbed by development of facilities.

Protection of the reserve's air quality and visibility would be enhanced through the redesignation of the reserve as a class I air quality area. Such action must be requested by the state and must include a public involvement process. Site design and visitor management would help to protect and enhance scenic quality along the rim. In addition, new access points to see views would be provided, and developed areas would be compatible with the historic rural setting.

Visitors would have the opportunity to understand and appreciate the California Trail and the full historic continuum, free of conflicting development. Some rock formations would be closed to climbing. Opportunities for camping on lands inside and outside the reserve would be provided in designated areas.

Closing 283 acres to grazing on public land and reducing the total number of AUMs as permittees vacate allotments would have adverse economic impacts on ranchers/permittees. Affected private landowners would be compensated with the fair market value of their property. The local economy would be adversely affected since grazing would be reduced, and related employment and expenditures would be diminished.

The character of the surrounding communities would continue to be altered through car, bus, and mountain bike use. Bus and tour traffic would increase during the week, and car traffic would be more prominent on the weekend. Potential private development in Almo and Oakley could also alter the character of the communities. Economic benefits to the communities from reserve visitor expenditures would likely remain the same as now. Cassia County and the surrounding area would possibly benefit because of federal and state expenditures for salaries, operating costs, and construction.

ALTERNATIVE 1: NO ACTION

Description

There would be no significant change in current management or visitor use. Reserve managers would take the minimum actions necessary to meet legislative requirements, to protect natural and cultural resources, and to address health and safety concerns, but few additional interpretive or recreational programs or facilities would be provided. Livestock grazing would continue on private and most of the public land.

Visitors would continue to participate in recreational opportunities (shown on the Existing Infrastructure and Public Use map) and experience the California Trail. They would be on their own to discover and learn about the reserve's resources, except for information provided at a ranger/administrative station outside the reserve and at two kiosks inside the reserve.

Rock climbing and camping would be permitted in most areas, except for special natural and cultural features. Hunting would be allowed in the same areas as it is now, and permission from landowners should be obtained for recreational activities on private property.

Resources would be managed under the current programs of the National Park Service and Idaho Department of Parks and Recreation. Management of cultural resources would remain limited, and most significant resources would remain in private ownership.

The existing road network, parking areas, and picnic sites would be retained.

Environmental Consequences of No Action

Slow deterioration of historic sites and structures and archeological sites related to the California Trail and the reserve's historic rural setting would cause an irreversible loss of historic and archeological values.

The gradual intrusion of modern developments and incompatible activities into the historic views from the California Trail and the reserve's historic rural setting would cause a long-term but theoretically reversible impact, although the investments in new development would make its removal unlikely in the foreseeable future.

Existing disturbance of soils, vegetation, and habitat for campsites, roads, trails, and private development would continue to cause a long-term loss.

Disturbance of 88 acres of soils, vegetation, and habitat for campsites, roads, trails, and private development would continue, causing a long-term but reversible effect. There would also be continuing degradation and reduced productivity of natural plant and animal communities caused by domestic livestock grazing and suppression of natural fire on 89 percent of the reserve, including 95 percent of the riparian and wetland areas. The productivity of damaged riparian areas and wetlands, damaged upland areas, and severely eroded areas would be substantially diminished indefinitely.

Air quality and the range of visibility would likely be adversely impacted. Scenic quality would be diminished, particularly the most outstanding landscape view and arrival views at the entrance.

Visitor understanding and appreciation of the California Trail and the historic continuum would be affected by a lack of preservation of and public access to many key resources and by competing recreational activities. Public lands for rockclimbing and other recreational activities, including tent and RV camping, would continue to be available. Minimal management of recreation would adversely affect natural and cultural resources. Power and audio devices would continue to be restricted under Cassia County ordinance. Conflicts between hunting and other visitor activities could be dangerous for some reserve users.

Public and private land for livestock grazing (12,215 acres) would continue to be available. However, the natural productivity of this land would continue to be decreased by loss of soils and invasions of woody species and nonnative plants.

The character of the surrounding communities would be most affected on weekends because of traffic and the resulting demand for parking and pedestrian/car conflicts. The economic benefits to the communities from reserve visitor expenditures would be expected to remain the same as now. Cassia County and the surrounding area would benefit from federal and state expenditures for salaries, operating costs, and construction.

ALTERNATIVE 3: CALIFORNIA TRAIL EMPHASIS

Description

Protection of the reserve's exceptional cultural, natural, and scenic resources would be greatly enhanced. The California Trail story would be told through several types of interpretive programs, while allowing for reduced amounts of compatible recreational and private use.

Visitors would be accommodated by providing many access points along the California Trail and Salt Lake Alternate and presenting a variety of interpretive programs. As described under the proposal, a visitor center would be outside the reserve. Two roads would lead to interpretive overlooks and day use areas, and a potential loop tour route would link sites outside the reserve. The reserve would be a day use area.

A road would be developed outside the boundary around the south end of the reserve, and managers would work with federal and state governments to replace or realign roads inside the reserve. A maintenance area would be outside the reserve near the visitor center and administrative facility. No campsites and no recreational trails would be developed.

Resources would be managed in such a way that would return the area to a more natural setting. All

cultural resources unrelated to the California Trail would be inventoried and evaluated to determine appropriate treatment. Management would seek fee title to lands visible from the trail corridors, which would exclude grazing. Native grasslands would be restored, native species promoted, and, if suitable habitat could be maintained without creating problems with domestic livestock, reintroduction of native wildlife would be considered. Like the plan, reserve managers would try to maintain the highest degree of integrity of air, water, biological, geological, and scenic resources.

Environmental Consequences of Alternative 3

Historic sites and structures related to the California Trail, including the foreground and middle ground of the views seen from the trail, would be stabilized, preserved, and interpreted. While emphasis would be placed on California Trail resources, other properties eligible for the National Register of Historic Places would be identified, evaluated, and protected in accordance with a cultural resource management plan.

Modern developments and incompatible activities in the historic views from the California Trail would be eliminated, and management of these activities would minimize the potential for future intrusions.

An additional 21 acres of soils, vegetation, and habitat would be disturbed by increasing visitor use, new campsites, roads, and trails, and 28 acres of currently disturbed areas would be restored for a net restoration of 7 acres. The total area of land disturbance for facilities and roads outside the reserve would be 77 acres. Although in the long term these changes would be reversible and the natural biological productivity could return to the areas, it would be unlikely in the foreseeable future. Although most developed areas could be restored to previous conditions over time, the use of the land and financial resources to implement this alternative would, in the practical sense, be an irretrievable commitment of resources. In areas that were restored, the natural biological productivity would be expected to increase indefinitely.

Gradual recovery and restoration of natural productivity of natural plant and animal communities in most areas of the reserve, including most riparian and wetland areas, would occur as livestock grazing was phased out.

Visitors would have an excellent opportunity to understand and appreciate the California Trail without conflicts from competing activities and conflicting development. However, the availability of popular rockclimbing areas would be reduced, and all opportunities for camping on lands inside the reserve would be eliminated. Many rock formations would be protected from impacts caused by some climbing methods.

Grazing on public lands within the reserve would cease. A major reduction in the availability of private land for livestock grazing would occur because reserve managers would seek to acquire most of the land inside the reserve on an opportunity basis. The decrease in land inside the reserve available for grazing would result in a loss of cattle forage to local ranchers. The local economy could also be adversely affected by a reduction in agricultural-related employment and local expenditures.

The character of the surrounding communities would be affected by traffic, primarily on the weekend. In addition, demand for lodging would probably increase in Oakley.

The economic benefits to surrounding communities from visitor expenditures would likely remain the same as now. Cassia County and the surrounding area would benefit because of federal and state expenditures for salaries, operating costs, and construction.

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PREFACE

> We encamped at the City of the rocks, a noted place from the granite rocks rising abruptly out of the ground. They are in a romantic valley clustered together which gives them the appearance of a city, a dismantled, rock-built city of the Stone Age.
>
> — James Wilkins, 1849

City of Rocks was an important milestone on the emigrant trails west. To trail users of the 1850s, it was a haven from the harsh heat and winds of the American West. The scenery inspired poetry and elaborate writings. It was a place to celebrate the end to the tedious plains crossing. It was a place to ponder on the perils to come. It was a safe harbor, a moment for respite, a place to pause, regroup, and relax. For a brief stay, all was well.

For centuries Native Americans and their ancestors used the City of Rocks area for a wide variety of resources, including the piñon tree. In 1826 Peter Skene Ogden and his beaver trappers were the first non-Indians to see the City of Rocks. For 40 years, between 1843 and 1883, City of Rocks was a landmark for emigrants and other travelers on their way to California and Oregon, and, later, the gold fields of southern Idaho. By the 1870s cattlemen and farmers began to settle the City of Rocks area, and ranching continues today.

City of Rocks, world renowned for its geologic features, includes some of the oldest rock in North America. Some believe the rock is 2.5 billion years old, the oldest in the western half of the continent. Erosion created this landscape of domes, spires, and hogbacks. The granites of the City of Rocks, created from molten rock deep within the earth's surface, were intruded up through older granite. As time passed, the overlying rock was cracked, fractured, and eroded, leaving "the City" as seen today.

City of Rocks is still a haven from the harsh heat and winds of the Great Plains. It is still a scenic wonder. It still inspires verse and celebration of people ambling along the cherished route of our forefathers. But now a retreat must be found away from the strain of everyday life.

Trail users had to search for shelter along a horizon line, setting a course to the best guess for finding a place to spend the night. Today's visitors arrive to find neatly organized historic settlements to welcome them — settlements worthy of their own place in the scenic quality of the visitor experience, towns built of local brick by sophisticated craftsman at a time in western history when logs were the style of the day, towns built with the confidence of permanence rooted in a strong abiding faith.

Today, City of Rocks is internationally known for the greatest number and variety of 5.13 and better climbs in the United States. Climbers, including many from overseas, come here expressly to climb Rabbit Rock, Morning Glory Spires, or the Breadloaves.

Along with climbing, hiking, and other activities, the "Silent" City of rocks is enjoyed for its namesake— silence. Here, one can come, sit, listen to the wind, embrace this magnificent landscape, and contemplate what this place may have meant to those California Trail pioneers more than a century ago. The City of Rocks is a place of both history and timeless beauty.

Even as one travels outside the reserve, through the region's scenic ranchlands, communities, and distant forested mountain slopes of southern Idaho, all become part of a visit to the City of Rocks. Ranch hands trailing, cattle, blue skies, friendly people, and small quiet towns are all part of the experience.

As a part of that region, they find the towns of Almo, Declo, Malta, Albion, and Oakley — towns where the pace is still pedestrian and wide streets and building arrangements are ordered by a definite religious planning style. These are places where the general store is the community center, fields and pastures surround small settlements, and folks tend to be informal and friendly.

City of Rocks legislation calls this the historic rural setting. It asks for the reserve's recognition and protection. While the plan defines pros and cons of a national/state/county area partnership, it has been left to the county and the citizens to acknowledge the value of the visual integrity of their way of

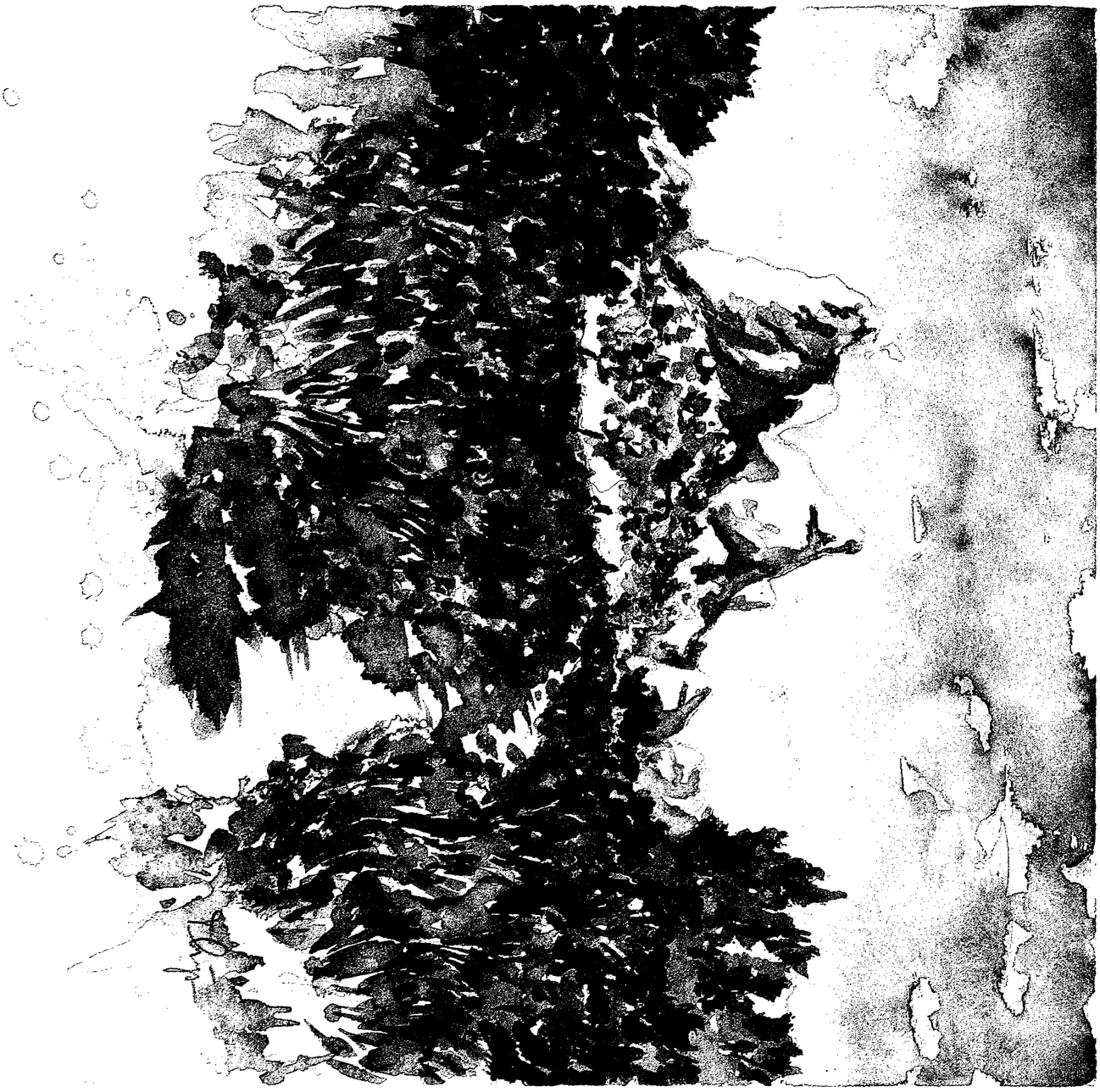
living. As government infrastructure and visitor services try to fit into these places, it is important to stay close to the beauty. And it is important for the National Park Service, the Idaho Department of Parks and Recreation, Cassia County, and the residents to remind each other of this beauty.

As John Muir noted, "nothing dollarable is safe." Applying this piece of wisdom to the preservation of City of Rocks, public uses must be accommodated within a context that provides for the enjoyment of the area while preserving the integrity of its resources. An experience for visitors, the staff, and local residents must therefore be created that still allows the unique heritage and spirit of this magnificent area to shine through.

The City of Rocks is now part of the national park system, established by Congress in 1988 as one of the nation's four national reserves. By its establishment, Congress recognized the character of this place — its history, scenery, and natural wonders — long forgotten and hidden from all but the local resident, history buff, and rockclimber.

Congress' recognition and establishment of City of Rocks National Reserve mandates cooperative protection, preservation, and management of this special place. Cooperative efforts between local citizens, Cassia County, the state of Idaho, and the National Park Service will be the partnerships that ensure preservation of the historic and natural resources, protection of the area's scenic qualities, and wise management of its use. This comprehensive management plan defines and presents the proposed strategies for the protection, preservation, and management of these values.

Cognizant of the need to protect the values of this special place and the opportunities presented by the cooperative spirit evidenced by each of the participants, the preparation of the *City of Rocks Comprehensive Management Plan* becomes the vehicle by which the common goals for the future of the national reserve may be realized. The vision of the future for the City of Rocks is therefore forward-looking, yet grounded in the past. The challenge is to provide for the long-term protection of the City of Rocks, while providing for the use and enjoyment by future generations of Americans.



PART ONE: FINAL COMPREHENSIVE MANAGEMENT PLAN

PURPOSE OF AND NEED FOR THE PLAN

City of Rocks, an extraordinary encirclement of granite rising out of the gently rolling sagebrush country in south-central Idaho, has attracted and intrigued people since they first entered this region. Native Americans camped here, as did the emigrants traveling along the California Trail/Applegate Trail, and they and the settlers who followed have overlaid a rich human history onto this dramatic natural backdrop. For all the area's significant natural and cultural values (it is a national historic landmark, a national natural landmark, and it contains segments of the California National Historic Trail), it did not receive national attention at a time when many of the other natural and cultural wonders of the West were withdrawn as federal reserves. Instead, the area was homesteaded, and most of the land in the heart of the City of Rocks passed into private ownership. Generations of Cassia County residents have made their living here and found recreation and inspiration in the great wealth of the area's natural and historic resources. Local traditions run deep at City of Rocks, and local residents are strongly tied to this place. Increasingly, recreationists from outside the region, including sightseers and rockclimbers, are also discovering the area. Concerns about growing tourism prompted local residents and the preservation community, after many years of reluctance, to support efforts to designate City of Rocks as a national reserve, and the area was added to the national park system in 1988 (see the Region and Vicinity maps).

poor wording

Congress recognized, in establishing the reserve, that local interest in this area and its traditional use was strong, and it specified that the reserve should ultimately be transferred to the state or an appropriate local governing body for management. Congress also indicated, through the type of zoning specified, that some private use should continue within the reserve (see appendix A).

The overriding issue to be resolved by this draft comprehensive management plan is finding a balance between historic and natural resource preservation, public education and recreation, and private use within a relatively small geographic area where significant values overlap and the potential for competing interests is great. Successful implementation of the plan will require the cooperative efforts of the National Park Service, the Idaho Department of Parks and Recreation, Cassia County, and private landowners.

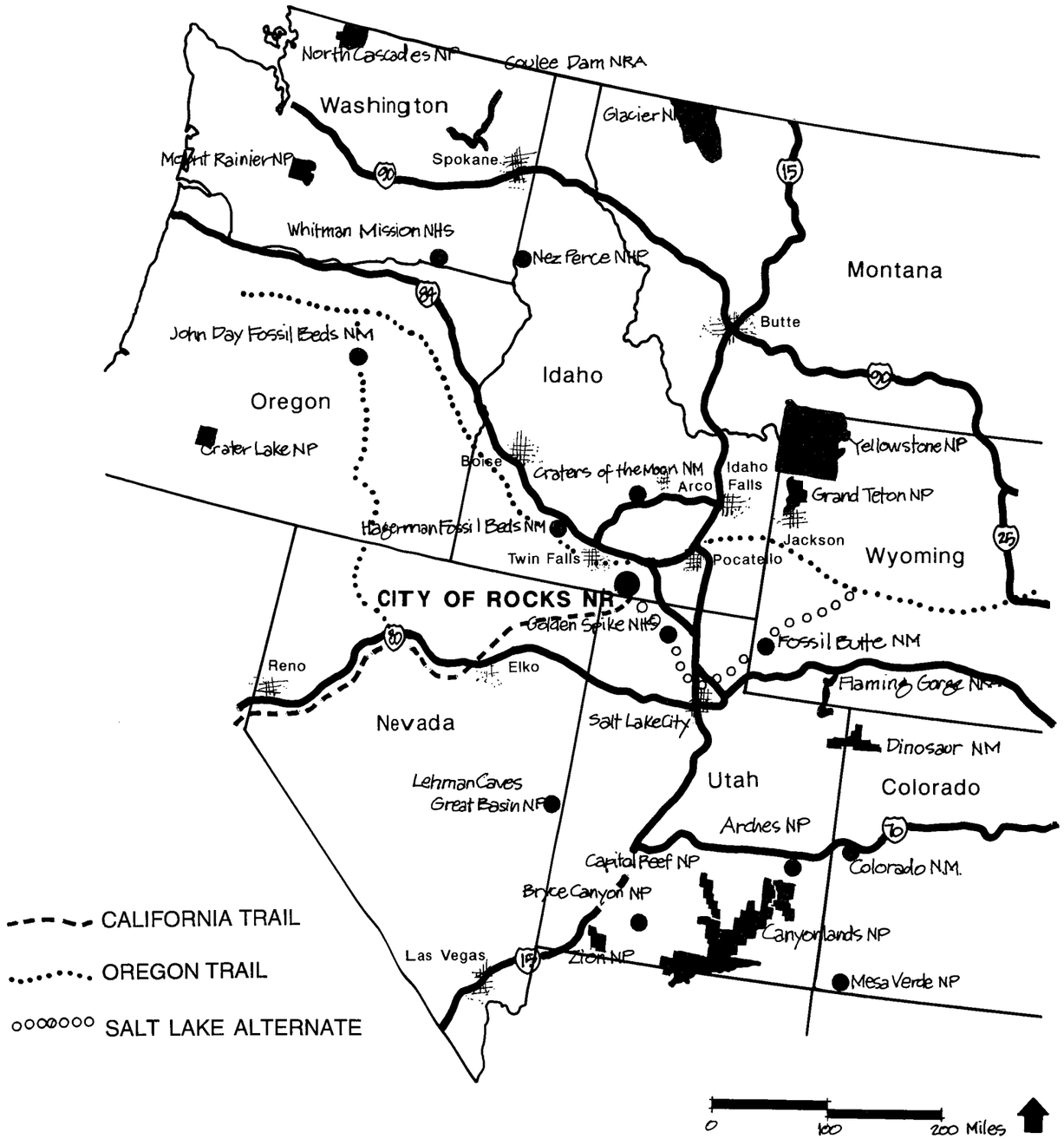
The tension created by the overlapping values of the reserve challenges planning to find a common ground and to emphasize the ways in which various uses can be mutually supportive rather than focusing on potential conflicts. The plan addresses resource management, visitor use, and reserve operations from this point of view. Some major planning issues are raised by this perspective. One is how broadly to define the significant resources of the reserve. Although a good case can be made for considering the reserve's historic rural setting (and the ranching operations that characterize it) as a significant resource value warranting long-term preservation and interpretation, another case can be made for defining significance more closely in line with sound preservation principles. Under alternative 2, the first approach recognizes that the prehistory and history of the City of Rocks region is a continuum in which the California Trail is a pivotal event. It marked the demise of the traditional hunting and gathering society of the Native American groups who used the area prehistorically and foreshadowed the agricultural and ranching economy that now shapes the landscape. Under the latter traditional approach, the reserve could be limited to the national historic landmark and California National Historic Trail values of the California Trail and the national natural landmark values of the rock outcrops. These two approaches provide different premises for the two alternatives considered during the course of the planning process.

A closely related issue is the degree to which the traditional land use of livestock grazing can or should be accommodated in the reserve. Grazing is not addressed expressly in the establishing legislation; however, the act states that there will be local private use, and the legislative history indicates that Congress expected that one of the private uses would be grazing.

grazing

Although livestock grazing is prohibited by policy in most units of the national park system, it might be permitted if it is necessary to maintain the historic scene. Consequently the issue of livestock grazing is closely tied to a determination of the significance of the reserve's historic rural setting and the elements contributing to that setting.

grazing



REGION

CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service
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VICINITY

CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service
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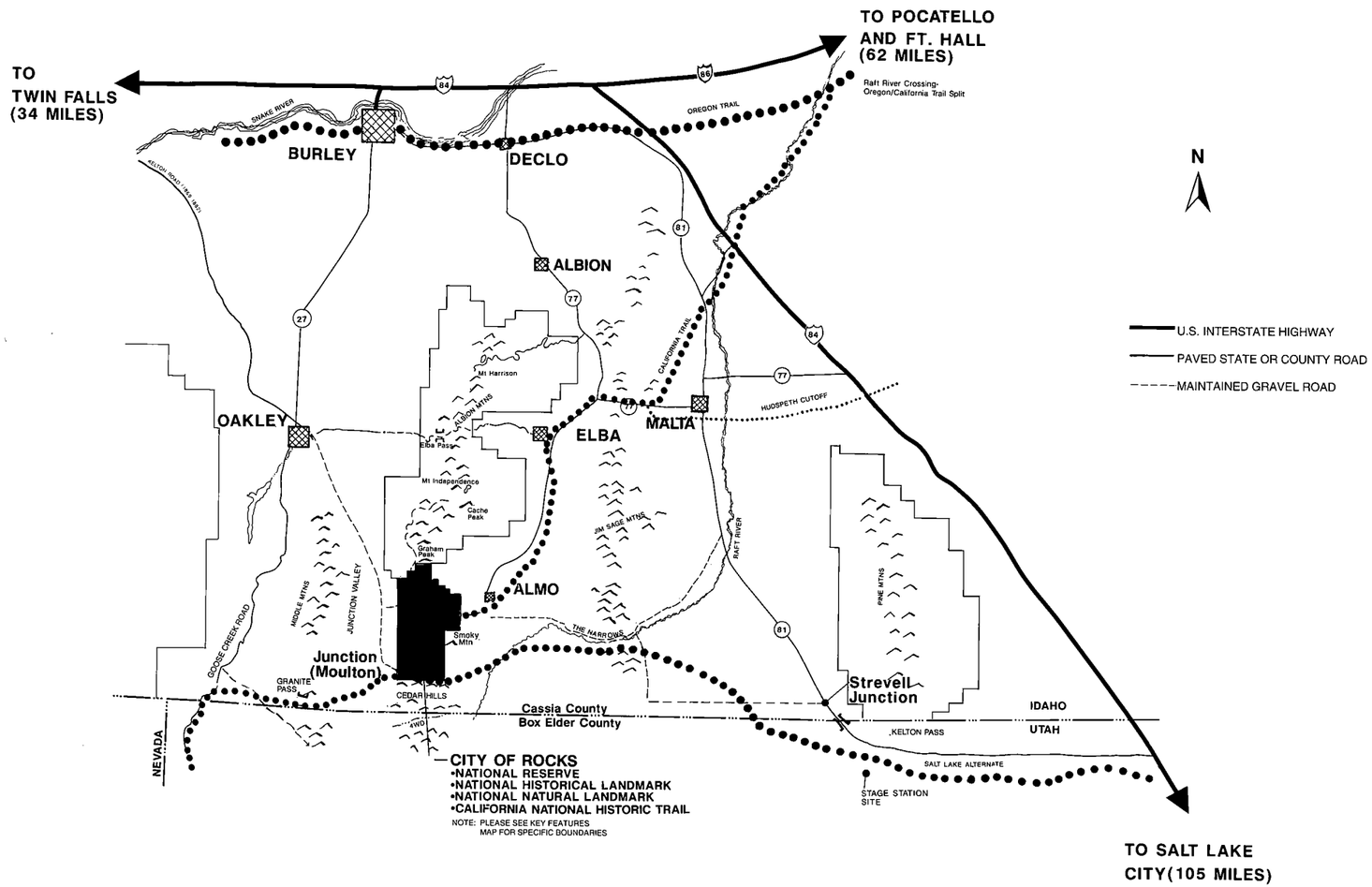


Another issue is technical rockclimbing in an area where the rock outcrops have significant historic and geologic values. The National Park Service supports technical rockclimbing as a legitimate recreational activity in units of the national park system; however, it recognizes that increasing impacts from the growth of certain climbing activities require that these activities be managed to protect significant resource values. Planning for the national reserve addresses management strategies that would manage compatible recreational use while protecting the geological, historical, archeological, and scenic values of the rocks, the historic rock inscriptions, and the habitats of species of special concern.

This *Final Comprehensive Management Plan/ Development Concept Plan/Environmental Impact Statement* presents the proposal and two alternatives for the management of City of Rocks National Reserve. It also analyzes the environmental consequences of implementing the proposal and alternatives. Part one is the plan. Part two contains the issues surrounding the reserve, a description of the affected environment, the alternatives considered in determining a proposal for management of the reserve, and the environmental impacts of each of the alternatives.

In this document, the terms cultural resources, historic resources, and archeological resources are all used to refer to historic properties as defined under the National Historic Preservation Act.

THE PLANNING PROCESS

The purpose of the comprehensive management plan for City of Rocks National Reserve is to guide cultural and natural resource management, visitor use, and general development for the next 15 years. This is the first plan for the reserve, which was authorized by legislation in 1988.

When Congress established the reserve it directed the National Park Service, in cooperation with appropriate state and federal agencies, local units of government, and local residents, to formulate a comprehensive plan for the protection, preservation, and interpretation of the reserve. To carry out this direction from Congress, a planning team was formed with eight members from the National Park Service, two from the Idaho Department of Parks and Recreation, and four residents of Cassia County, Idaho. The team consulted with numerous other public agencies, private organizations, and the general public (see the "Consultation and Coordination" section in part two of this document).

The formulation of a comprehensive plan for City of Rocks is being accomplished in three basic steps. The plan is now in step three. Each step is described briefly below:

Step One—Gather Information: Considerable information has been gathered over the past few years. Historians, natural scientists, and landscape architects have surveyed the cultural, natural, and scenic resources of the reserve. Public ideas and concerns about how the reserve should be managed have been gathered at nine public meetings in eight different communities in southern Idaho and northern Utah and through two newsletters asking for public comment.

Step Two—Consider the Possibilities: Based on ideas presented by the public and on professional assessments, the planning team identified the feasible range of possibilities for management and use of the reserve and developed alternative plans representing the different possibilities. The draft alternatives were presented for public review and comment in a workbook published in August 1991. Following that review the alternatives were revised into the three alternatives that were more rigorously assessed in the draft plan. (See part two of the document, "Environmental Impact Statement," for the documentation of that assessment.)

Step Three—Select and Refine a Proposal: After considering the public comments and recommendations of their planning and management staffs, the regional director of the Pacific Northwest Region of the National Park Service and the director of the Idaho Department of Parks and Recreation agreed upon a draft plan proposal for how the National Park Service, the Idaho Department of Parks and Recreation, and Cassia County anticipated managing the reserve. This proposal and the alternatives were presented for public review in the draft comprehensive management plan and draft environmental impact statement. The draft plan focuses on the proposal for managing the reserve. The draft environmental impact statement presents an analysis of the impacts of the draft plan (proposal) and compares them to the impacts of the other feasible alternatives. The public has had an opportunity to review and comment on both the draft plan and the draft impact statement. Following that review this final plan and final environmental impact statement were prepared. Representative letters are printed along with agency responses in Part II of this document in the "Consultation and Coordination, Comments and Response" section.

Implementation of the Plan

Following approval, implementation of the plan will occur. This will include resource surveys, natural and cultural resource studies, compliance actions, development of design guidelines, preparation of action plans, design and construction of proposed facilities, resource management actions, and the transfer of site management of City of Rocks to the state of Idaho. The plan will be implemented as funding permits.

The following excerpt from the City of Rocks enabling legislation guided the development of the "Major Planning Considerations" section of the plan.

TITLE II—CITY OF ROCKS NATIONAL RESERVE

ESTABLISHMENT OF CITY OF ROCKS NATIONAL RESERVE

SEC. 201. (a) There is hereby established the City of Rocks National Reserve (hereinafter referred to as the "reserve"), in order to preserve and protect the significant historical and cultural resources; to manage recreational use; to protect and maintain scenic quality; and to interpret the nationally significant values of the reserve.

PLAN AND MANAGEMENT OF RESERVE

SEC. 202. (a) To achieve the purpose of this title, the Secretary, acting through the National Park Service, in cooperation with appropriate State and Federal agencies, local units of government and local residents shall formulate a comprehensive plan for the protection, preservation, and interpretation of the reserve. The plan shall identify those areas or zones within the reserve which would most appropriately be devoted to—

(1) public use and development;

(2) historic and natural preservation; and

(3) private use subject to appropriate local ordinances designed to protect the historic rural setting.

(c) At such time as the State or appropriate units of local government having jurisdiction over land use within the reserve have enacted ordinances or established regulations which in the judgment of the Secretary will protect and preserve the historic and natural features of the area in accordance with the comprehensive plan, the Secretary shall, pursuant to cooperative agreement—

(1) transfer management and administration over all or any part of the property acquired under subsection (d) of this section to the State or appropriate units of local government;

(2) provide technical assistance to such State or units of local government in the management, protection, and interpretation of the reserve; and

(3) make periodic grants, which shall be supplemental to any other funds to which the grantee may be entitled under any other provision of law, to such State or local unit of government to carry out the purposes of this title.

(d)(1) The Secretary is authorized to acquire such lands and interests as he determines are necessary to accomplish the purposes of this title by donation, purchase with donated funds, or appropriated funds, or exchange, except that the Secretary may not acquire the fee simple title to any land without the consent of the owner. The Secretary shall, in addition, give prompt and careful consideration to any offer made by an individual owning property within the reserve to sell such property, if such individual notifies the Secretary that the continued ownership of such property is causing, or would result in, undue hardship.

MAJOR PLANNING CONSIDERATIONS

LEGISLATIVE MANDATE

The following definitions of City of Rocks provide a framework for determining what is important in making planning decisions for the reserve. Each of these definitions is an extension of the legislation establishing the reserve and its designation as a national historic landmark, national natural landmark, and the California Trail within the reserve as a national historic trail.

City of Rocks is a unit of the national park system.

The legislation that created City of Rocks National Reserve specifies that the area is to be administered subject to the provisions of the organic act for the National Park Service. The organic act specifies that units of the national park system are "to conserve the scenery and the natural and historic objects and the wildlife therein" and "to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations." This means that conservation of resources is of primary importance and that visitor use, although also important, must not degrade the scenic, historic, and natural values of the area (see Key Features map).

City of Rocks is a national reserve.

City of Rocks is one of four national reserves in the United States and one of two that are units of the national park system. The other is Ebey's Landing National Historical Reserve on Whidbey Island, Washington. Two other reserves are listed as affiliated areas of the national park system. A reserve is an area that is managed cooperatively by the federal government through the National Park Service and one or more nonfederal entities. Each reserve is inherently different, and each law designating a reserve reflects its individual values and purposes. How this reserve will be cooperatively managed has been further defined by this comprehensive management planning process. The legislation establishing City of Rocks National Reserve provides for transfer of management to a unit of local government. In this case, management will be turned over to the Idaho Department of Parks and Recreation with continued help from the National Park Service.

City of Rocks National Reserve has several potentially competing purposes based on its great variety of important resource values.

As indicated by Congress and further defined by the planning team, the purposes of City of Rocks are to

- preserve, protect, and interpret

  the City of Rocks, a major landmark and principal stopping place along the California Trail

  the trail segments and rock inscriptions associated with the California Trail

  the scenery, mystery, and silence of the landscape

  the historic sites and current ranching activities that contribute to a historic western rural setting

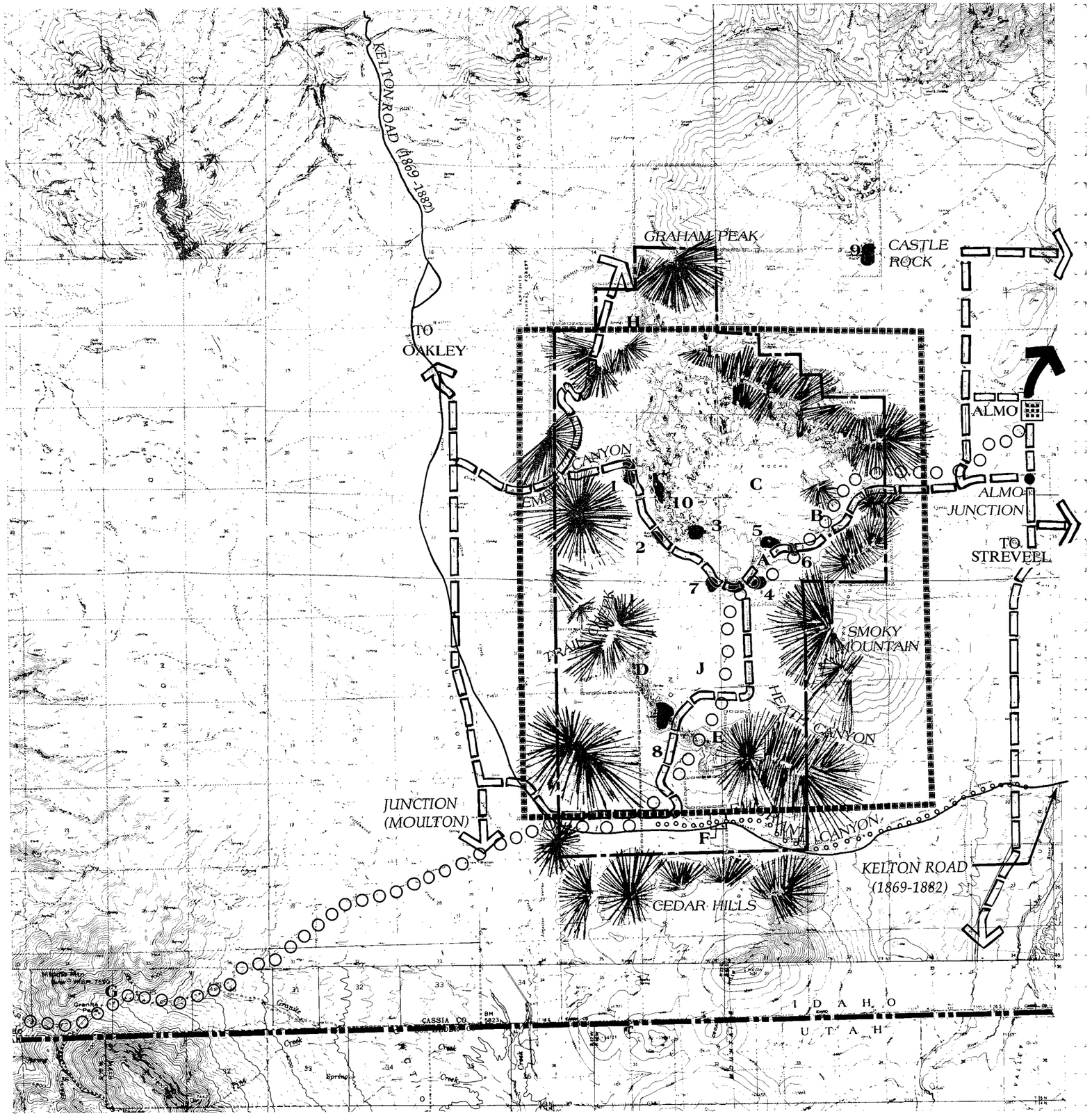
  archeological sites and traditional cultural properties

  the natural ecosystem that supports the species of particular interest and that forms the context for the reserve's cultural values

- manage recreation to ensure preservation and protection of resource values

City of Rocks is a national historic landmark.

In 1964 City of Rocks was designated a national historic landmark — one of our country's most significant cultural resources. It received this designation because of its relationship to the California Trail and the history of American westward migration during the mid 1800s. Situated on the approach to the best mountain pass between Fort Hall and the Humboldt River basin, this area of grass-covered valleys ringed by spectacular granite monoliths became a major landmark and principal stopping place along the California Trail and the Salt Lake Alternate. Many of the emigrants traveling through the area recorded their impressions of the intriguing granite outcrops. One such emigrant, passing through in 1849, identified the assemblage as "the City of Rocks." The name gained acceptance,


KELTON ROAD (1869-1882)
GRAHAM PEAK
CASTLE ROCK
TO OAKLEY
ALMO
ALMO JUNCTION
TO STREVEEL
CANYON
SMOKY MOUNTAIN
HEATH CANYON
JUNCTION (MOULTON)
KELTON ROAD (1869-1882)
CEDAR HILLS
IDAHO
UTAH
CASSIA CO
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KEY FEATURES

CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service
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IMPORTANT FEATURES

- SILENT CITY OF ROCKS
- CALIFORNIA TRAIL
- SALT LAKE ALTERNATE TRAIL
- GRAVEL ROAD
- PAVED ROAD
- STEEP SLOPE
- NATIONAL RESERVE BOUNDARY
- NATIONAL NATURAL LANDMARK BOUNDARY
- NATIONAL HISTORIC LANDMARK BOUNDARY

KEY ROCKS

1 BREADLOAVES
2 BATH
3 TURTLE
4 REGISTER
5 TREASURE
6 CAMP
7 ELEPHANT
8 TWIN SISTERS
9 CASTLE
10 PARKING LOT

KEY AREAS

A INSCRIPTION ROCKS CULTURAL AREA
B NICHOLSON RANCH HOUSE
C CIRCLE CREEK BASIN/TRAIL ENCAMPMENT AREA
D TWIN SISTERS RIDGE
E PINNACLE PASS
F STAGE STOP CULTURAL AREA
G GRANITE PASS
H INDIAN GROVE
I GRAHAM CREEK DRAINAGE
J TWIN SISTERS BASIN

N

0 1 MILE

and the area gained widespread fame as a leading attraction along the trail.

The national historic landmark boundaries extend beyond the boundaries of the more recently established national reserve to encompass Castle Rock, the first significant rock outcropping that emigrants would have seen as they approached from the east. The reserve itself encompasses about 9 miles of emigrant trail routes, including some of the best preserved segments of such trails in the nation. It also contains at least 13 "inscription rocks," where the emigrants recorded their names and dates on the granite, and two large conical rock formations, called the Twin Sisters, at the southern edge of the City of Rocks, which is a major landmark along the California Trail that marks its intersection with the Salt Lake Alternate Trail.

The story of the California Trail is an important but relatively brief part of the history of City of Rocks. People have inhabited the area for thousands of years. By the early 1800s Shoshone and other Native American groups ranged over a broad territory that included City of Rocks. The area was first visited by white fur hunters in 1826. It was poor fur-bearer habitat and proved more valuable as a practical travel corridor when the mountain men turned to laying out the early transcontinental wagon routes about 15 years later. Most of the pioneer families bound for California and virtually all of the 49ers who traveled overland to the California gold fields, and many Oregon-bound emigrants who followed the Applegate Trail used this route. The use peaked in 1852, when some 52,000 people passed over the California Trail. The overgrazing of lands along the trail and the depletion of game by the emigrants eventually led to conflicts with the Native Americans, who by the late 1860s were forced to resettle on the reservations.

Following the completion of the transcontinental railroad in 1869, a road was developed from Kelton, Utah, to Boise, Idaho, to provide a connection for postal service, express, and freighting operations between the railroad and the burgeoning mining communities of southern Idaho. A stage station near the junction of the old California Trail and Salt Lake Alternate served the thriving Boise-Kelton traffic until 1882 when the Oregon Short Line Railroad took the place of the road.

Responding in part to the growing market for meat by the expanding Idaho mining communities, cattle ranching began in the City of Rocks vicinity in the

early 1870s. From the late 1870s to the early 1890s Mormon settlements also began to dot the valleys adjacent to City of Rocks. Dry farming methods coupled with increasing precipitation after about 1890 allowed successful crop planting in City of Rocks up until the 1920s. Sagebrush was cleared, lands were fenced, and grain and hay crops were planted. During this period the existing road was built across City of Rocks from Almo to Moulton. In the 1920s more arid conditions and the severe agricultural depression that followed World War I caused a retrenchment of dry farming operations, and previous farm holdings at City of Rocks were consolidated back into stock ranches. Few farm or ranch buildings still stand in the reserve, but several structures or parts of structures have survived, along with many of the cattle trailing routes, passes, water sources, grasslands and pastures, and basins that are an important part of the memories passed down through the farming and ranching families who lived there. This historic rural setting is an important and increasingly rare remnant of the American West.

The unique landscape at City of Rocks is an important part of the historic scene and has outstanding scenic quality.

To modern-day visitors traveling along the California Trail through City of Rocks the landscape still looks and feels much the same as it did to the emigrants. The ability to recapture this experience without modern intrusions is one of the most important resources of the reserve. The first major impression is one of enclosure. The vistas here are different from the vistas on the surrounding plains; they are defined by the encircling rocks that alternately close in and open up, adding great variety to the scenery. The Circle Creek basin, where many of the emigrants camped, is still an open, expansive valley with a flowing creek, ringed by towering rock formations and offering a sense of security and comfort to plains-weary travelers. The Silent City of Rocks, the crescent shaped canyon at the heart of the outcrop, still retains a quality of mystery and an impressive silence that has awed people for centuries. The Twin Sisters, which have been known by various names, still appear on the horizon at a point just past the inscription rocks, guiding anyone who will follow them across the next open valley to Pinnacle Pass.

Although the physical landscape remains much the same as it was historically, the present plant and animal communities are considerably different from those seen by the first emigrants — a combination of historic and modern uses has resulted in successional shifts toward a dominance of sagebrush, piñon pine, juniper, and nonnative plants; riparian communities are no longer as prevalent near streams and springs, and a number of wildlife species, including bighorn sheep, pronghorn antelope, gray wolf, beaver, and grizzly bear, have disappeared from the scene. Management to preserve natural processes and to restore more natural conditions to sites that have been disturbed by man's use would also enhance the historic scene that is important to the story of the California Trail.

The same characteristics of the landscape that make it valuable from a historical point of view also give it outstanding scenic quality. The variety of enclosed and expansive spaces, the rich mixture of colors and textures created by rocks and vegetation, the focal points and sense of direction provided by such distinctive landmarks as Twin Sisters, and the mystical qualities of this unusual place all contribute to a vividness that makes the City of Rocks a memorable scenic landscape.

City of Rocks is a national natural landmark.

The national natural landmarks program was established by the secretary of the interior to identify, recognize, and encourage the protection of sites containing the best remaining examples of ecological and geological components of the nation's natural heritage. City of Rocks was designated a national natural landmark in 1974 because it is a geologically unique area that exhibits nationally significant features, including the dominance of bornhardt formations, the scarcity of tors, a wide range of elevations over which the landforms are distributed, and evidence that the landforms have been carved from the upper parts of a pluton.

The geology of City of Rocks includes some of the oldest rocks in North America juxtaposed with others that are more recent. The Twin Sisters are billions of years apart in age. City of Rocks is listed in *Natural History in the National Park System* and on the *National Registry of Natural Landmarks: 1990* under Great Basin Natural Region, group I, "Landforms of the Present," theme 6, "Sculpture of the Land."

Most of the significant landforms are in parts of sections 25, 26, and 36, township 15 south, range 23 east; sections 19, 30, and 31, township 15 south, range 24 east; and sections 11, 12, and 13, township 16 south, range 23 east (Jones 1973).

Dr. Frank C. Cunningham described the process of weathering at City of Rocks in his paper that formed the basis for recommending City of Rocks as a national natural landmark. According to Jones (1973), if Cunningham's theories prove to be valid, "Cassia Silent City of Rocks would be the type area where an important concept in origin of landforms was developed." Rocks that are mentioned specifically in the report on the eligibility of Cassia Silent City of Rocks for registered natural landmark designation include (using their 1970 popular names): Bathtub, Register, Twin Sisters, Camp, Treasure, Andy Gump, Look Out, Kaisers Helmet, Great Stone Bird, Dragon Head, Pagoda, Devils Bedstead, Two Rock Turtles, American Eagle, Elephant Head, Monkeys Head, Granite Peak, King on the Throne, Rabbit Rock, Clam Shell, Stripe, Flaming, Chinamans Head, Mica Knoll Hill, Needle, Giant Toadstool, Elephant, Squaw and Papoose, Skeleton Head, and Saddle.

The ecosystems associated with the granite outcrop include an uncommon diversity of vegetation and wildlife, including ferruginous hawks and Townsend's big-eared bats, both of which are candidate species for listing as threatened or endangered. Cliff chipmunks and several plant species, both considered rare or sensitive by the state of Idaho, are known residents. The reserve also provides essential habitat for other sensitive species, including golden eagles, prairie falcons, and other birds of prey. The piñon-juniper forest type is at the northern edge of its range here.

A portion of the reserve that has remained relatively undisturbed by man's activities was designated a research natural area by the U.S. Forest Service and Bureau of Land Management prior to the establishment of the national reserve.

City of Rocks contains segments of the California National Historic Trail.

The national significance of the California Trail was recognized by Public Law 102-328, approved on August 3, 1992. The legislation designated the California National Historic Trail as a component of the national trails system. The National Trails System Act (Public Law 90-543), enacted into law in 1968, defined the purpose of the national historic trails as "the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment."

City of Rocks has a long tradition of recreational use by local residents and is now receiving attention as an outstanding rockclimbing area.

City of Rocks has been a popular destination for camping, sightseeing, picnicking, and rock scrambling for generations of local residents. Over the last two decades, it has become a destination for climbers not only from the region, but from all over the nation and the world. Recognizing the recreational value of the area, a state-owned section of land in the heart of the City of Rocks was transferred to the management of the Idaho Department of Parks and Recreation in 1973. Tourists have been coming to the area in increasing numbers ever since. The most popular recreational activities in the reserve are sightseeing, picnicking, rockclimbing, camping, hiking, mountain biking, photography, and nature study. An amendment to the legislation establishing the reserve allows for hunting to continue in locations and under conditions determined cooperatively by the secretary of the interior and the Idaho Department of Fish and Game.

Approximately half of the lands in the national reserve are in private ownership.

In 1988, the year the national reserve was established, approximately 6,400 acres inside the boundary designated by Congress were in private ownership and used primarily for cattle grazing. Congress indicated that the plan for City of Rocks should identify which zones could most appropriately be devoted to "private use subject to appropriate local ordinances designed to protect the historic rural setting" existing at the time the reserve was established.

Congress authorized the secretary of the interior to acquire on an opportunity basis any lands or interests in lands considered necessary for the purposes of the reserve.

In addition to private lands, private grazing permits for allotments on public lands are currently in effect on most of the public lands in the reserve, except section 36 owned by the Idaho Department of Parks and Recreation. Grazing is not permitted in the research natural area (312 acres) even though it is within an allotment boundary. Permits for these allotments are currently reviewed on an annual basis.

MANAGEMENT OBJECTIVES

The following management objectives were developed by the planning team as part of the planning process. They are based on direction provided in the reserve's authorizing legislation, landmark designations, the organic act, and NPS *Management Policies*.

Cultural Resource Management

Identify, inventory, evaluate, protect, and preserve the resources related to the California Trail.

- Safeguard the route, remnants, and relics of the trail, including trail archeological evidence.
- Protect the rock inscriptions from further deterioration.
- Preserve the pristine scenic vistas seen by the emigrants along the California Trail.
- Pending historic documentation, stabilize stage station site. (Note: HABS documentation is complete; preliminary archeological testing has been done.)

Identify, protect, and preserve elements contributing to an ambience and scenic quality reminiscent of the American West.

- Ensure the long-term preservation of the traditional kind of ranching that was occurring at City of Rocks at the time the reserve was established.
- Cooperate with the state universities to develop and demonstrate ecologically sound, sustained-yield methods for grazing livestock on public lands.
- Place a high priority on preserving the area's historic rural setting and minimize development.

Identify, inventory, protect, and preserve all historic properties eligible for the national register, including sites, objects, landscapes, districts, and traditional cultural properties associated with the prehistoric and historic human occupation of the reserve and archeological resources.

Aesthetic Resource Management

- Inventory scenic resources; protect and maintain scenic quality.
- Measure, monitor, and protect the reserve's expansive, pristine vistas.
- Protect the romance, mystery, and impressive silence of City of Rocks.

Natural Resource Management

- Strive to preserve and restore natural resources.
- Balance ecological relationships and processes with uses in the reserve.
- Maintain natural conditions as much as possible.
- Determine the location of and protect the important habitat used by rare species and species sensitive to human uses.
- Protect air quality at the highest level possible under the Clean Air Act by working cooperatively with the state of Idaho to redesignate the area from class II to class I.
- Control exotic species that could disrupt the ecological, archeological, historical, or scenic integrity of the reserve.
- Conserve natural hydrological processes, including subsurface hydrology and control the acceleration of erosion due to human activities to preserve natural, cultural, and scenic resources.
- Protect or restore wetlands and riparian areas by managing their use wherever possible.
- Complete a comprehensive inventory of natural resources in the reserve.

General Visitor Use

- Give precedence to resource preservation and interpretation over recreational use.
- Provide an integrated visitor experience incorporating, in addition to park resources, historically relevant sites and recreational opportunities in surrounding communities.
- Manage visitor use to ensure that resources are not degraded.
- Prevent vandalism of natural and cultural resources.

Information/Orientation

- Provide adequate information and orientation to allow visitors to plan their visit, tour routes, and use of facilities and services in the reserve and surrounding area.
- Provide the means for visitors to find their way around the reserve.

Interpretation

Trails

- Provide opportunities to walk along the California Trail without damaging archeological evidence and to understand and appreciate the life of the emigrants.
- Provide visitors with a sense of history that allows them to place the California Trail in the context of what happened in this region before and after the major period of westward emigration.
- Interpret the historic landscape at the stage station site reflective of the scene in 1869-82.
- Interpret livestock grazing as a traditional use of the region, beginning with the Shoshone.
- Manage the visitor experiences to ensure that each visitor is exposed to the area's essence of romance, mystery, and awe.
- Help people understand the geological history of the area and the processes that created the City of Rocks.
- Provide opportunities for people to learn about the natural vegetation, with an emphasis on piñon pine, and about the wildlife within the reserve.

Recreation

- Support recreational activities that let visitors experience the reserve's natural, cultural, and scenic resources without impairing significant resource values.
- Manage recreational activities so as to minimize the potential for conflict among different users.
- Provide for an appropriate level of recreational opportunities.

Public Health and Safety

- Ensure that sanitary facilities are adequate.
- Provide emergency services for visitors and staff.
- Provide waste collection points for recreation vehicles outside but near the reserve to minimize the impacts of trash on reserve and adjacent lands.
- Work with local governments to prohibit illegal or inappropriate activities, such as keg parties, illegal drug use, and disturbing the peace.

Cooperative Management

- Fulfill the intents of the area's overlapping designations as a national natural landmark, a national historic landmark, a part of the California National Historic Trail, and a property listed on the National Register of Historic Places, as well as a national reserve.
- Define those areas or zones within the reserve that would most appropriately be devoted to private use subject to appropriate local ordinances designed to protect the historic rural setting.
- Define the geographical area of local influence on the reserve and work cooperatively with others to eliminate or mitigate actions that would otherwise degrade the reserve's resource values.

  Maintain a close working relationship with private landowners to help carry out the purposes of the reserve.

  Support county authorities and others in their efforts to protect resources outside the reserve boundaries.

  Work cooperatively with other federal and state agencies to accomplish the purposes of the reserve.
- Ensure the continued involvement of local residents in the operation of the reserve.
- Strive to help local communities through local contracts, technical assistance, and other cooperative measures.

Development

- Minimize development.
- Create and implement design standards that reflect the size, scale, and character of the historic western rural setting and that are compatible with the natural surroundings.
- Trails Provide access to the full range of the reserve's significant resources, while protecting sites vulnerable to vandalism or too much visitation. Provide accessibility in accordance with the Americans with Disabilities Act.

Land Acquisition

- Provide for the expeditious public acquisition of lands or interest in lands within the reserve from willing sellers to protect natural, cultural, and scenic resources.
- Give prompt and careful consideration to any property owner within the reserve who notifies the secretary of the interior that continued private ownership within the reserve will result in "hardship."

MANAGEMENT AUTHORITIES AND RESPONSIBILITIES

AUTHORITIES PROVIDED BY CURRENT LEGISLATION

The legislation establishing the reserve provides that when the state and Cassia County have enacted ordinances or established regulations which "in the judgment of the Secretary will protect and preserve the historic and natural features of the area in accordance with the comprehensive plan," the secretary of the interior will, pursuant to cooperative agreement—

> (1) transfer management and administration over all or any part of the property . . . to the State or appropriate units of local government
>
> (2) provide technical assistance when requested to such State or units of local government in the management, protection, and interpretation of the reserve; and
>
> (3) make periodic grants, which shall be supplemental to any other funds to which the grantee may be entitled under any other provision of law, to such State or local units of government to carry out the purposes of this title
>
> (4) ensure that the management of the reserve is consistent with legislation and the provisions of the comprehensive management plan

Later legislation (PL 101-512) provides that hunting will be permitted in accordance with applicable laws of the United States and the state of Idaho, except in designated zones where and periods when no hunting may be permitted for reasons of public safety, administration, floral and faunal protection and management, or public use and enjoyment. Except in emergencies, such restrictions will be put into effect only after consultation with the Idaho Fish and Game, which has jurisdiction over hunting activities.

The proposal envisions that the cooperative relationship between the National Park Service and state of Idaho would continue. The transfer of the responsibility for management and administration of City of Rocks National Reserve from the National Park Service to Idaho Department of Parks and Recreation should occur upon—

> (1) the completion of the final comprehensive management plan that would clearly define a management direction and issuance of a record of decision.
>
> (2) the completion of written agreements between all key local, state, and federal entities. The agreements would articulate roles and responsibilities of each entity and allow for the transfer of money, services, and other items.
>
> (3) enactment by Cassia County of those land use ordinances necessary to protect reserve values in accord with the comprehensive management plan (PL 100-696, section 202(c).)

The first step in defining a management direction would be completion of this comprehensive management plan/environmental impact statement and publication of the record of decision. Next, action plans such as cultural and natural resource management plans, a land protection plan, a grazing management plan, a climbing management plan, and an interpretive plan would be written to guide state administration and stewardship of the resource. Standards would also be developed that would be used to evaluate state administration of the reserve.

Specific Plans

While the comprehensive management plan was in progress, Cassia County was developing zoning that would protect the important values and purposes of the reserve. After the comprehensive management plan has been approved, funding would be sought for the design and construction of proposed facilities. The plan envisions funds from state and federal governments that would provide for site planning, design, and development of the reserve.

NPS authority to assist in developing reserve facilities and programs in cooperation with other agencies would come from congressional authorization and appropriation. Interagency cooperative agreements would be the instruments to implement the authority provided by Congress. Each agreement would be subject to review by the Department of the Interior regional solicitor. Public Law 100-696, section 202(c)(3), provides for the secretary of the interior to make periodic grants to state and local governments to further reserve purposes and to implement plan provisions.

All proposed major reserve support facility development outside the authorized reserve boundary, including visitor center/administration, maintenance, employee housing, RV campground, and amphitheater, would be built on federal land managed by the Bureau of Land Management. Chapter 9 of the NPS *Management Policies* provides that, "Where authorized, major facilities may . . . be located outside park boundaries in the vicinity of the park." The authority to commit federal dollars to develop and construct facilities outside the reserve is provided for by 16 USC 17j-2(b): "Appropriations for the National Park Service are authorized for . . . (b) Administration, protection, improvement, and maintenance of areas, under the jurisdiction of other agencies of the Government, devoted to recreational use pursuant to cooperative agreements."

A land protection plan is being prepared along with the comprehensive management plan. It is intended that the land protection plan will be prepared in consultation with area landowners and released in conjunction with the final comprehensive management plan. The land protection plan will articulate levels of protection necessary to protect values and public benefits on all nonfederal lands within the reserve. Acquisition of full or partial interest in lands, along with the enactment of county zoning ordinances, are some of the variety of land protection tools available. Land exchanges may also be used in certain instances. All federally acquired property will remain in federal ownership after transfer of reserve management to the Idaho Department of Parks and Recreation. As restricted by legislation, any full or partial interest in land acquired within the reserve will be only through the consent of the owner (willing seller).

mgmt of The reserve will be transferred to the state before the principal visitor and administrative facilities are cooperatively developed. The facilities would include the new visitor center/administrative complex and parking lot, visitor center media, wayside exhibits, brochures, sign plans, and campground development. A tangible expression of this collaboration might be entry signs that have both the National Park Service arrowhead and the Idaho Department of Parks and Recreation logos as agreed upon by the respective departments. Recognition of the contribution of the Bureau of Land Management, the U.S. Forest Service, and other participating partners will also be provided. Because the reserve has been designated a unit of the national park system, development and the visitor experience must be of the quality expected by the public of an NPS area. Therefore, the state and the National Park Service would need to reach a consensus on a specific agenda for the state to follow. This agenda would be documented through a cooperative agreement between the National Park Service and the Idaho Department of Parks and Recreation required by section 202(c) of PL 100-696.

When management of the area is transferred to the state, the reserve will remain a unit of the national park system. The National Park Service would continue to serve the reserve through the services of park, regional office, Denver Service Center, Harpers Ferry Design Center, and Washington office staffs in areas concerning interpretation, resource management, and site development. The National Park Service would ensure that its responsibilities under the National Historic Preservation Act, National Environmental Policy Act, and other appropriate federal legislation are carried out by the state of Idaho in administration of the area.

As requested, the National Park Service would also provide technical assistance to the Idaho Department of Parks and Recreation, Cassia County, and in some cases, private landowners. National Park Service authority to provide technical assistance to private property owners within the national reserve is based upon the following laws: National System Trails Act of 1968 (California National Historic Trail), Outdoor Recreation Act, and the National Historic Preservation Act. National historic landmark and national natural landmark designation for private lands within and outside the City of Rocks also provides for NPS technical assistance to landowners to help preserve landmark values. Assistance would be available for all areas within the reserve. Outside the reserve, assistance would be limited to areas within national landmarks, areas of special concern identified in the plan, and other areas integral to the tour loop concept and along the Oregon and California trails.

Federal technical assistance would be available for cultural resource preservation, national landmark preservation, natural resource management, scenic resource management, interpretation and education, visitor use management recreation programs and development, site planning and design, and road and trail conservation.. Requests for technical assistance must be made through proper channels and would be funded based on the merits of the proposed project and the funds available for carrying out the program. Further information about applying for

trails

technical assistance might be obtained from reserve management.

Recognizing that parks are integral parts of larger regional environments, the National Park Service will work cooperatively with others to anticipate, avoid, and resolve potential conflicts, to protect park resources, and to address mutual interests in the quality of life for community residents, considering economic development as well as resource and environmental protection.

Title to federal land in the reserve would remain in federal ownership. If it was later determined that the comprehensive management plan was not being implemented or provisions of the establishing legislation were not being adhered to, the secretary of the interior could withdraw management and administration from the state, and the National Park Service would resume management and administration of the reserve except for state-owned section 36 based on establishing legislation. (Please see section 202e in appendix A.)

AUTHORITIES REQUIRING ADDITIONAL LEGISLATION

Additional legislation would be required to authorize the increased spending ceiling for development and operations that would be needed to implement this plan and to authorize the expenditure of federal funds for planning, design, and construction on nonfederal land. Proposed facilities on nonfederal lands include entrance stations on nonfederal land and county roads within the reserve.

MANAGEMENT ZONING

BASIS FOR ZONING

All units of the national park system are required to divide the unit into management zones to provide guidance to park managers concerning resource protection and management, visitor use management, and development. Usually NPS management zoning is developed for all public land in the unit. However, the legislation at City of Rocks calls for the planning team to develop zoning for all the land within the reserve. Although the manage- ment zoning described in the plan on private land reflects the planning team's judgment of which areas are most appropriately devoted to various uses, the National Park Service cannot enforce that management zoning unilaterally on private land. Reserve management must rely on landowners' voluntary compliance with reserve zoning and on county enforcement of county zoning unless the reserve purchases an interest in land on an opportunity (willing seller/willing buyer) basis. Regulation of private land use is the responsibility of local government, in this case, Cassia County. County zoning of private lands in the reserve is discussed in the "Management Authorities and Responsibilities" section of this plan.

Congress directed that the comprehensive management plan for City of Rocks National Reserve should identify those areas or zones that would most appropriately be devoted to

- historic and natural preservation
- public use and development
- private use subject to appropriate local ordinances designed to protect the historic rural setting

The public and private use zones included in this draft plan have been modified slightly from those listed by Congress to reflect that public educational use is an important part of the preservation zone and also that certain private uses can be compatible with preservation and public use. Rather than treating private use as a separate and distinctive zone, it is treated as activities (stock grazing and residential use being the primary possibilities) to be encouraged or discouraged in each zone based on their compatibility with the management intent for that zone.

The development of a management zoning scheme for the reserve was a three-phase process of (1) mapping important resource values, (2) mapping traditional and contemporary uses, both private and public, and (3) identifying the most appropriate uses for each area of the reserve, recognizing that resource preservation, public use, and private use should all be represented in the final scheme.

IDENTIFICATION OF RESOURCE VALUES

The reserve's cultural, natural, and scenic resources were surveyed and evaluated to provide a basis for planning. Two categories of important and exceptional resources were identified: cultural and visual, and natural and visual.

Those cultural and visual resources identified as important are the national historic landmark boundary, historic structures and sites, archeological sites, foreground and middle ground of the views seen from the California Trail, and the historic rural setting. Congress recognized the land within the national historic landmark boundary as an important resource by designating it a historic landmark. Historic structures and sites associated with periods of history other than the California Trail are important because they provide information about other times and about regional and local history. The importance of archeological sites stems from the fact that they hold data about and artifacts from historic and prehistoric periods. Some of this material is of national significance. Consultations with concerned tribes are underway in order to complete the survey of ethnographic resources within the reserve. The foreground and middle ground of the views seen from the California Trail are relatively unchanged from the trail period and are an important part of the cultural landscape that assists visitors to envision and sense the California Trail setting and experience. The legislation for the reserve establishes the importance of the historic rural setting by calling for its protection. ("The plan shall identify those areas or zones within the reserve that would most appropriately be devoted to . . . (3) private use subject to appropriate local ordinances designed to protect the historic rural setting." Public Law 100-696 sec 202 (A)(3)). Surviving resources associated with historic cattle ranching operations in the reserve contribute to a historic rural setting that imparts an increasingly rare ambience and scenic quality reminiscent of the America's West (see Resource Values map).

The exceptional cultural and visual resources are historic structures, sites, and the "viewshed" of the California Trail (trail remnants, inscription rocks, other historic trail-related features, and the foreground and middle ground of the views seen from the trail). These are the nationally significant features that led to the designation of the area as a national historic landmark. The California Trail is the most significant historical theme at City of Rocks.

The trail viewshed has been discussed in terms of its continuity and sequence; however, there are three important views and their viewsheds that warrant special attention. They are important because they are views experienced by travelers trying to find their way along the trail. These landmark views are

- the view south towards Twin Sisters from the California Trail corridor as the ground rises into the basin in front of Twin Sisters

- the view northwest towards Twin Sisters along the Salt Lake Alternate Trail at the stage stop

- the view southwest to Granite Pass, ¼ mile outside the southwest boundary of the reserve

The first view is barren in the foreground, with neither vegetation nor groundform to frame the scene. The viewer is directed to the focal point of the highest two spires, but the spires' dominance is lost in the jumble of crags and peaks along Twin Sisters ridge and the lengthy distance of the scene from the viewer. Yet, the view retains its significance by setting up the trail alignment to Pinnacle Pass, once the lowest point along the ridge.

The second view is the most dramatic view of the Twin Sisters. From this angle, their separate character is apparent. Their individual and distinctive forms and textures can be vividly perceived. Their strength as a dominant focal point is more evident at this closer distance. The absence of competition from the serrated ridge they lie in allows a sharp contrast within this view of rolling sagebrush hills and smooth granite domes.

The third view is expansive and open, without any foreground textures or containment to distract the viewer. The distant mountain pass is a subtle but important focal point that is experienced at the reserve boundary.

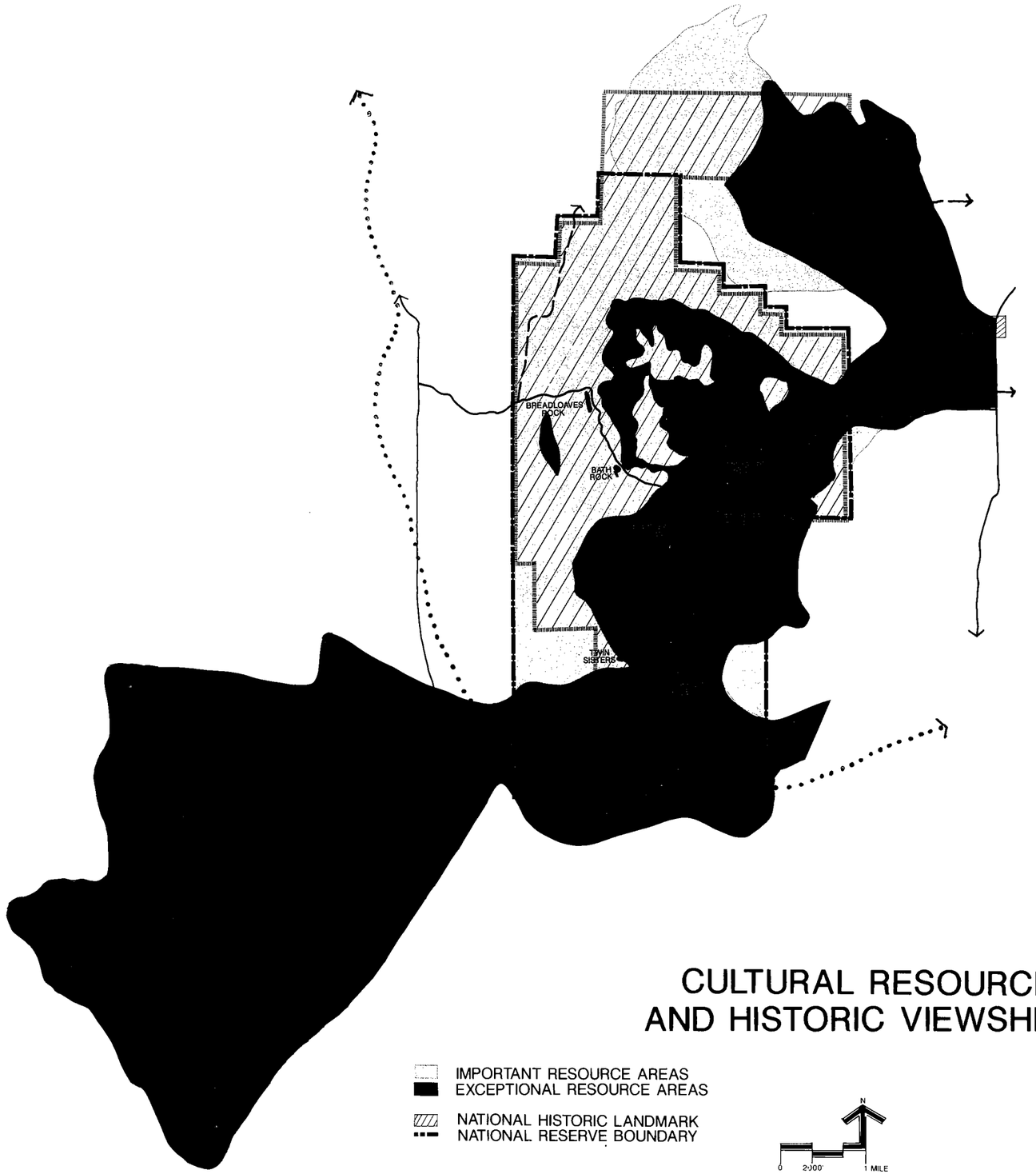
Important and exceptional natural and visual resources were also identified. Those identified as important are the national natural landmark; distinctive geologic features; potential habitat for endangered, threatened, or candidate species under the federal Endangered Species Act; potential habitat for state species of concern and for rare and sensitive plant species; habitat for golden eagles and other birds of prey; wetlands; most scenic views; and most commonly seen views. Congress recognized the area within the national natural landmark boundary as important because of its nationally significant rock formations and the unusual processes that formed them. The high scenic value of the distinctive geologic features has been a distinguishing characteristic of the area from early times as evidenced by the frequent reference to these features in emigrant journals.

Wetlands, another highly important ecosystem, provide necessary food, water, and shelter for many species of animals and plants. They can filter pollutants, increase groundwater recharge, improve water quantity and quality, reduce downstream flooding, and decrease soil erosion.

As part of the establishing legislation to "protect and maintain scenic quality," the most scenic views and the most frequently seen views were judged to be important to achieving this purpose.

Those natural and visual resources identified as exceptional are major rock outcrops and associated enclosures that provide essential nesting and roosting sites for species of special concern and are of the highest scenic value and habitat for several rare and sensitive plants. The rock outcrops are exceptional because they contain multiple important resources. In addition to the geologic value of the rock outcrops themselves, the rocks provide habitat for special species and are important as scenic resources.

The two reduced maps that make up the Resource Values map show the most important resources identified by this study and the extent of those resources within and adjacent to the reserve. Each map is a composite of several overlays, as follows:



CULTURAL RESOURCES AND HISTORIC VIEWSHED

IMPORTANT RESOURCE AREAS
EXCEPTIONAL RESOURCE AREAS

NATIONAL HISTORIC LANDMARK
NATIONAL RESERVE BOUNDARY

RESOURCE VALUES
NATURAL/CULTURAL VISUAL
CITY OF ROCKS NATIONAL RESERVE
United States Department of the Interior
National Park Service
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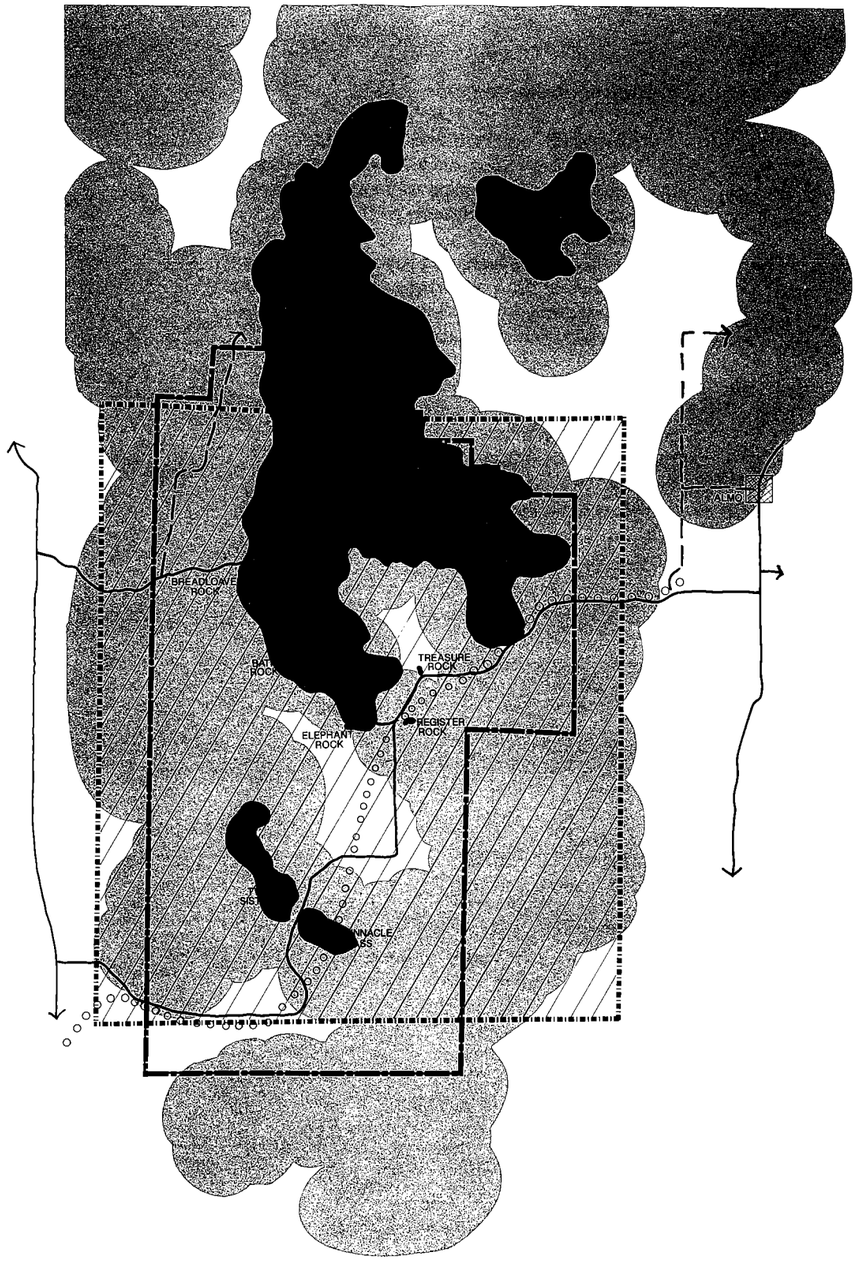
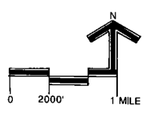


NATURAL/VISUAL RESOURCES

IMPORTANT RESOURCE AREAS
EXCEPTIONAL RESOURCE AREAS

NATIONAL NATURAL LANDMARK
NATIONAL RESERVE BOUNDARY



Cultural/Visual Resources

Overlays of Important Resources

- National historic landmark boundary
- Historic structures and sites
- Archeological sites
- Foreground and middle ground of the views seen from the California Trail
- Historic rural setting and viewshed

Exceptional Resource Areas

- Historic structures, sites, and "viewshed" of the California Trail (trail remnants, inscription rocks, other historic trail-related features, and the foreground and middle ground of views seen from the trail)

Natural/Visual Resources

Overlays of Important Resources

- National natural landmark boundary
- Distinctive geologic features
- Potential habitat of endangered, threatened, or candidate species under the federal Endangered Species Act
- Potential habitat for state species of concern and for rare and sensitive plant species
- Essential habitat for the region's wildlife populations
- Wetlands
- Most-scenic views
- Most-frequently-seen views

Exceptional Resource Areas

- Major rock outcrops and associated enclosures that provide essential nesting, roosting, and denning sites for species of special concern and are of the highest scenic value
- Habitat for hedgehog cactus, narrow-leaved Indian paintbrush, and Krukeberg's swordfern
- Research natural areas

Because the area included inside the reserve boundary is the nucleus of a larger area with both national historic landmark and national natural landmark designations, all the lands inside the reserve have one or more important resource values that also extend beyond the boundary of the reserve.

IDENTIFICATION OF TRADITIONAL AND CONTEMPORARY PUBLIC AND PRIVATE USES

As stated in the "Planning Considerations," the City of Rocks area has traditionally been used for dry farming and ranching, with some highly dispersed residential use associated with early homesteading, farming, and ranching activities. There has been virtually no residential or crop farming activity in City of Rocks for the past several decades. Stock grazing occurs on all private lands and most of the public lands (see Existing Ownership/Grazing and Ranching Activities map). Because stock grazing and associated ranching activities are closely associated with the reserve's historic western rural setting, they are also reflected on the Resource Values map.

The Existing Infrastructure and Recreational Use map provides data on where recreational use is occurring. It is generally concentrated around the rock outcrops, mostly in sections 25, 26, 31, 36, and the Twin Sisters. Group camping occurs west of Breadloaves and north of the road about 1 mile east of the Junction (Moulton) entrance. Six restrooms are located along the east-west road between the Y-intersection and Emery Canyon and one at Twin Sisters. Information kiosks are located near Bath Rock and near the east-west road where it turns southwest into Emery Canyon.

EXISTING OWNERSHIP
GRAZING AND RANCHING USE
CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service

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GRAZING

PRIVATE LAND

PUBLIC LAND (Federal)

PUBLIC LAND (State)

CALIFORNIA TRAIL

NATIONAL RESERVE BOUNDARY

INFRASTRUCTURE

GRAVEL ROAD

RANCH ROAD

LIVESTOCK TRAILING CORRIDOR

TRAIL

NOTE: All federal land within the national reserve boundary is held by the National Park Service. 10 grazing allotments currently exist. See table 11.

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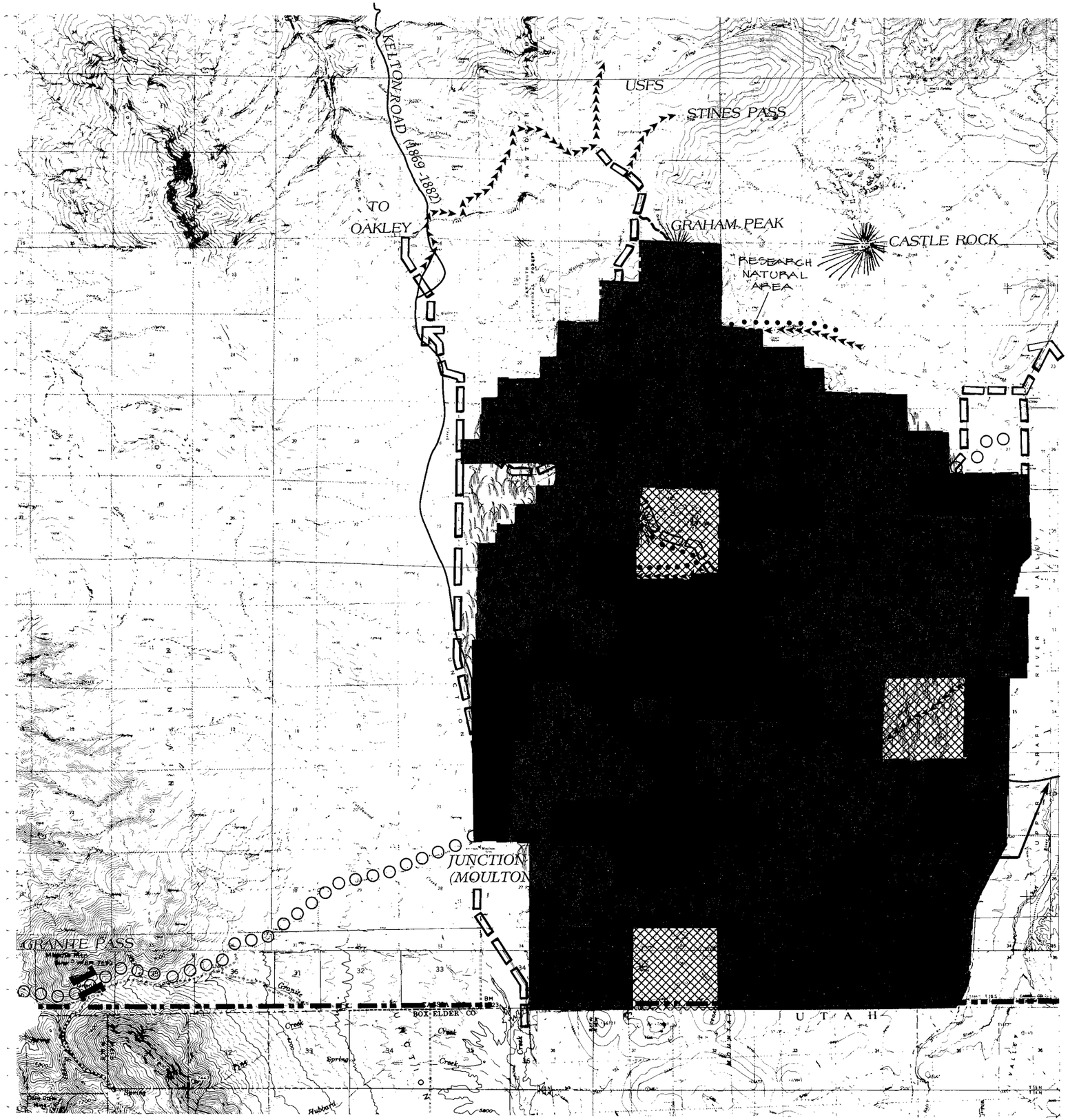
KELTON ROAD (1869-1882)
USFS
STINES PASS
TO
OAKLEY
GRAHAM PEAK
CASTLE ROCK
RESEARCH
NATURAL
AREA
JUNCTION
(MOULTON
GRANITE PASS
BOX ELDER CO
UTAH

EXISTING INFRASTRUCTURE AND PUBLIC USE

CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
Nat onal Park Service
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PRIVATE LAND

PUBLIC LAND (Federal)

PUBLIC LAND (State)

NATIONAL RESERVE BOUNDARY

EXISTING FEATURES

CALIFORNIA TRAIL CORRIDOR

SALT LAKE ALTERNATE TRAIL

BEST PRESERVED WAGON RUT REMNANT

PASSES ON TRAIL

INFRASTRUCTURE

GRAVEL ROAD

RANCH ROAD

TRAIL

CLIMBING

PARKING

CAMPING

PICNICKING

PARK HEADQUARTERS

MAINTENANCE

RESTROOM

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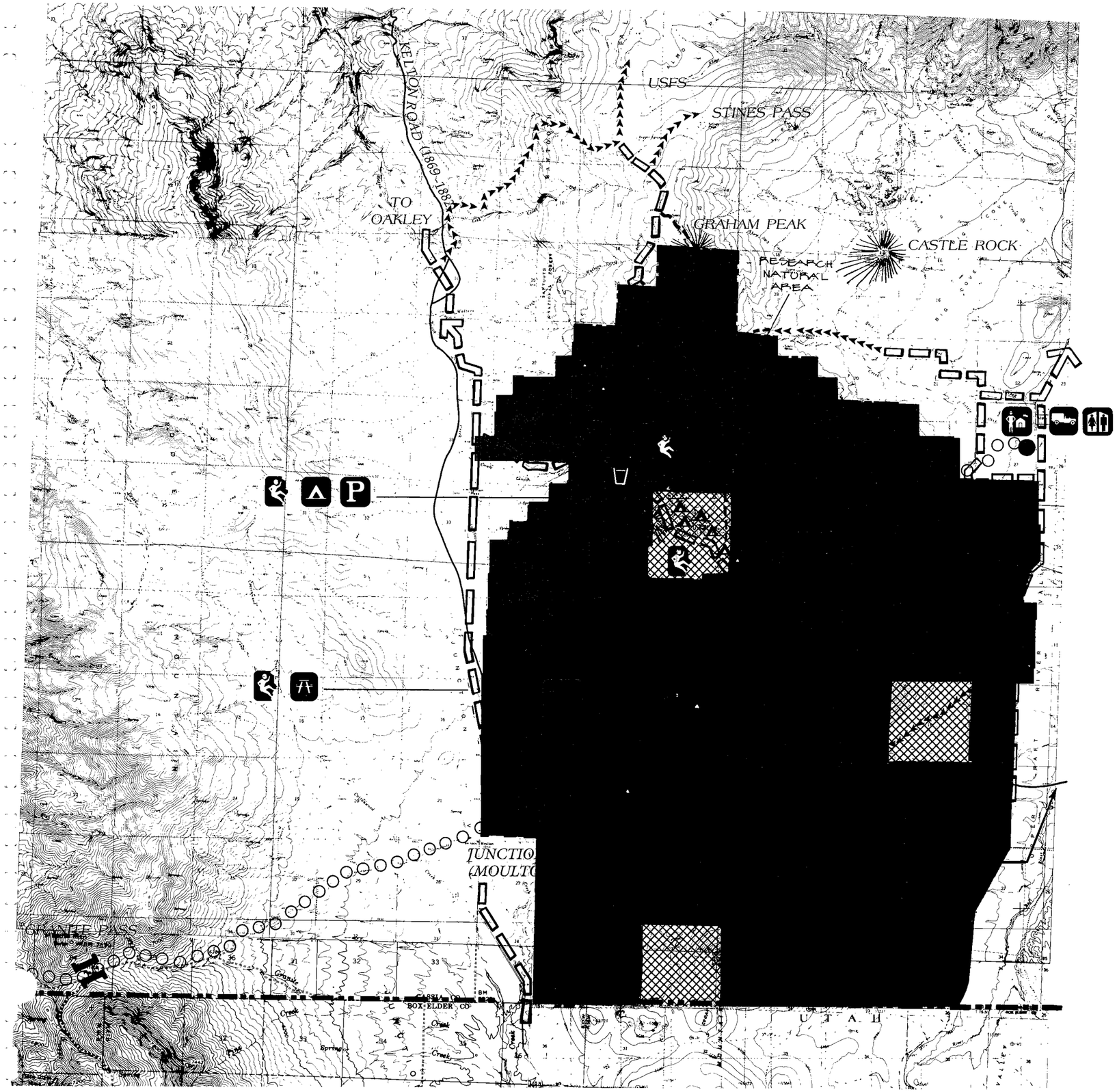

KELTON ROAD (1869-1882)
USFS
STINES PASS
TO OAKLEY
GRAHAM PEAK
CASTLE ROCK
RESEARCH NATURAL AREA
JUNCTIO
(MOULTO
GRANITE PASS
BOX ELDER CO
U T A H

MANAGEMENT ZONES

HISTORIC AND NATURAL PRESRVATION ZONE

This zone would contain lands where the preservation and public appreciation of cultural and natural resource values would be the predominant concern. The zone would include subzones for the California Trail and major rock outcrops—the two exceptional resource values identified for the reserve. (See the Management Zoning map for proposed federal/state zoning of the reserve.)

California Trail Subzone

The management intent for this subzone would be to preserve the major landmarks, trail remnants, and inscription rocks associated with the California Trail and to give visitors the opportunity to walk alongside the entire length of the California Trail and to walk within the Circle Creek encampment area. For the purposes of zoning in this plan the term California Trail includes the Salt Lake Alternate. Minimal modern intrusions would be allowed in the foregrounds of the views from these areas to allow visitors to experience a landscape reminiscent of the trail period. Adhering to these objectives will protect significant cultural values and provide for those activities which do not adversely affect cultural resources. The accompanying viewshed analysis identifies uses that affect the foreground, middle ground, and background views from the California Trail. Based upon this analysis it can be determined if either mitigating measures or restrictions will be needed to ensure the retention of these values.

Most uses within this zone would relate directly to the preservation and interpretation of California Trail-related resources. However, to minimize impacts on traditional private use, livestock grazing would continue to be allowed in some portions of the trail subzone, because this activity has not caused major disturbance to the historic trail corridor. In locations where random trampling or rubbing by cattle would potentially damage significant resources, such as the best trail remnants or rock inscriptions, cattle would be excluded. These exclosures would not only maximize protection of outstanding features but also provide places where the public could experience these highly significant resources without having to compete with grazing cattle. The outstanding features from which cattle would be excluded would be Twin Sisters, Pinnacle Pass, three of the best trail remnants, the inscription rocks, a portion of the Circle Creek encampment area, and wetland and riparian areas on public land. The National Park Service would acquire fee title to these outstanding areas on an opportunity basis so that cattle could be excluded and use could be focused exclusively on interpretive (educational) activities.

For the remainder of the lands within this zone, the National Park Service would acquire, on an opportunity basis, the interests necessary to ensure visitors the opportunity to experience and/or access these areas in their currently undeveloped state. The National Park Service would seek sufficient interest in these lands to complement county zoning and ensure that incompatible commercial or residential development did not occur in the historic viewshed. It was not considered necessary to exclude cattle grazing from the historic trail viewshed. Although herds of grazing beef cattle were not a part of the historic California trail scene, the livestock pulling the emigrants' wagons and their saddle horses and dairy cows were prominent features. Because of this close association, grazing cattle were not considered incompatible with the preservation of the historic trail viewshed.

While the preservation of cultural resources (including their natural resource context) is the primary emphasis of this management zone, appropriate recreation uses directly related to historic resources, including low-impact day use such as walking, informal picnicking without facilities, nature viewing, and photography, are the types of activities that might occur. No overnight camping would be permitted in the zone.

Recreation uses not directly associated with the access or the enjoyment and interpretation of the California Trail would generally be precluded within the foreground viewshed of the California Trail. The foreground viewshed occurs approximately ¼ mile on each side of the California Trail and Salt Lake Alternate prisms and includes Twin Sisters. Precluded activities would be the siting of recreational facilities such as campgrounds and picnic areas and recreational uses such as bicycling, climbing, or scrambling on the Inscription Rocks, Twin Sisters formation, Pinnacle Pass, and other physical features that have cultural significance. Grazing would be excluded from riparian areas and wetlands on public land. Any further restrictions or mitigation measures necessary to address activities within the California Trail subzone, but outside of

Trails

Trails

Trails

* contrast with more intense resource-based day recreation

Trail Plan

the foreground viewshed, will be addressed in activity-specific plans such as the trail plan and climbing management plan.

Natural Area Subzone

The management intent of this subzone would be to preserve the exceptional natural resource values of the reserve and to provide for recreational activities where appropriate. Areas included within the natural area subzone would include most of the crescent-shaped rock outcrops of the Circle Creek basin, the ridgeline and northern slopes of the reserve, the research natural area, and most of the Indian Grove and Graham Peak areas. Use of these areas would focus on natural resource preservation. The National Park Service would seek to acquire the private lands in this subzone on an opportunity basis to protect sensitive habitats and scenic vistas from livestock grazing and development. Three management areas are identified within the natural area subzone.

dep. for trail plan

Research Natural Area. The Research Natural Area preserves outstanding natural features, natural processes, diversity, and ecological values, with a focus on unique geologic formations and the northern limit of the piñon-juniper forest type in North America. Activities within the research natural area would be restricted to nonmanipulative research, education, and other activities that would not detract from the area's research values as set forth in the *Natural Resource Management Guidelines*, NPS-77. Grazing would not occur in this area. An expansion of approximately 100 acres is proposed for addition to the western boundary of the research natural area. This area was part of an earlier proposal submitted by the U.S. Forest Service in 1982.

General Natural Area. The management approach for the general natural area is to protect natural resource values and to provide for a level of public and private use that does not degrade the natural qualities of the area. Grazing would be excluded from riparian areas and wetlands on public land in the General Natural Area. Grazing would be allowed to continue in those areas appropriate for such use, and as articulated in the City of Rocks grazing management plan. Some of the area is considered to have water resources critical to ranching operations. Camping by permit only would be allowed at up to seven sites in the Indian Grove area. Individual campsites would not be designated. Popular sites would be monitored and impacts mitigated. Up to two of the seven might be group sites. Campers would hike in via a trail from Breadloaves. The number of campers would be limited to 50 at one time to protect the backcountry experience. The number of sites might be adjusted based on resource impacts, but the maximum number of people would be 50.

trail

Grazing and recreation would be managed to protect the areas natural resources and the backcountry visitor experience in the general natural area. The area would be subject to more intense natural resource monitoring and management than other areas of use to ensure that sensitive habitats were not degraded.

* intense ≡ type of activity vs. degree of activity

Natural and Recreational Resource Area. The emphasis of this area would be to balance recreational use with the protection of natural resources. Opportunities for more intense resource-based day recreation would be provided in the western arm of the rock crescent (including section 36 and portions of sections 25 and 31), which contains many of the the most popular areas for rockclimbing, hiking, picnicking, and camping. Grazing would not occur on public land in part of this zone as shown in appendix J.

unencumbered recreational use from other conflicting non-recreational land uses (ie. grazing)

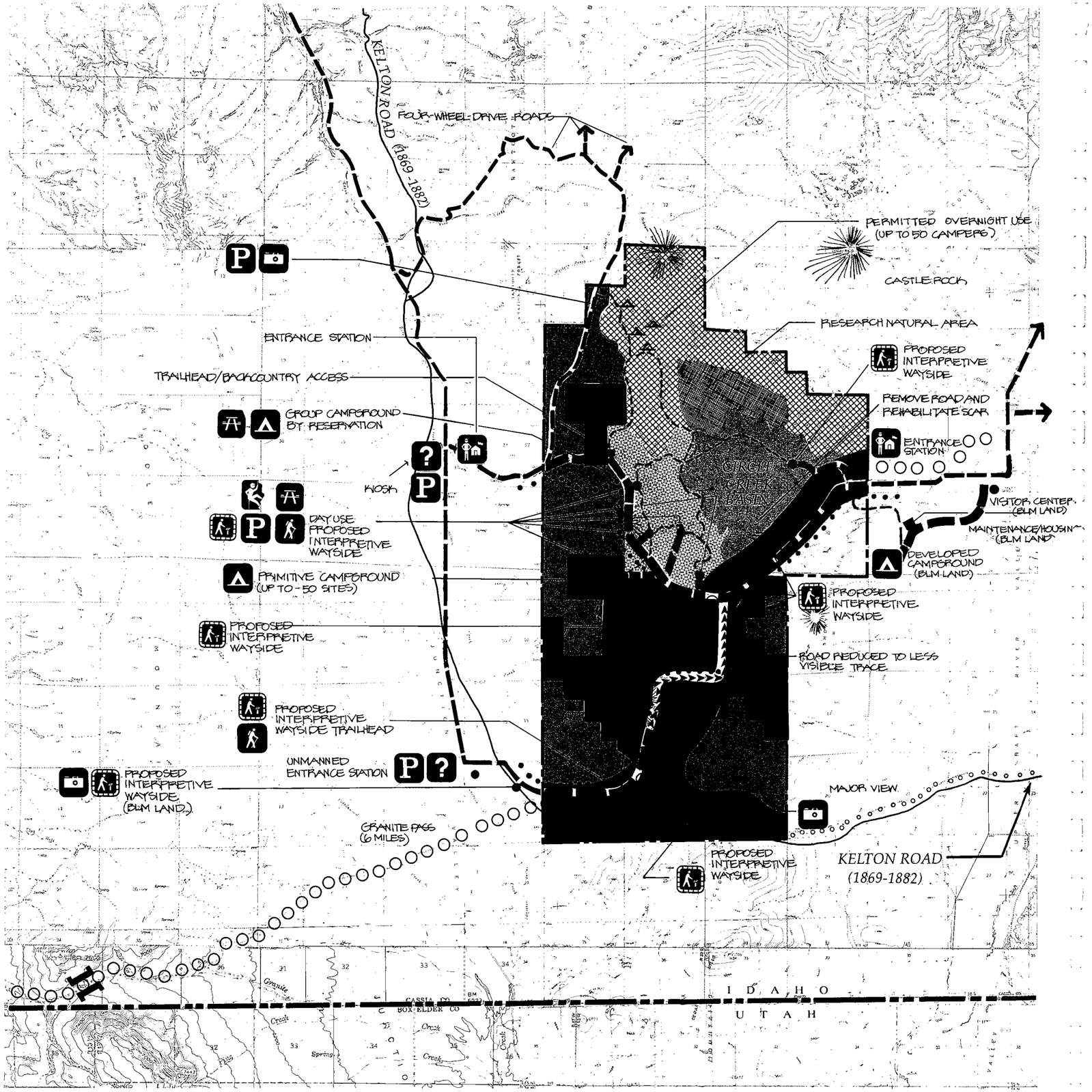
Organic Act prohibits degradation of natural qualities

The National Park Service would acquire fee title to these lands on an opportunity basis so that the public could have unobstructed access and use of these areas.

HISTORIC RURAL SETTING ZONE

Most of the private lands in the reserve, along with some public lands outside the historic and natural preservation zone, would be in this zone. The management intent would be to preserve the historic rural setting and to perpetuate ongoing ranching activities that captured the rural character of the reserve at the time of its establishment. Uses of lands in this zone would include continued ranching use, interpretive activities, and day recreation on the public lands. While preservation of historic resources and the historic rural setting are the primary emphasis of this management zone, appropriate recreation, including day uses such as hiking, informal picnicking (no facilities), photography, nature viewing, and climbing would be permitted. Since much of this zone is in private ownership, the public would be directed to seek the owners permission prior to entering private land. Reserve management would request that if landowners choose to allow recreation in this portion of the historic and natural preservation zone, they would allow the same dispersed, day uses listed for public land in this subzone. Regarding private lands within this zone, enacted Cassia County ordinances and regulations are intended to provide for the

Tracks


KELTON ROAD (1869-1882)
FOUR-WHEEL-DRIVE ROADS
PERMITTED OVERNIGHT USE (UP TO 50 CAMPERS)
CASTLE ROCK
RESEARCH NATURAL AREA
PROPOSED INTERPRETIVE WAYSIDE
REMOVE ROAD AND REHABILITATE SCAR
ENTRANCE STATION
VISITOR CENTER (BLM LAND)
MAINTENANCE/HOUSING (BLM LAND)
DEVELOPED CAMPGROUND (BLM LAND)
PROPOSED INTERPRETIVE WAYSIDE
ROAD REDUCED TO LESS VISIBLE TRACE
ENTRANCE STATION
TRAILHEAD/BACKCOUNTRY ACCESS
GROUP CAMPGROUND BY RESERVATION
KIOSK
DAY USE PROPOSED INTERPRETIVE WAYSIDE
PRIMITIVE CAMPGROUND (UP TO 50 SITES)
PROPOSED INTERPRETIVE WAYSIDE
PROPOSED INTERPRETIVE WAYSIDE TRAILHEAD
UNMANNED ENTRANCE STATION
PROPOSED INTERPRETIVE WAYSIDE (BLM LAND)
MAJOR VIEW
GRANITE PASS (6 MILES)
PROPOSED INTERPRETIVE WAYSIDE
KELTON ROAD (1869-1882)
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MANAGEMENT ZONING
CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service
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HISTORIC AND NATURAL PRESERVATION ZONE

CALIFORNIA TRAIL SUBZONE

- FOREGROUND OF CALIFORNIA TRAIL
- GENERAL USE

NATURAL AREA SUBZONE

- RESEARCH NATURAL AREA
- GENERAL NATURAL AREA
- NATURAL AND RECREATIONAL RESOURCE AREA

HISTORIC RURAL SETTING ZONE

- PRIVATE LAND
- PUBLIC LAND

PUBLIC USE AND DEVELOPMENT ZONE

- GRAVEL ROAD (proposed)
- RANCH ROAD
- MINOR ROAD
- TRAIL

EXISTING FEATURES

- CALIFORNIA TRAIL CORRIDOR
- LIVESTOCK TRAILING CORRIDOR
- SALT LAKE ALTERNATE TRAIL
- BEST PRESERVED WAGON RUT REMNANT
- PASSES ON TRAIL
- NATIONAL RESERVE BOUNDARY

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HISTORIC AND NATURAL PRESERVATION ZONE

California Trail Subzone: Emphasis on preserving outstanding features (major landmarks, trail remnants, inscription rocks, encampment area, California Trail corridor) and interpreting them to the public.

Foreground of California Trail

Emphasis on preserving the California Trail corridor and interpreting it to the public. Recreation uses not directly associated with the access or the enjoyment and interpretation of the California Trail would generally be precluded. Precluded activities would be the siting of recreation facilities such as campgrounds and picnic areas and recreation uses such as bicycling, climbing, or scrambling on the Inscription Rocks, Twin Sisters formation, Pinnacle Pass, and other physical features that have cultural significance. Grazing would be discontinued on areas shown in appendix J.

General Use

Emphasis on preserving outstanding features outside the foreground of the California Trail corridor.

Recreation uses not directly associated with access, enjoyment, and interpretation of the California Trail would generally be precluded. Climbing use would be determined based on the climbing management plan. Grazing would be discontinued on areas shown in appendix J. Grazing use in other parts of this area would be determined by the natural resource management plan and grazing management plan.

Natural Area Subzone: Emphasis on preserving exceptional natural resource values and providing recreational opportunities where appropriate.

Research Natural Area

Emphasis on protecting natural processes and conducting nonmanipulative research. Use by permit only. Grazing would not occur.

General Natural Area

Emphasis on protecting important natural resource values and providing for a level of public and private use that does not degrade the natural qualities of the area. Registration required. Grazing would be discontinued on areas shown in appendix J. Grazing in other areas would be determined by the natural resource management plan and grazing management plan.

Natural and Recreational Resource Area

Emphasis on providing prime resource-based recreational opportunities managed in balance with the protection of natural resources. No grazing.

HISTORIC RURAL SETTING ZONE

Emphasis on preserving the historic rural setting that existed at the time the reserve was established. Climbing and grazing use would be determined by the resource, climbing, and grazing management plans.

PUBLIC USE AND DEVELOPMENT ZONE

Emphasis on providing facilities needed to support visitor use and reserve opportunities.

NOTE: Private land overlaps zoning. Remains in private use under county zoning unless government acquires sufficient interest on an opportunity basis.

protection of the hisotric rural setting. The National Park Service would acquire development rights on an opportunity basis to provide additional protection of the open ranchland character of this zone from incompatible development.

PUBLIC USE AND DEVELOPMENT ZONE

The management intent of this zone would be to provide the facilities needed to support visitor use and reserve operations without degrading the values the reserve was established to preserve. There is very little unseen area within this public reserve. What is seen must be treated with a standard that retains the spacious western character that is so much a part of the history of this region. The only land inside the reserve boundary that could be developed without intruding on scenic vistas seen from the historic trails, the tour road corridor, visitor use areas, or backcountry sites is confined to hidden slopes of the Trail Creek and Graham Creek drainages. Because new development would significantly degrade the visual resource values for which the reserve was set aside, it was determined that most visitor facilities (especially the visitor center and developed campground) and all administrative, housing, and maintenance functions should be placed outside the reserve and on land already in public ownership. Only those modest facilities essential to visitor enjoyment of resources, such as access roads, parking pulloffs, trails, picnic sites, primitive campsites, and toilet facilities, would be included in the reserve. Appropriate recreation would be driving for pleasure, snowmobiling, bicycling, picnicking at designated sites, camping in designated sites, and visiting sites developed for visitor education. Educational sites would include the amphitheater, interpretive waysides, information kiosks, and visitor center.

The National Park Service would acquire fee title to lands needed for development in the reserve on an opportunity basis. Outside the reserve the Idaho Department of Parks and Recreation is working cooperatively with the Bureau of Land Management to secure land for the visitor center, amphitheater, developed campground, maintenance area, and employee housing.

LAND PROTECTION INSIDE THE RESERVE BOUNDARY

County zoning is central to the achievement of the purposes of the reserve because it would preserve and protect pre-1988 ranching character of the large amount of private land inside the boundary. (Public Law 100-696, included in appendix A, calls for local governments to "protect and preserve the historic and natural features of the area . . .") Cassia County has proposed zoning to retain traditional grazing uses, but it would preclude commercial and industrial development within the reserve. County zoning limits residential development in the reserve to one residence per owner at the time the enabling legislation was enacted. With the cooperation of area landowners and reserve managers, the county has established a historic preservation zone for all nonfederal land within the reserve. (See appendix G for pertinent sections of the ordinance.) The county would develop design guidelines to minimize the effects of residential development on the historic rural setting. The guidelines would provide area residents with recommendations concerning the materials, textures, scale, orientation, and circulation that would be in keeping with the historic development patterns. As requested, the National Park Service would provide technical assistance to the county to develop these guidelines, which would be similar to the design standards adopted for all public facilities inside the reserve (see appendix D for site design considerations).

In addition to the protection afforded by county zoning standards, the National Park Service would seek to acquire that interest in land on an opportunity (willing seller/willing buyer) basis necessary to protect cultural, natural, and recreational values as described in the "Management Zones" section. The type and method of protection necessary to ensure the retention of the traditional ranching scene (e.g., scenic easements) will be described in the City of Rocks land protection plan. This additional protection would ensure continued traditional grazing use of private lands within the reserve while limiting the construction of residences and other development.

It is recommended that this comprehensive management plan be adopted by the Cassia County Board of Commissioners as the county's comprehensive land use plan for the area of the county within City of Rocks National Reserve.

AREAS OF SPECIAL CONCERN OUTSIDE THE RESERVE

Because of the importance of landmarks and vistas to visitors' understanding and appreciation of the California Trail, the protection of historic views extending beyond the reserve boundary would be highly encouraged. Areas of special concern for their historic landscape values would include

- the foreground of the views along the entrance road from Almo, which is also near the route of the historic trail and from which the rock outcrops are first sighted
- the view from the trail looking east toward Smoky Mountain
- the views to the south and east from Pinnacle Pass
- the foreground of the views from the segment of the trail west of the reserve boundary leading to Granite Pass, which was the next guiding landmark beyond Pinnacle Pass and a major milestone on the journey to California

Other areas would be of special concern because of their importance to visitors' first impressions of the reserve. They would include the foregrounds of the views along the Almo, Oakley, and Moulton entrance roads (see Areas of Special Concern map).

The National Park Service, the Idaho Department of Parks and Recreation, and Cassia County would offer to work in partnership with landowners in these areas, including the Bureau of Land Management and the U.S. Forest Service, to encourage voluntary and complementary stewardship of these lands so that they remain in harmony with the region's historic rural character. The top of Granite Pass and most of the trail corridor in between Circle Creek and Granite Pass is privately owned ranchland. As possible, and with the full consent of area landowners, periodic commemorative trail rides would be highly encouraged. Steps would be taken to make these commemorative drives as historically authentic as possible. This interpretive event would provide visitors with a historical retracing of the steps of early American settlers as they went on one-day journeys from camp to camp.

Portions of the California Trail prism and associated foreground viewshed, between the reserve boundary and Granite Pass, should be considered for potential addition to the designated national historic landmark. Landowner permission is required for any additions. While such designation would recognize its historic value, no additional restrictions would be placed on private property use with such a designation.

AREAS OF SPECIAL CONCERN OUTSIDE THE RESERVE BOUNDARY

CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service
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EXISTING DESIGNATIONS

NATIONAL RESERVE BOUNDARY

NATURAL LANDMARK BOUNDARY

NATIONAL HISTORIC LANDMARK BOUNDARY

LANDOWNERSHIP

PRIVATE

PUBLIC

INFRASTRUCTURE

GRAVEL ROAD

RESOURCE VALUES

FOREGROUND OF CALIFORNIA TRAIL

APPROACH ROUTE TO RESERVE

HABITAT FOR SPECIAL SPECIES

POTENTIAL ADDITION TO NATIONAL HISTORIC LANDMARK

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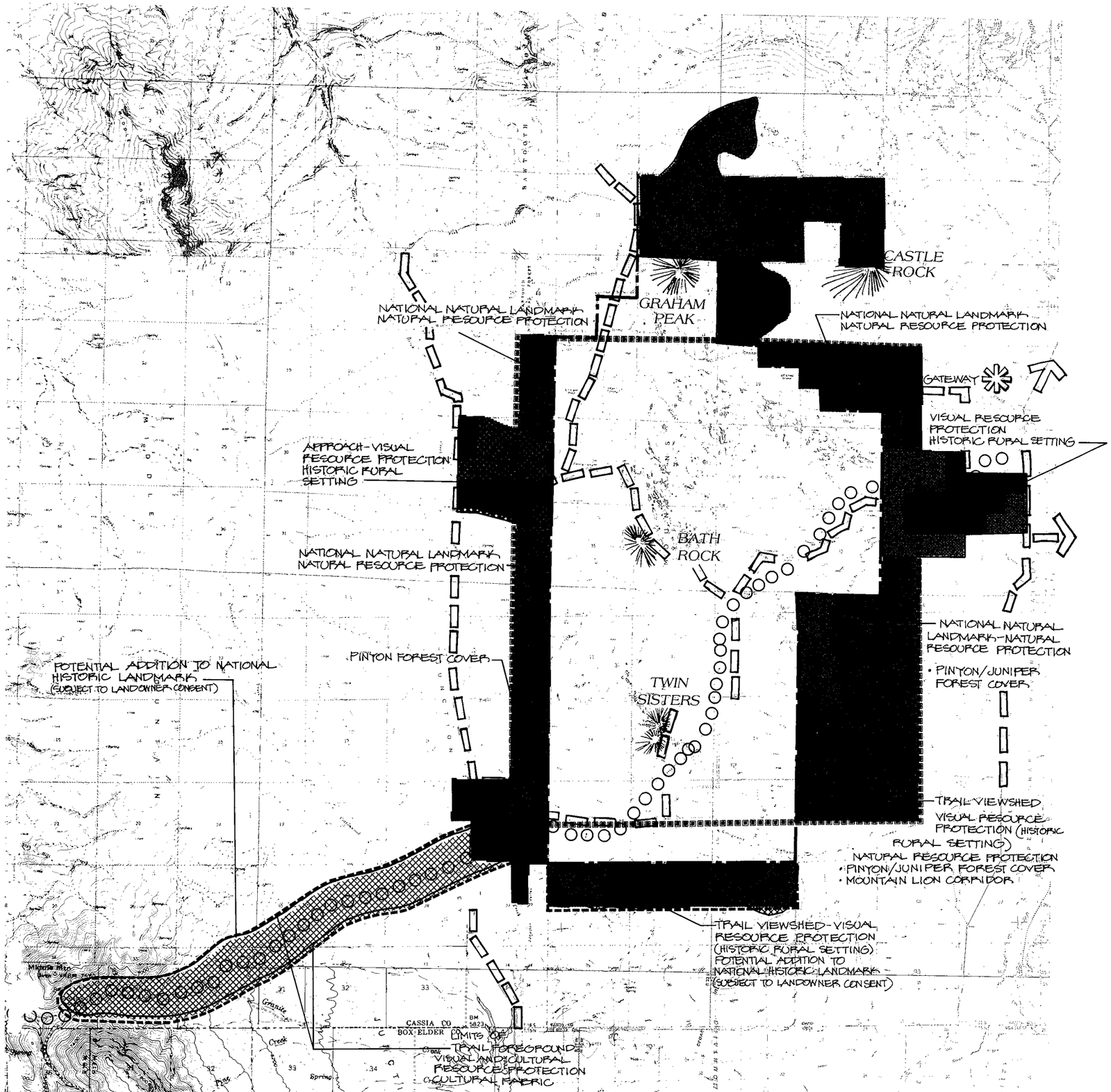

CASTLE ROCK
GRAHAM PEAK
NATIONAL NATURAL LANDMARK NATURAL RESOURCE PROTECTION
NATIONAL NATURAL LANDMARK NATURAL RESOURCE PROTECTION
GATEWAY
VISUAL RESOURCE PROTECTION HISTORIC RURAL SETTING
APPROACH-VISUAL RESOURCE PROTECTION HISTORIC RURAL SETTING
BATH ROCK
NATIONAL NATURAL LANDMARK NATURAL RESOURCE PROTECTION
NATIONAL NATURAL LANDMARK-NATURAL RESOURCE PROTECTION
• PINYON/JUNIPER FOREST COVER
PINYON FOREST COVER
POTENTIAL ADDITION TO NATIONAL HISTORIC LANDMARK (SUBJECT TO LANDOWNER CONSENT)
TWIN SISTERS
TRAIL VIEWSHED VISUAL RESOURCE PROTECTION (HISTORIC RURAL SETTING)
NATURAL RESOURCE PROTECTION
• PINYON/JUNIPER FOREST COVER
• MOUNTAIN LION CORRIDOR
TRAIL VIEWSHED-VISUAL RESOURCE PROTECTION (HISTORIC RURAL SETTING) POTENTIAL ADDITION TO NATIONAL HISTORIC LANDMARK (SUBJECT TO LANDOWNER CONSENT)
CASSIA CO
BOX ELDER
LIMITS OF
TRAIL FOREGROUND VISUAL AND CULTURAL RESOURCE PROTECTION CULTURAL FABRIC

RESOURCE MANAGEMENT

CULTURAL RESOURCES

Under the proposed plan the principal cultural resources in the national reserve would be given increased protection, preservation treatment, and interpretation as directed by a cultural resource management plan, subject to consultation with the Idaho state historic preservation officer and the Advisory Council on Historic Preservation. The scope of the proposed plan would encompass the entire historic continuum of the City of Rocks area, focusing on the principal aspects of the reserve's history from prehistoric times to ranching practice present at the time the reserve was established.

Actions called for on private land would require either the permission of the owner or a willing seller acquisition of that interest necessary to provide for the intended public use.

California Trail/ Salt Lake Alternate

The outstanding trail features would be enclosed to increase protection for the resources and to enhance interpretive opportunities in a livestock-free environment. Two principal areas would be enclosed to protect and interpret the outstanding features associated with the California Trail: (1) the inscription rocks (including the 13 inscription rocks), one of the preserved intact trail ruts and remnants, and a portion of the encampment area in the vicinity of Circle Creek; and (2) the Twin Sisters/ Pinnacle Pass, including the vicinity of the Twin Sisters landmark, several preserved intact trail ruts and remnants, and a wagon-related cable cut at Pinnacle Pass. Because of the emphasis on preserving these outstanding features and interpreting them to the public, the National Park Service would acquire fee title to these areas on a willing seller/willing buyer basis. Visitor activities would be limited to educational and interpretive uses in this area.

Trails

Visitors would be encouraged to peruse the enclosed cultural areas and would be permitted to walk past the preserved intact trail ruts and remnants. The rock inscriptions would be given appropriate preservation treatment to prevent further deterioration and would be protected by fencing and associated wayside exhibits to keep the visitors from touching them. Wayside exhibits would illustrate the historic appearance of key resources and interpret their cultural significance.

Outside the enclosures, a half-mile-wide corridor running the entire length of the California Trail and Salt Lake Alternate, a portion of the Circle Creek encampment area, and part of the rim area overlooking the Silent City would be managed to protect the views and to support public access and interpretation in conjunction with other public recreational use and private livestock grazing. The National Park Service would acquire the interest necessary to provide for visitor access and scenic protection within a corridor approximately 1/4-mile wide on each side of the two trails to protect the foreground views of the trails' viewsheds. The only nonhistoric intrusions allowed in these areas would be occasional fencelines, grazing livestock, and day recreation on public lands (no camping). South of the Y in the road and north and east of the inscription rocks would be reduced to a less-visible trace, primarily for ranching use, and the road crossing the Circle Creek basin would be down-sized to a trail and the remainder of the road scar rehabilitated.

Historic Rural Setting

The historic rural setting is the spacious, open expanse and the cultural artifacts resulting from the cumulative land uses beginning with the trail era and through the establishment of the reserve in 1988.

The years intervening between the 1860s, when the trail era ended, and 1988, when the reserve was established, witnessed a progression of homesteading, dryland farming, and ranching activities in City of Rocks, and the development of the community of Almo, 2 miles to the east of the area. During these years, crop production and livestock ranching were alternately pursued and abandoned, following the boom-and-bust cycles of commodity prices and changing weather patterns. Even at the height of homesteading during the World War I period, residential use was limited to scattered structures. As ranching became more and more predominant, these structures were gradually abandoned and fell into ruin.

At the time the reserve was established in 1988 the landscape was a wide-open expanse of rangeland interrupted only by necessary fencelines and dirt roads marking pastures and property lines. Minimal structures, such as fencing and water tanks needed to support range cattle operations, were present. Grazing livestock and occasional trailing, branding, and fence-building activities made it a dynamic expression of traditional ranching operations. This

historic rural setting had an increasingly rare and highly scenic quality that Congress recognized as a significant cultural value of the reserve.

This setting should be preserved to the extent possible by protecting the contributing elements and minimizing incompatible intrusions. Structures should be limited to those that support range ranching operations, such as unloading chutes, corrals, wells, and stock tanks. Barns and outbuildings associated with residential uses would not be consistent with the isolated, rustic character of the scene, nor would any residential, commercial, or park development. Interpretive waysides and primitive trails would be acceptable development in this area. Roads should remain unpaved but improved sufficiently to ensure safe use and maintenance.

Trails

The few remaining ruins of historic structures are a contributing part of the historic rural scene and help represent the historic continuum of the reserve's history. Selected historic resources would be enclosed to exclude cattle, increase protection, and enhance interpretive opportunities. The intent would be to preserve representative elements of all the post-trail-period themes in the historic continuum of the reserve's history. These sites would be interpreted via wayside exhibits that would illustrate their historic appearance and interpret their cultural significance.

The extant stone walls of the Nicholson house would be included in the area set aside for the inscription rocks/Circle Creek encampment cultural area. Measures would be taken to ensure visitor safety at the site by removing nonhistoric debris and providing appropriate design to keep visitors away from the potentially hazardous walls. The house site would be interpreted via a wayside exhibit, and the structure's stone walls would be given minimal stabilization.

The stage station site would be enclosed and interpreted via a wayside exhibit. The structures at the site would be given minimal stabilization, and measures would be taken to ensure visitor safety by removing nonhistoric debris and removing hazardous structural elements.

Small enclosures would be constructed around several other historic sites in the reserve, including the remnant foundations and associated features of an early homestead site near Trail Creek, the log cabin near the Nicholson house, and a corral site where ranching activities still occur. These sites would be given minimal preservation treatment and would be interpreted via wayside exhibits. Measures would be taken to ensure visitor safety at these sites.

Cattle grazing and trailing would also be a component of the historic rural setting and its associated interpretive story and would be encouraged to continue in appropriate zones with management to protect resource values. Livestock grazing is discussed in greater detail in the natural resource section of this plan.

Archeological Sites

Archeological surveys and testing have been carried out at the reserve over the past four years to assess the nature and extent of the reserve's archeological resources. Among the types of prehistoric sites that have been recorded in the reserve are rockshelters, hunting blinds, bedrock trays, and open sites featuring litchic scatters, metates, hopper mortar bases, and other artifacts. Since only portions of the reserve have been surveyed to date, there is a high probability that significant numbers of undiscovered prehistoric archeological sites exist at City of Rocks.

Funding would be sought for further archeological studies, and a comprehensive reserve-wide inventory of archeological resources would be completed to evaluate their contextual significance and interpretive value. Based on the inventory and survey of archeological resources, a site may be designated based on consultation with the regional archeologist and the Idaho state historic preservation officer for protection and interpretation. Until this database was developed, cultural resources would be evaluated for their significance and possible nomination to the National Register of Historic Places under criterion D (likely to yield information important to prehistory). This evaluation would be carried out in consultation with the Idaho state historic preservation officer. In addition, areas to be affected by ground disturbance and development would be surveyed and archeological clearance obtained before initiation of such projects. This would include archeological testing to determine the nature and extent of the archeological resources to be affected. After testing, every effort would be made to avoid adverse impacts on resources. If adverse impacts could not be avoided, a plan for mitigation of those impacts would be developed in consultation with the state historic preservation officer. Mitigation would normally involve data retrieval through controlled surface collection of artifacts, excavation of buried remains, mapping of features, and production of a report.

Museum Collection

Collections from the archeological investigations, as well as limited natural specimen collections, have been formed but documentation and planning for the management of these collections is still in its earliest stages. A Scope of Collections statement, cataloging funds, and a trained employee capable of managing the collection to NPS standards are all high-priority needs.

Additional Planning Requirements

The principal historical study relating to the historic sites in the reserve is "City of Rocks Historical Report," an overview-type document prepared by Merle Wells in 1989. This historical overview, outlining the basic themes and historical periods associated with the reserve, would serve as the basis for completing a scope of work for a historic resource study of the reserve. The historic resource study is needed to provide a documented historical narrative of the City of Rocks area and additional data on the historic sites in the reserve within the context of their cultural milieu. The study, using primary and secondary sources, would identify and evaluate the historic events that occurred in and around City of Rocks and locate and identify the historic sites, scenes, structures, and objects associated with them, including their historic functions. Topics to be addressed in the study should include

- Native American inhabitants during the post-Euro-American contact period
- exploration and fur trapping
- overland trails to California and Oregon
- regional freight, stage, and express traffic
- ranching and cattle grazing operations
- homesteading and white settlement
- mining
- dryland farming
- U.S. Forest Service, Bureau of Land Management, and state of Idaho management of area
- tourist recreation

Funding for the study was received in fiscal year 1994 and bids accepted.

An annotated bibliography of the late 19th- to early 20th century settlement era would assist the research for the historic resource study.

An initial assessment of cultural landscape resources within the reserve was completed by the Pacific Northwest Regional office in 1992, complementing the visual resource analysis completed by the Denver Service Center planning team. Comprehensive research and in-depth documentation of cultural landscapes began in 1994.

The ongoing historic landscape study will identify and evaluate the historic rural setting of the City of Rocks area, which was identified as a significant resource worthy of preservation in the reserve's establishing legislation. This study will determine appropriate management options for the historic landscape.

Existing knowledge of the ethnography and ethnographic resources in the reserve is largely limited to an overview-type study prepared by David H. Chance in 1989. The study is entitled, "The Tubaduka and the Kamuduka Shoshone of the City of Rocks and Surrounding Country." A documented ethnographic overview and comprehensive reservewide inventory, including an assessment of ethnographic resources, is needed to evaluate their significance and interpretive value.

Consultation with interested American Indian groups has begun under the direction of the regional anthropologist, who has met with representatives of the Fort Hall Shoshone-Bannock Tribes. In addition to establishing a long-term consulting relationship with these tribes, which may have interests in several NPS sites, information is being sought regarding sites of special significance and interest to the tribes within City of Rocks, for which protection and management strategies will have to be developed. It is anticipated that this will be an ongoing relationship that will continue through completion of the planning process and establishment of a management direction for the reserve and its resources.

Archeological surveys and testing have been carried out at the reserve over the past four years to assess the nature and extent of the reserve's archeological resources. The results of this effort have been provided to the state historic preservation officer and will be used to develop a long-term strategy for archeological investigations at the reserve as defined in a programmatic agreement covering NPS responsibilities under sections 106 and 110 of the National Historic Preservation Act.

A research design for the reserve will be developed to address both prehistoric and historic archeological sites and to provide a plan for future survey work. A comprehensive reserve-wide survey, inventory, and assessment of archeological resources will evaluate their contextual significance and interpretive value.

Collections from the archeological investigations, as well as limited natural specimen collections, have been formed, but documentation and planning for the management of these collections is still in its earliest stages. A Scope of Collections statement, cataloging funds, and a trained employee capable of managing the collection to NPS standards are all high-priority needs.

The Idaho state historic preservation officer will be asked to comment on these ongoing studies because City of Rocks is a new entity with a small existing database that will increase substantially.

A cultural resource management plan is being prepared. It includes ongoing identification and evaluation components and provides for a computerized data management system that enables relevant variables to be weighed in the management planning and decision-making processes. The plan establishes program goals and mechanisms for coordinating these with other resource management goals. A schedule for program development and accomplishments provides the basis for justifying personnel and funding needs of the cultural resource management program. Recommended reserve staffing includes a historic preservation specialist on call from neighboring park units or stationed at the reserve at least during the initial planning stages to ensure adequate development and implementation of the program.

NATURAL RESOURCES

Reserve managers would strive to maintain the highest degree of integrity of the air, geological resources, water, biological resources, and visual/scenic resources by establishing a resource baseline to determine the present condition of these resources, monitoring changes in resource conditions, and identifying and, if possible, mitigating the sources of changes. Scientific research in the reserve would be encouraged to increase knowledge about the processes, objects, and organisms present. Reserve managers would continue to cooperate with the Bureau of Land Management, the U.S. Forest Service, state and local governments, and landowners for compatible management on adjacent lands to ensure continued preservation of the reserve's natural resources and significant related resources on lands adjacent to the reserve. In addition, reserve managers would seek technical assistance from the U.S. Fish and Wildlife Service in restoring wetlands and riparian areas and in completing a comprehensive inventory of natural resources within the reserve, especially for rare and sensitive species.

A resource management plan would be developed that would provide ways to resolve deficiencies in knowledge and recommend actions to solve resource management problems. Important components of the natural resource portion are described below.

Air Quality

City of Rocks National Reserve is a class II clean air area for air quality as designated under provisions of the Clean Air Act. The maximum increments beyond baseline concentrations of air pollutants allowable for class II areas would allow modest industrial growth in the vicinity of the reserve. Because City of Rocks was established to preserve and interpret significant cultural resources and to protect and maintain the scenery—all of which are air-quality-related values—and because air pollution, even at concentration levels below national ambient standards, can harm cultural resources, degrade visual quality, and diminish visitors' enjoyment, reserve managers would work with the state of Idaho to seek redesignation of City of Rocks as a class I area. With class I designation, the reserve and all its air-quality-related values—visibility, plants, animals, water quality, and cultural and other resources—would be given additional protection from air pollution impacts from major new emitting sources.

Reserve managers would actively cooperate in all regional efforts to maintain air quality and remedy any existing air pollution effects. An air monitoring program would be developed for the reserve.

Geological Resources

City of Rocks was designated a national natural landmark in recognition of the nationally significant geological and scenic values of its rock formations. One of the objectives of the landmark program is to encourage protection of the site, and any management actions must avoid damage to site integrity. Although most of the formations appear to be competent granite, geological research for the area suggests that some rock formations in the reserve are in a fragile condition because of natural geological and weathering processes (Cunningham 1971). To ensure protection of these nationally significant rock formations a monitoring and inventory sampling program would be developed. The inventory process would concentrate on locating fragile rock formations and on identifying impacts to all rock surfaces from visitor activities, particularly the use of climbing equipment. The monitoring process would determine if impacts over time are significantly altering the natural state of the rock surfaces or accelerating erosion processes.

Depending on the fragility of the rock resources or the significance of impacts, it might be necessary to restrict recreational use to prevent impacts.

In addition, all public lands disturbed by past mineral development would be inventoried for hazards. Any identified threats to the environment or to the safety and health of visitors would be mitigated. Recreational collection or removal of minerals, such as rockhounding, would be prohibited on all public lands to protect both the resources and the visitors.

Water Resources, Water Rights, Wetlands, and Floodplains

Baseline water quality and quantity data would be collected from all streams and springs in the reserve. Measurements would include biotic and abiotic elements relating to water quality and quantity. The baseline data would be used to monitor streams and springs for possible future disturbances and to locate and mitigate present and future impacts in reserve watersheds, including those caused by grazing.

To the degree feasible, the actions proposed in the plan would be accomplished using water rights currently held by the United States and the state of Idaho. If additional water was needed to fulfill the purposes of the reserve, rights would be obtained according to state law.

A wetland inventory, monitoring, and protection program will be developed. The program will include a detailed onsite evaluation of all wetlands in the reserve. The study will determine the location, condition, threats to, and ecological function of all wetlands. The data will be used to monitor and mitigate impacts, including those caused by grazing. Strategies to restore damaged wetlands will be developed to reestablish their natural ecological functions. Methods such as limiting livestock access and structural improvements to abate soil erosion may be required to improve wetland conditions in some areas.

The proposed roads, trails, campground, and facilities would be placed outside wetlands and floodplains unless there is no practicable alternative.

Vegetation and Soils

One of the reserve's most notable qualities is its large degree of biological diversity concentrated in a relatively small area. The great variety of textures, colors, and shapes in the natural landscape contributes considerably to the reserve's scenic quality. Intense grazing, dryland farming, and other events associated with the settlement of the area have reduced the diversity of the natural landscape by causing successional shifts in plant communities toward a dominance of woody perennial and alien annual herbs in many areas of the reserve. In recent years an increase in vegetative disturbance in the reserve has been attributed to an increase in recreational activities. The overuse of the land in some areas of the reserve has caused the loss of both vegetative cover and soil.

Various methods would be developed involving fire and vegetation management to protect the natural diversity of the native plant communities to the extent possible. Vegetation and soils would be intensively managed to control and repair damage caused by recreational use. For example, heavily used areas might be rested and revegetated, and runoff would be controlled to reduce erosion. Vegetation might be managed to enhance views from scenic overlooks. Wetlands would be protected from vegetation trampling, soil compaction and erosion, and pollution. Damaged riparian areas would be restored. For areas where grazing would be allowed, a grazing management plan directed at protecting the natural diversity of native biological communities would be developed and implemented.

A coordinated wildland fire management plan would be prepared for the reserve, consistent with NPS policies and guidelines. This plan would include provisions for prescribed natural fire and prescribed burning. Through interagency agreements, the managing agency could provide support to the Forest Service and Bureau of Land Management by participating in all firefighting activities in the region. In addition, other agencies might provide resources as needed to control wildfires in the reserve.

Nonnative Plant Species

Many introduced plant species exist within the reserve. Some are a potential threat to resources; for example, halogeton is toxic to livestock and wildlife. Nonnative plant species would be eradicated or controlled only if they threatened to spread or compete with reserve resources and if control was feasible. Care would be taken to ensure that programs to manage nonnative species did not significantly damage native species.

Wildlife Management

Reserve managers would continue to consult with the Idaho Department of Fish and Game in managing wildlife and hunting in the reserve. A wildlife management and hunting program for the reserve would be developed in accordance with NPS and Idaho Department of Parks and Recreation policies and guidelines. Hunting would only be allowed in the reserve if it did not compromise

public safety or more significant purposes of the reserve such as visitor enjoyment, protection of historic features, and protection of natural resources, including other species. Hunting would be allowed only during established deer or upland game bird seasons. Hunting would be limited to big game, and upland game birds and would be prohibited in the greater Circle Creek basin. All other indiscriminate hunting, shooting, and discharge of fire arms would be prohibited. Trapping would continue to be prohibited.

Many rocks in the reserve provide essential habitat to some species that are sensitive to human activity. The rocky cliffs provide important nesting habitat for various species of raptors, including the ferruginous hawk, a candidate threatened or endangered species. The cracks, crevices, and caves may be important roosting habitat for as many as six species of bats, including Townsend's big-eared bat, also a candidate species. To ensure protection of sensitive cliff-dwelling species their habitat would be inventoried and important habitat monitored seasonally. Efforts would be directed primarily at protecting ferruginous hawks, golden eagles, red-tailed hawks, prairie falcons, and Townsend's big-eared bat. The management direction for specific species would be as follows:

Early season surveys would be conducted during raptor courtship and nest selection to find the outcrops occupied by breeding raptors. Any outcrops with occupied nests would be closed to climbing for the duration of the breeding season for sensitive species. Outcrops within 300 meters and in sight of golden eagle and ferruginous hawk nest sites also would be closed because they are particularly sensitive to disturbance during their courtship and nesting cycle.

Any caves or large crevices occupied by Townsend's big-eared bats would be closed to all visitors.

Rare/Threatened/ Endangered/ Sensitive Species

There are no federally listed threatened or endangered species in the reserve. However, ferruginous hawks and Townsend's big-eared bats, category 2 (candidate) species, do occur in the reserve. Ferruginous hawks and Townsend's big-eared bats and their important critical habitats would be strictly protected. The state has identified additional rare or sensitive plant and animal species that might occur in the reserve, but information is limited for these species and their important habitat in the reserve (see appendixes B and C).

The reserve would be proactive in protecting habitat for all threatened, endangered, or candidate species identified in or near the reserve. Reserve managers would cooperate with the Bureau of Land Management, U.S. Forest Service, U.S. Fish and Wildlife Service, Idaho Department of Fish and Game, and other agencies to protect and reestablish federally listed species in the region. The reserve would enter into conservation agreements for inventory and management of federally listed or candidate species when the opportunities exist. Before any construction activities begin, impacted areas would be surveyed for those protected species likely to be affected and appropriate mitigation would be undertaken.

The reserve would inventory all federal and state listed threatened, endangered, rare, declining, sensitive, or candidate species native to and present in the reserve along with their critical habitats. The reserve would seek technical assistance from the U.S. Fish and Wildlife Service in completing the inventory. These species would be given special consideration in all future planning activities and in management of special uses and activities such as grazing and recreation, including climbing. Species of special concern would be periodically monitored to ascertain the health of each identified population.

Scenic Quality

The establishing legislation recognizes scenic quality as a value requiring protection through management. Preserving scenic quality is achieved through protecting the aspects that create scenic quality: naturalness, vividness, and unity. These qualities within the eight selected important viewsheds that display the reserve's outstanding scenic quality would be managed to retain conditions at the time the reserve was established. Photographic documentation would set up baseline images that would be used for monitoring changes. This documentation would serve as the goal towards which to manage.

Specific tools of management would include manipulating air quality, vegetation, and visitor use to ensure the best possible visual experience for the visitor. Air quality would be managed to maintain pristine conditions for clarity and visibility.

Vegetation within the viewsheds would be managed to maintain visual variety in textures, forms, and colors. Visitor use would be managed so that viewers could experience a sense of solitude in the Trails

landscape and so that activities, noises, and accompanying facilities do not intrude on the scene.

In addition, enhancing the scenic quality of historic views would be a by-product of cultural resource management. Restricting the introduction of modern features within historic viewsheds and managing scenes for more natural conditions automatically increases the value of scenic quality in those landscapes.

Management of Natural Resource Uses

Domestic Livestock Grazing. Reserve managers and willing private landowners would work cooperatively to develop and demonstrate ecologically sound, sustainable methods for managing rangelands. A grazing management plan would be developed in accordance with range management techniques, consistent with NPS policies and guidelines, to ensure that livestock grazing on public lands did not result in significant resource damage. The plan would be developed in cooperation and coordination with the Bureau of Land Management, U.S. Forest Service, and permittees and would prescribe methods for managing each allotment in the reserve. Any grazing allotments in the reserve that were vacated for any reason by the recognized permittee of record would be allocated to remaining or adjoining permittees with no increase in AUMs for those permittees. In these cases, the same number of AUMs would therefore be using a larger allotment. Specific decisions on vacated allotments would be consistent with sound range management principles or would be permanently withdrawn from domestic livestock grazing if it was in the best interest of resource protection and visitor use.

Grazing over the years has caused an increase in the density of woody plants and their expansion into new areas of the reserve. Increasing woody plant cover, especially sagebrush, has served to confine livestock grazing to less and less productive area over time, resulting in a reduced range condition, a loss of native perennial herbaceous species, and an increase in nonnative plant species that are more resistant to livestock grazing.

Various techniques would be developed involving fire and vegetation management to restore the range to more natural vegetative communities. For example, some basin areas now covered with monotypic stands of sagebrush and nonnative annual grasses would be managed toward a natural community of native perennial grasses and widely dispersed sagebrush. Only native plant materials would be used if planting was required. Protecting the natural vegetative communities would increase forage for both livestock and wildlife, provide better soil protection from erosion, and support a greater diversity of wildlife.

To protect riparian areas, domestic livestock grazing and trailing activities on public lands would be excluded from wetlands and riparian areas in the California Trail subzone (includes the foreground of the California Trail, Circle Creek basin, and the stage station site), the General Natural Area, the Research Natural Area, portions of the South Fork of Circle Creek basin, Taylor Springs, Mahogany Springs, and some damaged wetlands and riparian areas on public lands in any zone. This involves about 220 acres (30% of total in the reserve) of public wetlands and riparian areas. The National Park Service would also give a high priority to acquiring private land within the California Trail subzone from willing sellers, which would add another 260 acres (36%) of wetlands and riparian areas that would be protected from grazing.

For areas where grazing would be allowed in riparian areas the grazing management plan would incorporate wetland protection and restoration strategies developed under the resource management plan. The grazing management plan would include livestock management techniques to limit access to wetlands. Techniques would vary depending on the condition and sensitivity of wetlands in a particular area. In some cases, fences or other restrictive barriers would be built to keep livestock out of wetlands, either permanently or until wetland vegetation has recovered and soils have stabilized. In other wetland areas, livestock would continue but would be more limited. For example, grazing rotation and deferred seasons might be used to protect riparian areas during periods when they are most vulnerable to damage. Direct water pollution by livestock grazing under commercial grazing permits would also be prevented by eliminating existing corrals and watering sites near all streams and springs that originate in the reserve. The grazing management plan would include strategies to develop alternate water sources to move stockwater tanks and livestock away from wetlands on public lands. Only water sources that did not directly modify wetlands or change the timing, distribution, or amount of water supplying wetlands on public lands would be developed. The reserve would work cooperatively with private water rights owners that divert water from wetlands on public land to encourage them to mitigate any damage they might cause to wetlands. Water rights

could be acquired where possible according to state law. In some cases, livestock grazing permits might be modified to ensure the protection of wetlands. As grazing allotments changed over time, subsequent revisions to the City of Rocks grazing management would be identification of additional areas where riparian areas might be protected. Additional environmental compliance, including a statement of findings, might be required to address the impacts caused by specific actions under the grazing management plan.

Domestic livestock could be trailed through any zone necessary to move them from one area of an allotment to another. Livestock trailing corridors would be designated along the new east-west road alignment and the existing north-south road lignment (see the Management Zoning map). Trailing corridors would remain for all other historic trailing routes. Trailing would be prohibited in the research natural area and where California Trail ruts are best preserved.

Impacts would be inventoried and monitored to help develop methods to protect vegetation, soils, and wet areas. Special emphasis would be placed on monitoring the cumulative effects of grazing and recreational use in the backcountry recreation subzone just west of the research natural area. Most of this area is poorly suited for grazing because of steep terrain, extremely erodible soils, and low forage value of the vegetation covering the area. If it was determined that domestic livestock were adversely affecting this area, grazing would be reduced or eliminated from the area.

Visitors. Visitors would be informed about sensitive wildlife or plants, where their critical habitat occurs, and their life histories. Temporary closures of some areas might be necessary to protect important habitats. For example, use would be directed away from raptor nest sites. Visitors would also be informed about the locations of all established trails and campsites and educated about the delicate nature of vegetation and soils.

Trails

Campfires would be allowed only in established campsites. To protect habitat the gathering of firewood within the reserve would not be allowed, but visitors could use their own firewood from other sources.

A climbing management plan with input from the local climbing community is being developed. The plan will provide strategies for protecting cultural and natural resources from significant climbing impacts.

To preserve the natural silence that is a significant value associated with City of Rocks, no noise-generating equipment, including generators, radios, or power tools would be allowed away from the road corridor without permission of the reserve manager or landowner. No firearm use would be allowed other than during established hunting seasons and for the purpose of hunting. County ordinances have been developed to protect this value on private lands within the reserve. Reserve managers would pursue an agreement with the U.S. Air Force to eliminate low-level overflights over the reserve.

Air Force

VISITOR USE

INTERPRETATION

Interpretive Themes

Actions called for on private land would require either permission of the owner or a willing seller acquisition of that interest necessary to provide for the intended public use.

City of Rocks was designated a national historic landmark on July 19, 1964, and is listed in *History and Prehistory in the National Historic Landmarks Program: 1987* under theme X, "Westward Expansion of the British Colonies and the United States, 1763-1898," subtheme D, "Western Trails and Travelers," facet 4, "California Trails and Settlement of California."

City of Rocks is listed in *Natural History in the National Park System* and on the *National Registry of Natural Landmarks: 1990* under Great Basin Natural Region, Group I, Landforms of the Present, Theme 6, Sculpture of the Land.

Before deciding what areas will be made more accessible to visitors and where facilities will be located, it is essential to determine what visitors need to know about the reserve. The following interpretive themes represent those ideas about the resources that are critical to a visitor's understanding of the reserve's significance. All interpretive efforts (both media and personal services) should relate to one or more of the themes, and each theme should be addressed by some part of the overall interpretive program.

The following themes, in priority order, would provide the basis for interpretation at City of Rocks:

- The Oregon and California Trails — The trails were the routes of the most significant overland emigration in American history. City of Rocks, situated along the eastern approach to the best mountain pass between Fort Hall and the Humbolt River basin, became a major landmark and stopping area along the California Trail. The site was noted for its impressive scenery and the feelings of awe it inspired in the emigrants.

  A typical encampment at City of Rocks offered a brief respite from a long day on the trail, during which the emigrants would pasture their livestock, replenish water supplies, bathe, record their names on the rocks, cook and eat, visit around the campfire, and repair equipment.

- Geology — At City of Rocks a unique combination of rock types and geological weathering forces has resulted in some of the oldest rock in the United States being juxtaposed with others that are much more recent. The two spires of the Twin Sisters are actually billions of years apart in age.

- Livestock Grazing — The Shoshone were the first to graze livestock in this area. They traded horses to other tribes in the Northwest. The first whites to use the area were trappers and explorers. Early settlers tried dryland farming, but it was not successful. Ranching has proved to be a sustainable use of this land.

- Diverse Habitat — The habitat of the reserve supports a large variety of sensitive and rare species, such as golden eagles, ferruginous hawks, cliff chipmunks, and Townsend's big-eared bats.

- Vegetative Diversity — The City of Rocks is situated in a unique location that contains a wide variety of plant species — it is at the northern edge of the Great Basin with plants representative of that area and at the southern edge of the Snake River plains with plants representative of it. Add to these plant diversities the varied elevation of the reserve, and an even larger variety of plants can be found because of the different moisture levels and microclimates.

  To date approximately 600 different species have been identified in the reserve area, and a plant list is being developed.

- Stage Route — The Kelton-Boise stage route (1869-1883) through the City of Rocks was the fastest way to get from the East to the gold fields of Idaho. The Emigrant Canyon stage station at the south end of the reserve was a welcome rest area and overnight stop for weary travelers on their way to Boise.

- The stage station offers an impressive view of the Twin Sisters and is on the Salt Lake Alternate Route of the California Trail.

Orientation/ Information

Visitors would be directed to City of Rocks by signs along I-84 at the Burley, Declo, and Sublett/Malta exits and at other key intersections of state and county roads.

Visitor information and an interpretive overview of the reserve would be provided at a new visitor center in the vicinity of but outside the reserve. The reserve does not include any areas where a major facility such as a visitor center or a full-service campground would not intrude on important views. Therefore, as suggested by many during the scoping meetings and review of the preliminary alternatives, these facilities would be located outside the reserve on land owned by the Bureau of Land Management, where they could be accommodated without degrading the wide open, undeveloped character of the reserve's historic rural setting.

The Bureau of Land Management administers a parcel of federal land at the City of Rocks junction on the Almo road, just south of Almo. The National Park Service and the Idaho Department of Parks and Recreation are working cooperatively with the Bureau of Land Management to obtain use of the land to build the proposed visitor center on this site. Most visitors (estimated at 70%) approach the reserve from the east; thus a visitor center at this location would serve the majority of visitors before they entered the reserve.

The center would provide a point of arrival and a place where visitors could get an overview of the interpretive themes before entering the reserve. Details regarding specific interpretive media would be provided in a separate interpretive prospectus. Visitors would receive literature (including a map of the reserve) identifying key resources, facilities, and recommendations for a safe visit. They also would be able to purchase theme-related publications and to ask specific questions at the information desk. These materials would help visitors gain an understanding of the reserve concept and how it relates to other units of the national park system.

At the two western entrances to the reserve visitors could get information at one staffed and one unstaffed kiosk. The panels would provide general information about the reserve's key resources, facilities, and services and encourage visitors to stop at the visitor center when they got to that side of the reserve.

Visitor Center Interpretive Programs

An audiovisual program at the visitor center would present the human history of the area from Native American occupation to present-day ranching; however, the principal focus would be the emigrants along the California Trail. Audiovisual media would be excellent vehicles for interpreting chronological events and for conveying emotions, such as those expressed in the diaries of the people who traveled by wagon on the trail.

An exhibit area would complement the audiovisual program. The goals of the exhibits would be to highlight aspects of the primary interpretive themes, to provide a historical context for the resources visitors would experience during their stay, and to relate elements of the natural and human history that most people would be unlikely to see during their visits. For example, one exhibit might interpret lifestyle elements of the Shoshone in the region, another might depict scenes of life on the California Trail, still another could show the emigrant trails in the reserve in context with the entire route, and yet another could focus on the diversity of wildlife and plantlife in the reserve. Interpretive exhibits would work best when they incorporate articles, such as artifacts, reproductions, models, maps, photos, or artwork. The reserve currently owns few artifacts, and there would be no guarantees that many objects of significance would be forthcoming. Consequently, reproductions, models, and other media might be required to provide effective exhibits.

An outdoor amphitheater, parking lot, and trail would be built near the developed campground. Here daytime interpretive demonstrations, talks and walks, and evening programs would be presented. The amphitheater would be within a mile of the visitor center outside the reserve, and the facility also could serve people camping within the reserve and local residents. The amphitheater would be designed for an initial capacity of 100 with expansion capability for 200 visitors.

Most visitors, upon leaving the visitor center, would opt to take the tour road through the reserve to experience the resources firsthand.

East-West Road

From the visitor center a road would cross the reserve from east to west, providing access to most of the reserve's significant resources, developed facilities, trails, and recreational opportunities.

As visitors travel into the reserve from the east, they would be directed to their first stop at an overlook of the Circle Creek basin. Here visitors could view a large section of the California Trail, the Circle Creek encampment area, and the City of Rocks with the Twin Sisters landmark visible in the background. Wayside exhibits at the overlook would interpret the historic trail, the encampment area, and the scene as it may have looked during the emigrant period. It would provide an overview of the geology of the area.

The Nicholson house would be the next interpretive site. Site interpretation at this location would interpret early homesteading and later ranching activities. A wayside near the inscription rocks would describe the significance of the rocks and perhaps provide enhanced illustrations of some of the inscriptions. To encourage visitors to leave their cars, a short interpretive trail would lead from the Nicholson house to Register Rock.

At the next pullout visitors would have an opportunity to stand at a high point overlooking the Twin Sisters basin, where they could view a scene similar to what the early emigrants would have seen, and to pick out the next major landmark on their journey. To enhance this experience, the Twin Sisters basin would be managed to retain an open expanse with little or no signs of modern development. The north-south road would be maintained at a lesser standard than the main road to make it less visible.

Visitors would be encouraged to walk along this section of the trail, to experience it more as the emigrants would have (see the "Interpretive Trails" section below).

At the existing corral site near the east/west road, a wayside exhibit would interpret some of the modern ranching activities practiced in the reserve.

Upon entering the natural area subzone natural and recreational resource area (see the Management Zoning map) visitors would be directed by signs to day use areas at Bath and Turtle rocks where they could view the Silent City from the rim. Wayside exhibits at these two areas would interpret the rocks from both a geological and a historical perspective.

To access the southern portion of the reserve and the Twin Sisters area by car, visitors would be encouraged to follow the existing dirt road or exit the western boundary of the unit, drive south on the county road, and reenter the reserve via the Southwest or Junction (Moulton) entrance on an alignment that parallels the California Trail. Before reentering the reserve, a pullout and wayside exhibit would draw attention to Granite Pass, the next day's goal for emigrants on the California Trail. At the point where the road turns north toward Twin Sisters, a wayside exhibit would interpret this segment of the California Trail and its intersection with the Salt Lake Alternate. Another wayside near Twin Sisters would explain the historical and geological significance of this landmark.

Upon leaving the reserve from the Twin Sisters area, visitors could head back to Almo, or they could choose to travel north to Oakley and perhaps take advantage of the loop tour of the region (described below).

Interpretive Trails

By leaving their cars visitors could leave the developed areas, get closer to the resources, and gain better understanding and appreciation of each of the primary themes.

Historic Emigrant Trails. Walking alongside the California Trail and Salt Lake Alternate would offer special interpretive experiences to reserve visitors. These historic trails were not paths but routes (sometimes miles in width) used by countless wagon trains in the 19th century. Visitors would be encouraged to walk along these routes and to experience the area much as the 19th century emigrants would have experienced it. An important characteristic of this experience would be traveling across open country without being confined to a defined path. Reducing automobile traffic from a portion of the trail corridor would greatly enhance this experience. Because the trail corridors would cut across several management zones, including zones where livestock grazing occurred, visitors would occasionally encounter fences that they could cross either through marked narrow gaps in the fencelines or by simple stiles. Visitors would also be encouraged to wander freely through the encampment area.

Key features on the historic trails would be interpreted through wayside exhibits. Some of the exhibits would be the same as those along the tour road. However, Pinnacle Pass would only be accessible by walking. The California Trail narrowed at this pass to allow the wagons to squeeze through, and the heavy traffic left wheel ruts on the rock and scars from the cables used to slow the

wagons' decent. A wayside exhibit at Pinnacle Pass would interpret the emigrant activity here and direct visitors' attention to Granite Pass, which represented the next barrier to cross.

Historic Continuum Trails. A loop trail would lead hikers through the historic rural setting to Twin Sisters, the junction of the California Trail and Salt Lake Alternate, the stage station site, and Pinnacle Pass. The wayside exhibits mentioned above would interpret many of the key features. On the Salt Lake Alternate, a short distance east of its intersection with the California Trail, another wayside not accessible by road would point out the site of the stage station that operated well after the peak emigration period. The station buildings were converted years ago into ranching structures that are now in an advanced state of deterioration. The wayside would interpret the evolving uses of the Salt Lake Alternate corridor up to and including present-day ranching activities.

Visitors would be encouraged to walk from the tent campground along a short trail to a homestead, mining site, a view of the reserve, and connections to Twin Sisters formation and the stage station. A wayside exhibit at the homestead site would interpret the early settlement of the region.

Silent City Trail. To experience the silence and mystery of City of Rocks, which can be as awesome to modern-day tourists as it was to the emigrants, visitors would be directed to a loop trail connecting the day use areas on the rim and descending down through the rocks. Here visitors would disperse and experience the drama of the rim and the inner city on their own, away from other people and development. A segment of the trail would be provided between Turtle Rock and Parking Lot Rocks.

Indian Grove Loop

~~**Natural Environment**~~ **Trails.** A 7-mile loop trail between the Silent City and Indian Grove would take hikers through areas of outstanding scenery, significant geology, and examples of the reserve's diverse flora and fauna.

Regional Loop Tour

The story of the continuum of history in the City of Rocks area would be greatly enhanced by the interpretation of resources throughout Cassia County. For example, the Oakley Historic District, listed on the National Register of Historic Places, is an excellent representative of Mormon town planning and architecture. Additional resources that could help tell the story include the county courthouse at Burley, other town sites and institutions, dryland farms and ranches, and traces of old trails and roads. This tour route and the associated literature would be developed in cooperation with the communities, local chambers of commerce, and other tourism agencies in the area (see Regional Loop Tour map).

The main visitor center for telling this story would appropriately remain at City of Rocks, where all the various aspects of the story would come together in explaining how this nationally significant landscape was settled and how the land uses in this area have related over time to the land uses in the larger region. From the City of Rocks visitor center, a loop tour could link related resources outside the reserve boundary. Information stations would be established in Burley, Oakley, Albion, and Connor to contact visitors as soon as they entered the loop and advise them of what they could see along the way.

The reserve managers could provide technical assistance to Cassia County and to communities in the vicinity of the reserve to help them preserve, protect, and interpret the significant cultural resources in their respective jurisdictions, thus enhancing the cultural setting for the reserve. Properties listed on the National Register of Historic Places would receive primary consideration. Properties in Cassia County that are already listed include the Oakley Historic District, Granite Pass, the Albion Methodist Church, the Albion Normal School campus, and the Cassia County courthouse in Burley. Adaptive reuse of these properties and development of design guidelines for the communities would be encouraged.

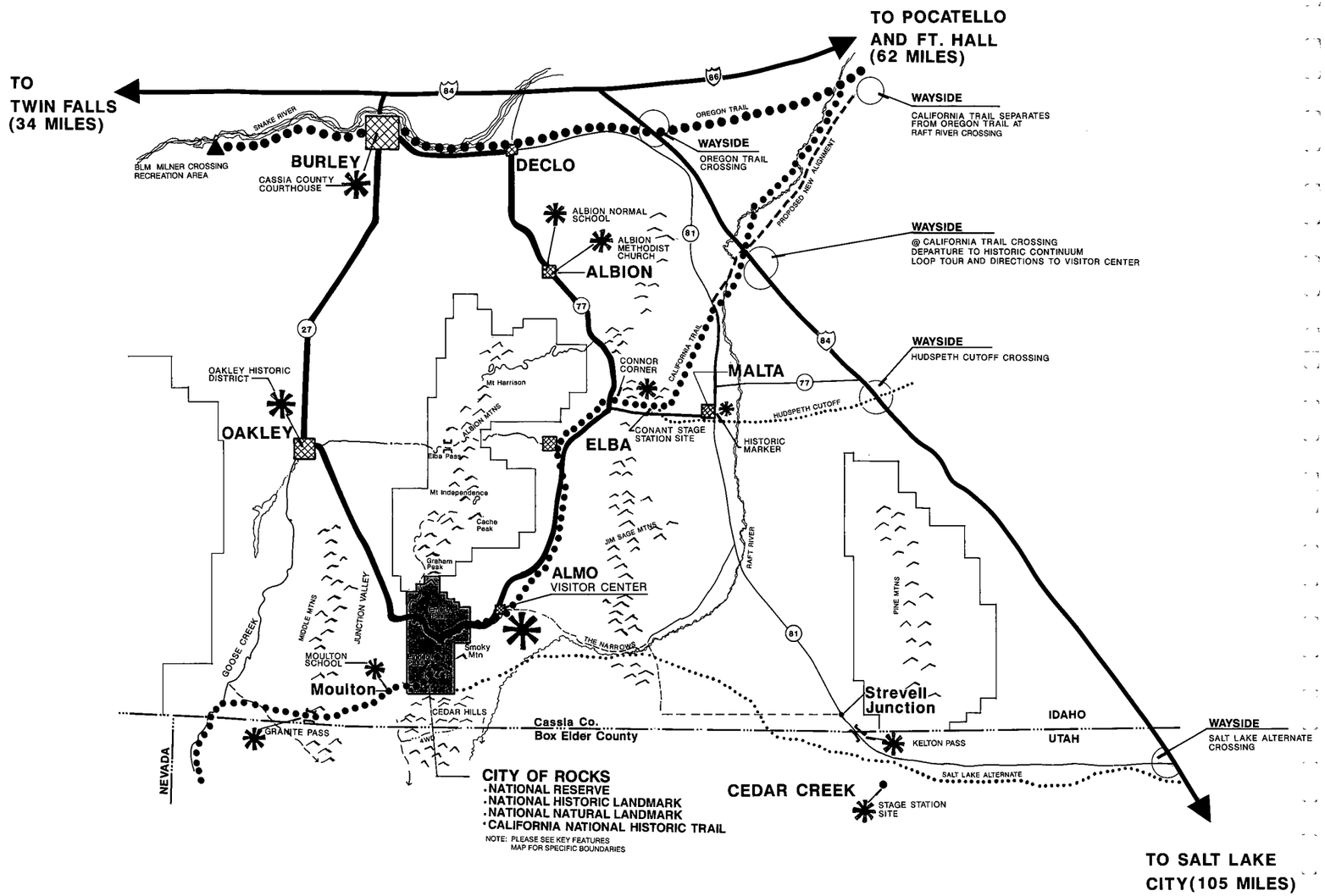
It is recommended that the tour loop, much of which passes through Forest Service and BLM lands, be studied for possible designation as a national scenic byway.

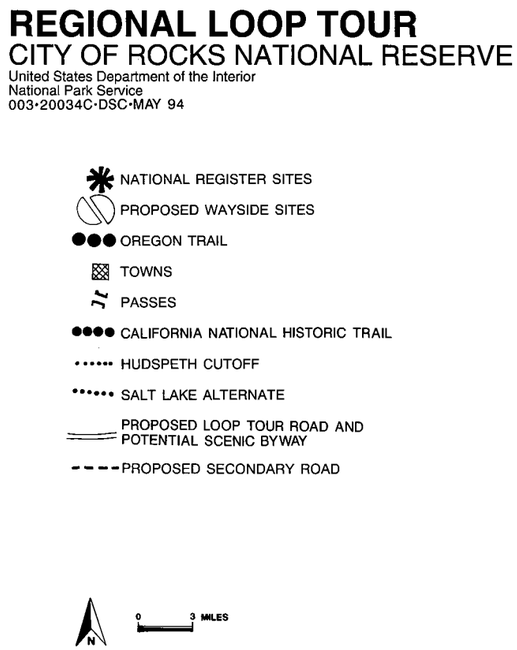
RECREATION

Camping

Three types of camping would be available within the reserve: primitive camping, group camping, and backcountry camping. Within the natural and recreational resource area in the southwest corner of section 36, a tent campground would be developed for up to 50 sites.

Located adjacent to, but not within, aspen groves, the campground would have sites for primitive camping. Water, picnic tables, fire grills, trash receptacles, and restrooms would be provided. A bulletin board would hold changeable information, regulations, safety precautions, and interpretive


TO POCATELLO AND FT. HALL (62 MILES)
TO TWIN FALLS (34 MILES)
84
86
SNAKE RIVER
BLM MILNER CROSSING RECREATION AREA
BURLEY
CASSIA COUNTY COURTHOUSE
DECLO
OREGON TRAIL
WAYSIDE
OREGON TRAIL CROSSING
WAYSIDE
CALIFORNIA TRAIL SEPARATES FROM OREGON TRAIL AT RAFT RIVER CROSSING
PROPOSED NEW ALIGNMENT
ALBION NORMAL SCHOOL
ALBION METHODIST CHURCH
ALBION
81
WAYSIDE
@ CALIFORNIA TRAIL CROSSING DEPARTURE TO HISTORIC CONTINUUM LOOP TOUR AND DIRECTIONS TO VISITOR CENTER
77
27
84
WAYSIDE
HUDSPETH CUTOFF CROSSING
OAKLEY HISTORIC DISTRICT
OAKLEY
Mt Harrison
ALBION MTNS
CONNOR CORNER
CALIFORNIA TRAIL
MALTA
77
HUDSPETH CUTOFF
CONANT STAGE STATION SITE
HISTORIC MARKER
ELBA
Elba Pass
Mt Independence
Cache Peak
Graham Peak
JIM SAGE MTNS
RAFT RIVER
ALMO
VISITOR CENTER
PINE MTNS
MIDDLE MTNS
JUNCTION VALLEY
GOOSE CREEK
Smoky Mtn
THE NARROWS
81
MOULTON SCHOOL
Moulton
CEDAR HILLS
Strevell Junction
IDAHO
UTAH
WAYSIDE
SALT LAKE ALTERNATE CROSSING
Cassia Co.
Box Elder County
GRANITE PASS
KELTON PASS
NEVADA
SALT LAKE ALTERNATE
CITY OF ROCKS
·NATIONAL RESERVE
·NATIONAL HISTORIC LANDMARK
·NATIONAL NATURAL LANDMARK
·CALIFORNIA NATIONAL HISTORIC TRAIL
NOTE: PLEASE SEE KEY FEATURES MAP FOR SPECIFIC BOUNDARIES
CEDAR CREEK
STAGE STATION SITE
TO SALT LAKE CITY(105 MILES)



program schedules. Vehicle parking would be clustered to provide walk-in access to campsites. Campsites would be located to avoid any impacts on wet areas and to use the existing landscape and vegetation to maximize privacy.

A group campground would be developed in the area behind Breadloaves. It would be operated on a reservation basis. Amenities would be similar to those provided in the primitive camping area.

Up to seven backcountry campsites would be available for up to 50 people in the Indian Grove area. Up to two of the sites might be group sites with fire rings and toilets. Use of these undesignated sites would require a permit. Visitors could hike to Indian Grove along trails within the reserve. Grazing would be managed to protect natural resources and the backcountry visitor experience.

In addition to campsites within the reserve, in cooperation with the Bureau of Land Management, a developed campground would be developed on BLM land in cooperation with the Idaho Department of Parks and Recreation just outside the reserve boundary near the visitor center.

Climbing

The majority of rockclimbing activity within the reserve would continue to occur in the natural and recreational resource area that encompasses all of section 36 and portions of adjacent sections 25 and 31. These areas offer prime climbing opportunities. At various access points, parking areas would be developed along with designated trails to popular rock faces.

Rockclimbing activity within the reserve would be managed in accordance with the objectives established for each management zone, subzone, and area as described in this plan. To protect outstanding features, climbing and scrambling would be prohibited on historic inscription rocks, Twin Sisters formation, Pinnacle Pass, and other physical features that have cultural significance. Like other recreational uses not directly associated with the access or enjoyment and interpretation of the California Trail, climbing would be precluded within the foreground viewshed of the trail. This would eliminate climbing opportunities where the activity would be visible from approximately ¼ mile of each side of the California Trail. The research natural area would be managed exclusively to protect natural processes and to conduct nonmanipulative research, which would exclude climbing and other uses from this area without a special use permit.

Other specific issues and restrictions pertaining to climbing will be addressed in a climbing management plan that is being developed with input from the climbing community.

The plan will provide strategies for protecting natural and cultural resources from significant climbing impacts and for monitoring the environmental effects of climbing use. Since some climbing rocks are located on private property, the reserve will continue to direct climbers to obtain permission from private landowners prior to entry onto private lands.

Hiking and Horseback Riding

Hiking would be permitted on public lands anywhere in the reserve. Hiking on private lands would require prior permission from the landowners. Specific hiking trails would be developed to lead visitors to many of the reserve's magnificent viewpoints and significant historic and natural resources. A trail plan would be developed to identify the locations of designated trails within the reserve.

MTN. BIKING

The trail up North Circle Creek to Indian Grove would be accessible to horseback riders and hikers, but not to mountain bikers. Off-road vehicles would be permitted only on existing roads that are open to all motorized vehicles. Mountain bikes would be limited to designated secondary roads or bicycle trails.

Picnicking

Fully accessible picnicking facilities would be provided in the two day use areas off the main tour road in the natural and recreational resource area. The picnic area adjacent to the Twin Sisters would be removed.

Driving for Pleasure

Motor touring, a popular visitor activity, would continue and would be enhanced by the public use of the proposed tour loop from Burley through Albion, Almo, and back through Oakley.

Hunting

Hunting is recognized as a traditional and compatible use of the reserve. PL 101-512 authorized the continuation of hunting, within limitations, to be managed in consultation with the Idaho Department of Fish and Game. Hunting would be allowed within certain public areas of the reserve and on private lands where prior permission of the owner has been obtained. Restrictions would be based on public safety, administration, floral and faunal protection, and management of public use and enjoyment. Consequently, it is expected that in the future hunting would be limited or not be permitted in areas and zones within the reserve that are dedicated to high visitor use and zones or portions of zones specifically intended for resource protection. A wildlife/hunting management plan would be developed in consultation with the Idaho Department of Fish and Game that identified those areas within the reserve where hunting would continue during specific times of the year or seasons (see appendix A for hunting legislation). The program would be developed in accordance with the National Park Service and Idaho Department of Parks and Recreation policies and guidelines.

FACILITIES INSIDE THE RESERVE

Actions called for on private land would require either permission of the owner or a willing seller acquisition of that interest necessary to provide for the intended public use.

Roads

Two major road alignments would change as follows:

The east-west gravel road from Nicholson ranch to the west boundary at Emery Canyon, approximately 3.5 miles, would be relocated to the south of the inscription rocks and the Silent City of Rocks rim activity area. This would help preserve the historic setting surrounding the inscriptions rocks and create an access and circulation pattern more conducive to separating potentially conflicting uses along the rim. The new road, which would be approximately 4 miles long, would retain the scale and textures of the existing road and be designed to support a 25 mph limit, in keeping with the historic rural setting.

A segment of the north-south road across the Twin Sisters basin, approximately 2 miles, would be reduced to a ranch route to minimize vehicular travel through one of the most significant trail viewshed areas. Although vehicular use would be allowed, it would be discouraged. Fencing might or might not be removed at the discretion of the landowner.

The road crossing the Circle Creek basin from the Nicholson ranch up to the North Circle Creek drainage, approximately 1.5 miles, would be converted to a hiking trail (see discussion below).

One mile of gravel road would be constructed from the east-west road to the new Circle Creek basin overlook.

Gravel, sand, and materials would not be taken from within the reserve for road maintenance or construction. These materials would come from a nearby source and be petrologically and mineralogically compatible with the native rock of the reserve, especially for road work.

Trails

Three major trail loops would be created and would become the principal trails of the reserve. Other trails might be added later after preparation of a trail plan and appropriate compliance.

Silent City loop trail. Approximately 3.5 miles of loop trail around the Silent City would originate at the primitive campground. The route would follow the rim for 1.5 miles from its most southern point at Turtle Rock north to the Breadloaves, connect to the Bath and Parking Lot Rocks day use areas, then descend from Parking Lot Rocks into the Silent City, wind its way along the eastern edge of the escarpment, and climb out at Turtle Rock. Much of the route already exists. The new trail would clarify, organize, and consolidate a myriad of climbing access routes and social trails. Other social trails would be obliterated.

This is not around the Silent City. Nor is it a loop!

Indian Grove loop trail. Approximately 7 miles of loop hiking/horseback riding trail would connect the Breadloaves group area to the Indian Grove overlook. The route would follow a new alignment east around the Taylor property to Indian Grove, descend North Circle Creek, and connect with the north leg of the Silent City loop trail to connect back through Parking Lot Rocks to Breadloaves. Except for the Taylor property bypass, all of this alignment is in place and being used (see the Management Zoning map).

where would horse staging areas be located? Breadloaves

inappropriate for horses

this would put horses up on the road

Also, horses through concentrated pedestrian day-use area.

Twin Sisters loop trail. Approximately 4 miles of trail would connect Twin Sisters to the stage station site by way of Pinnacle Pass and the trails junction interpretive wayside. This trail would cross and follow significant portions of the California and Salt Lake Alternate trails, carving through piñon woodlands and across Homestead basin. The intent of this alignment would be to allow the least impacting access to sterling trail resources. A spur trail would connect the primitive campground with the Twin Sisters loop trail.

Approximately 1 mile of trail would leave the tent campground and climb 800 feet to the top of an unnamed ridge that encloses the Twin Sisters basin. This route would require easements across two private properties and provide a primitive overlook experience.

The road crossing the Circle Creek basin from Nicholson ranch up to the North Circle Creek drainage, approximately 1.5 miles, would be ripped back to create a 3-foot natural surface hiking trail.

Two existing road segments would be removed and converted to trail use as follows:

approximately 1.5 miles of ranch road/trail from Emery Canyon Pass up to Indian Grove

approximately 1.5 miles of ranch road/trail from the northeast boundary at Graham Creek to Indian Grove

The appropriate status of any existing trail that has not been specifically addressed will be analyzed in the City of Rocks trail plan.

The following chart describes the capacity of facilities for day use areas at the reserve, and indicates the availability of trailheads, interpretive waysides, and picnicking sites.

TABLE 1: DAY USE ACTIVITY AREAS ACCESSIBLE BY CAR

	FEATURES						
Areas	**Parking Spaces**	**Trailhead**	**Access Reason**	**Interpretive Wayside**	**Picnicking**	**Restrooms**	**Other**
Inside Reserve							
Circle Creek Basin							
Overlook	20 cars	yes, ridge access	orientation overlook to inner city	yes	no	no	sign, garbage
Nicholson Ranch	5-10 cars	to interpretive trail	historic sites	yes	no	yes	sign, garbage
Inscription Rocks	5-10 cars	to short interpretive trail	historic site	yes	no	no	
Twin Sisters View	5-12 cars	to California Trail	historic trail view	yes	yes	yes	
Corral Site	5-10 cars	no	observe modern ranching	yes	no	no	seating
Turtle Rock	15-20 cars	to inner city loop & accessible rim trail	scenic view, trail to inner city, climbing	yes	3-5 tables	yes	relocate garbage receptacles
Bath Rock	10-25 cars	to inner city & accessible rim trails	scenic view, trail to inner city, climbing	no	5-8 tables	yes	redesign parking, relocate garbage receptacles
Parking Lot Rocks	6-10 cars	to inner city & accessible rim trails	climbing	no	3-5 tables	yes	
West Breadloaves	15-20 cars	north to Indian Grove	backcountry access, climbing, group camping, picnicking	no	yes	yes	sign
Indian Grove Overlook	3 cars	no	scenic view	yes	no	no	sign, garbage
Twin Sisters Basin	5-7 cars	Pinnacle Pass, Twin Sisters	historic sites along trail	yes	no	yes	trail connects to stage stop
Trails Junction	5-7 cars	to California & Salt Lake Alternate Trail	historic site along trail	yes	no	no	
Outside Reserve							
Almo Entrance	5-10 cars	no	orientation	kiosk	no	no	
Emery Canyon Entrance	5-10 cars	no	orientation	kiosk	no	no	
Junction (Moulton) Entrance	3-5 cars	no	orientation	kiosk	no	no	
Granite Pass View	3-5 cars	to California Trail	historic view	yes	no	no	on BLM land

Campgrounds

p. 366 says RVs can also park here!

It cannot be hidden.

Tent Campground/Trailhead. Prior to the relocation of existing campsites within the reserve, a campground with up to 50 primitive sites, sized for small vehicles, would be developed in the natural and recreational resource area and around the southwest corner of section 36. This area was selected because it is close to the rim, it is shaded, and the campground can be hidden from road and trail views. The campsites would include tables, tent pads, and fire grills. Two, 2-compartment vault toilets would service the pedestrian loop access system to the sites.

This is supposed to be a walk-in campground

Access from the realigned east-west road would be along a 0.5 mile gravel access road into the campground. Trails leading to the rim, nearby summits, and to rocks would start here.

After campground development is completed, all former sites would be returned to natural conditions.

Breadloaves Group Camping Area/Trailhead. Design of a group camping area at Breadloaves would use shaded areas to the west of the existing site on the west side of the rocks.

This site has access to the well, is separated from other users, and allows good trail access to day use areas. Camping would be separated from the west rock faces to keep high-demand climbing routes accessible and unimpeded.

A two-compartment vault toilet would be installed at this location. Parking for camping, picnicking, climbing access, and trailheads would use the disturbed area with a setback from the western rock faces. The parking lot would be located to serve both the group site and trailhead area. The lot would be sized to accommodate 15–20 vehicles and horse trailers. One registration board for backcountry use to Indian Grove would be installed.

misplaced

Indian Grove Backcountry Camping Area. A backcountry camping area with up to seven undesignated, unimproved sites for use by permit of up to 50 campers would be positioned adjacent to but not within the aspen landscape of the Indian Grove area. Access would be from the Breadloaves parking area. but also from Almo Park Rd

Backcountry

Up to three single composting privies would be in the backcountry.

and Circle Creek Basin

Signs

The following orientation/information signs would be used inside the reserve. (See the signs portion of appendix D for definitions of sign types.)

Regulation (type II) signs would be at

- three entrances at the boundary or where entrance stations occur
- backcountry registration sites at Breadloaves and the Nicholson ranch
- information panels/bulletin boards at the primitive campground and the developed campground (these would be readable by pedestrians and car passengers and located within the site design to capture the attention of all occupants)

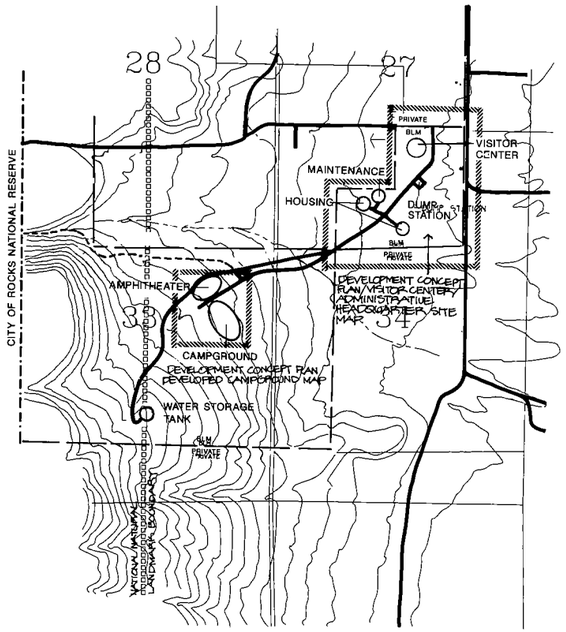
Interpretive (12 type IV) signs would be used

Along Road	**Along Trails**
Circle Creek basin overlook	Pinnacle Pass
Nicholson ranch	stage station
inscription rocks	homestead site
Twin Sisters	
corrals/historic rural setting	
Bath Rock	
Turtle Rock	
Trails Junction	
Twin Sisters	

A bulletin case/text panel would be at the tent campground.

FACILITIES OUTSIDE THE RESERVE

Because the Idaho Department of Parks and Recreation is intended to manage reserve facilities, including the visitor center/administrative complex and the developed campground, it has filed for a long-term lease of BLM lands through the Recreation and Public Purposes Act (43 U.S.C. 869 et seq.) program. Ownership would remain with the Bureau of Land Management for these sections. The retention of the administrative/visitor center site in federal ownership would allow opportunities for cost-sharing by the National Park Service, the Bureau of Land Management, the Idaho Department of Parks and Recreation, and others. The cooperative use with the Bureau of Land Management of the area of the proposed campground is expected to state that the Idaho Department of Parks and Recreation would administer the developed campground directly or through a concession contract or through a cooperative management agreement with the Bureau of Land Management.



DEVELOPMENT CONCEPT PLAN

OVERVIEW

CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service
003-20052B-DSC-AUG 94

NOTE:
This drawing is intended to present a concept only.
Detailed layout may differ when the design phase is complete.

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0 50 150 350 500
25 100 250

MAJOR VIEWS TO CALIFORNIA TRAIL AND CASTLE ROCKS

TO PRESERVE BOUNDARY

PROPOSED VISITOR CENTER

- 9,500 SQUARE-FOOT FACILITY
- LOCATED ON CORNER OF MAIN ACCESS TO PARK
- INTERPRETIVE DISPLAYS
- PARK ADMINISTRATIVE OFFICES
- ACCESSIBILITY TO COMPLY WITH UNIFORM FEDERAL ACCESSIBILITY STANDARDS
- PARKING FOR 5 RVs, 2 BUSES, AND 45 CARS WITH ROOM TO EXPAND
- FIRE PROTECTION PROVIDED BY GOVERNMENT
- POWER FROM CONNECTION TO OVERHEAD LINES ON NORTHEAST CORNER
- ENTRANCE SIGN

PRIVATE
BLM

PROPOSED OPERATIONS AREA

- FOUR PARK MAINTENANCE BUILDINGS ONE BUILDING FOR WORK AREAS/SHOPS, BAYS, AND THREE FOR WAREHOUSING
- EQUIPMENT YARD AND STORAGE AREA
- VEGETATION SCREEN ON ALL SIDES
- 6 FT FENCED COMPLEX OFF CAMPGROUND ROAD AND OUT OF VIEW OF INCOMING VISITORS
- WATER TREATMENT FACILITY

PRIVATE
BLM

WATER

MAINTENANCE YARD EXPANSION AREA

PAVED ROAD - 25 MPH WITH BIKE LANE

UNDERGROUND ELECTRIC DISTRIBUTION LINE

JOINT MAINTENANCE AND HOUSING AREA LEACHFIELD

PROPOSED PERMANENT HOUSING

- PARK MANAGER RESIDENCE, 1,500 SQ. FT.
  11 ADDITIONAL PARK EMPLOYEE RESIDENCES
- SCREEN FROM OTHER PARK ACTIVITIES

OBTAIN EASEMENT FOR THIS PORTION OF ROAD

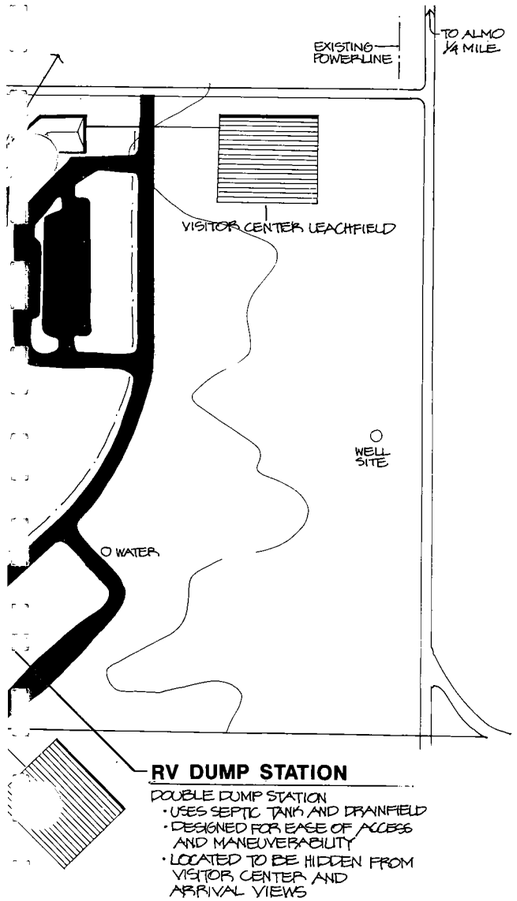
PRIVATE
BLM

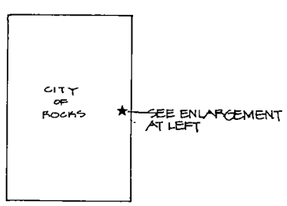
TO CAMPGROUND (SEE NEXT PAGE)

CLOSE AND OBLITERATE THIS PORTION OF ROAD

BLM
PRIVATE

BLM
PRIVATE





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DEVELOPMENT CONCEPT PLAN

VISITOR CENTER/ ADMINISTRATIVE HEADQUARTERS SITE

CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service
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NOTE:
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Detailed layout may differ when the design phase is complete.

0 50 150 350 500'
25 100 250

The site design for the headquarters area, administrative and maintenance facilities, utilities for the headquarters site, housing, and the developed campground is more detailed than would normally be presented in a general management plan. It is intended to show generally what is anticipated to occur so that relatively accurate cost estimates can be prepared. This design, based on limited site work, would probably meet reserve needs. However, before any construction is undertaken, a design process, including the consideration of other alternatives, would be undertaken. The design that is actually constructed may differ from the single concept presented here. (See the Development Concept Plan Overview and Development Concept Plan, Administrative Headquarters Site maps.)

Headquarters Site

Visitor Center/Entrance Station. The visitor center would be a modest, approximately 9,500-square-foot building containing

- a lobby with a staffed information desk, a backcountry registration area, and a small publication sales area
- a 70-seat theater
- exhibit space and museum
- administrative office space
- restrooms for staff and public
- miscellaneous, HVAC, etc.
- multipurpose room (25-30 seats)

Parking for 35-45 cars, eight RVs and two buses (with capability to expand) would be provided at the Almo Junction site.

A staffed entrance station designed to accommodate fee collection would be built on the main road into the reserve, just west of the RV campground road junction, within sight of the visitor center.

Administrative and Maintenance Facilities. Administrative offices would be in the visitor center.

Maintenance operations, both covered warehousing, shop facilities, and open-air yard storage would be 1/2 to 3/4 mile south, west of the road that would continue to the developed campground. The complex would be fenced with a 6-foot barrier and screened with native vegetation. Views along the road to the campground and from a distance along the Utah entrance road would not include any of the structural or yard elements. The yard would include four 20- x 100-foot covered warehouses and a 220- x 300-foot open storage area.

Emery Canyon and Moulton Entrances

The orientation/information kiosks installed at the Emery Canyon and Junction (Moulton) entrance would be designed to fit the settings at the intersections of reserve roads with the Junction Valley Road. Pull-outs for cars/RVs would be incorporated into the site design at each location.

A staffed entrance station would be built at the junction of the Emery Canyon Road and Junction Valley Road.

Utilities for Headquarters Site

A sewage system would service most of the Almo junction site. The sewage system would be designed to meet state codes. Power would be provided by Raft River Rural Electric Association and come from overhead lines already at the junction. A new well would be drilled.

Developed Campground

A developed campground with up to 100 sites large enough for RV use would be developed outside the reserve, 1 mile south of the proposed visitor center on property owned by the Bureau of Land Management — 50 units could be developed initially, with 50 units added later as needed. (See the Development Concept Plan, Developed Campground map.)

The campground design would include electric and water hookups at each site, showers, two comfort stations, and 100 sites along two 1,200-foot loops. Minimum spur lengths would be 55 feet, with 100 feet allowed for pull-through, one-way, counter-clockwise traffic. Proposed density would be five units per acre. Domestic water and sewage facilities would be designed to meet Environmental Quality and Clean Water Act requirements.

Adjacent to the campground and available to the local community would be a 100-seat (expandable to 200-seat) amphitheater for evening programs and interpretive activities. The amphitheater would be sited to take advantage of pedestrian access from the site and car access from other parts of the county. It would have the capability for multimedia presentations and future expansion. Parking for 20 cars would be provided.

An RV dump station would be hidden from the visitor area, on the east side of the campground between the campground and the visitor center site. This facility would be a double station and would be designed for easy access and service maneuverability.

Approximately 1 mile of improved road would be built to access the proposed developed campground. The road would originate from the entrance road,

DEVELOPMENT CONCEPT PLAN
DEVELOPED CAMPGROUND
CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service
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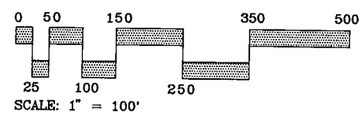
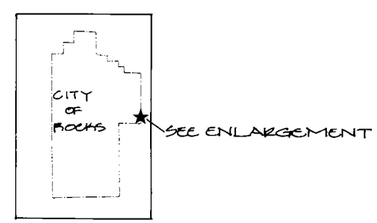
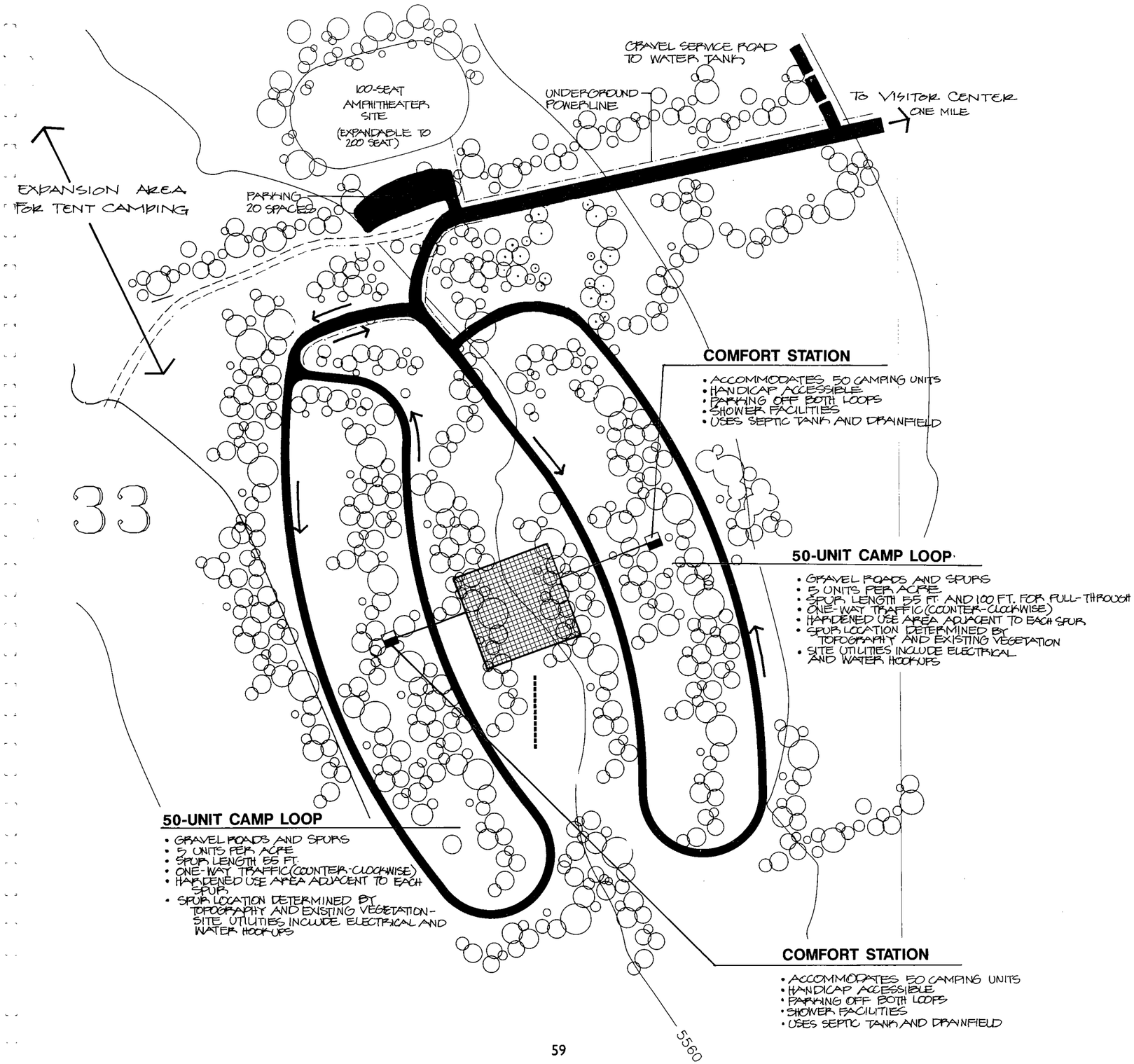





GRAVEL SERVICE ROAD TO WATER TANK
UNDERGROUND POWERLINE
TO VISITOR CENTER ONE MILE
100-SEAT AMPHITHEATER SITE (EXPANDABLE TO 200 SEAT)
EXPANSION AREA FOR TENT CAMPING
PARKING 20 SPACES
COMFORT STATION
• ACCOMMODATES 50 CAMPING UNITS
• HANDICAP ACCESSIBLE
• PARKING OFF BOTH LOOPS
• SHOWER FACILITIES
• USES SEPTIC TANK AND DRAINFIELD
50-UNIT CAMP LOOP
• GRAVEL ROADS AND SPURS
• 5 UNITS PER ACRE
• SPUR LENGTH 55 FT. AND 100 FT. FOR PULL-THROUGH
• ONE-WAY TRAFFIC (COUNTER-CLOCKWISE)
• HARDENED USE AREA ADJACENT TO EACH SPUR
• SPUR LOCATION DETERMINED BY TOPOGRAPHY AND EXISTING VEGETATION
• SITE UTILITIES INCLUDE ELECTRICAL AND WATER HOOKUPS
33
50-UNIT CAMP LOOP
• GRAVEL ROADS AND SPURS
• 5 UNITS PER ACRE
• SPUR LENGTH 55 FT.
• ONE-WAY TRAFFIC (COUNTER-CLOCKWISE)
• HARDENED USE AREA ADJACENT TO EACH SPUR
• SPUR LOCATION DETERMINED BY TOPOGRAPHY AND EXISTING VEGETATION-SITE UTILITIES INCLUDE ELECTRICAL AND WATER HOOKUPS
COMFORT STATION
• ACCOMMODATES 50 CAMPING UNITS
• HANDICAP ACCESSIBLE
• PARKING OFF BOTH LOOPS
• SHOWER FACILITIES
• USES SEPTIC TANK AND DRAINFIELD
5560

just west of the Almo junction and the proposed visitor center site, and continue on to the campground. The road would cross one drainage, Circle Creek, approximately 1/2 mile south of the visitor center. Further study would be required to determine appropriate engineering treatment of this road.

The existing four-wheel-drive road would continue past the developed campground and provide access to other public lands. (Please see Development Concept Plan Overview map.)

A hiking/bicycle trail would be developed from the developed campground westward into the reserve to encourage nonmotorized use.

Signs

Orientation/information signs would be used outside the reserve on interstate and state highways. Requests to state highways to install signs would be made at the following locations.

Type I signs would be

I-84 south at Sublette exit (2)
I-84 north/south at Malta exit (2)
I-84 east/west at Bailey and Route 77 exits
Junction of state routes 77 and 30 at Declo (2)
Junction of Route 77 at Connor Corner (2)
in Oakley (1)
Route 27 leaving Oakley at junction with Birch Creek/Junction Valley Road (1) Almo Junction

Specialty (type III) signs would be

two entrance signs at east and west junctions at Almo and Emery Canyon: wood and stone, 4'x8'

one modified entrance sign at Junction (Moulton): wood and stone, 3'x5'

visitor center identification at the Almo Junction in front of the building as part of the entrance sign

Interpretive (type IV) signs would be used at

Granite Pass overlook

Bulletin cases/text panels would be located at the visitor center, Emery Canyon entrance, Moulton entrance, and RV campground.

Housing

Housing would be provided for up to 12 permanent and or seasonal employees east of the proposed operations area. Where existing housing is available for purchase, it is the intent of cooperative management to blend employees into the community. Therefore, structures would be purchased on an opportunity basis, where they meet management needs, on sites where

- septic and water systems would be most suited
- structures would not be viewed by reserve visitors
- traffic from residences would not load onto the main north-south route through town, nor the east-west arrival route south of town
- presence of mature trees would help alleviate harsh weather conditions
- neighboring uses would not be negatively impacted by housing and would not negatively impact residential use

Before structures were converted for use as government housing, management would take whatever actions are necessary to bring them up to National Park Service housing standards as stated in NPS-36 and NPS-76.

Design for new housing structures would fit into the textures, densities, and style of the Almo area. Units would be situated in the landscape to gain the benefits of passive solar, have snow-free entrances and drives, create privacy between residences, and to provide an interesting passive solar orientation to the South Castle Rocks to the northwest.

A summary of development considered under the proposal is shown in table 2 of part two of this document. Site design considerations are described in appendix D, and specific development actions and costs are shown in appendix E.

CARRYING CAPACITY

To provide for the protection of the cultural and natural resources of City of Rocks National Reserve, it is necessary to set limits on the amount of public use of the reserve resources. Facilities such as parking lots were relatively small at the time the planning process began. Public sentiment expressed at public meetings indicated the desire to keep development at a small scale. These expressed desires are reflected in the plan.

The following limits have been established within the boundary of the national reserve:

Not to exceed: 50 primitive campsites
7 unimproved backcountry campsites (may be rotated)
3 primitive campground clusters at group campground
226 parking spaces at 13 sites within the reserve

As future conditions warrant, reserve management may establish additional limits on human activity within the reserve to protect resources. Use limits would also be established through the adoption of several action plans that would help to implement the general provisions of the comprehensive management plan. These action plans include the City of Rocks trail plan, climbing management plan, grazing management plan, cultural resource management plan, and natural resource management plan.

PHASING OF DEVELOPMENT

The National Park Service and the Idaho Department of Parks and Recreation recognize that additional surveys and compliance with the National Environmental Policy Act, section 106 of the Historic Preservation Act, and related laws, regulations, and guidelines would be required before implementation of some parts of the plan and before construction of some proposed facilities. This applies to lands where the federal government has full or partial interest.

To retain the rich detail and elements of area settlement patterns and ranching heritage design guidelines need to be developed before designing and constructing any facilities. Architectural guidelines need to be developed to guide design and construction of any structures associated with the reserve (housing, visitor center, restrooms, sign displays, trailheads, and fencing).

Phasing is contingent on funding. No plan implementation can take place without the necessary funding to undertake the proposed actions, including construction.

An interpretive plan, which would include details of the visitor center media and wayside treatments, would be needed during the first phase of development.

Some proposals, such as raising the development ceiling for the reserve, may require additional legislative authorization if federal funding is involved.

Agreements would be needed with the Bureau of Land Management to lease land for the facilities outside the reserve, including the entrance stations.

It is suggested that the following proposed development be phased over the next 10 years (see Development Phasing Schedule). Participants responsible for these actions are included under each action.

100-site developed campground and amphitheater outside reserve with roads and utilities (e.g., water, septic, trailer dump station)

Before the day use areas are developed on the rim, camping would need to be closed so facilities can be designed and constructed for the day use areas.

The proposed developed campground is big enough to meet current demand for camping. It can be used for tent camping as well as recreational vehicles. People would not have to be turned away, just redirected. Current demand sometimes reaches 100 sites: City of Rocks has approximately 80 designated sites.

The amphitheater associated with the developed campground would be situated to overlook the California and Salt Lake Alternate trails coming out of Almo, a bonus for campers that would not be provided at the primitive campground. The primitive campground would be a recreational opportunity within the reserve setting that would not have the personal services and interpretive opportunities that the amphitheater would provide at the developed campground.

Participants: Idaho Department of Parks and Recreation has filed with Bureau of Land Management for a lease on lands proposed for the administrative/visitor center site and developed campground. Ownership would remain with the Bureau of Land Management for these sections of land. This would provide opportunities for cost-sharing by the National Park Service, Bureau of Land Management and other entities. Administration of the developed campground would be an Idaho Department of Parks and Recreation responsibility. Bureau of Land Management would continue to own the land, but the agreement or lease to Idaho Department of Parks and Recreation would allow the department to administer the campground directly or through concession contract.

Up to 50-site primitive campground/trailhead

As discussed in the preceding section on the developed campground, before day use areas are developed on the rim, camping on the rim would need to be closed so day use facilities can be designed and constructed.

While the proposed 100-site developed campground outside the reserve could accommodate the full existing camping demand in the reserve, many current campers enjoy camping within the reserve in a less-developed setting. Construction of the primitive campground within the reserve during the first phase of construction would allow the removal of the campsites from the rim while still providing campers the option to remain overnight in the reserve in a primitive campsite.

The primitive camping area would require more resource data and more sensitive and delicate design or treatment to be done well, and more time would be required to gather data and understand the primitive campground site prior to design — especially the wet areas. The area has been in a drought cycle, and the wetland patterns need to be understood in wet (nondrought) years before attempting to place a campground; for example, there were springs all over the hillside even during the recent drought cycle.

Participants: It is expected that this project, including compliance with guidelines on conservation of wetlands, would be funded by the National Park Service.

Interior road system and entrance stations for

east-west road
road from Junction (Moulton) Entrance to Twin Sisters
scaling back of north-south road from Y intersection with east-west road to Twin Sisters

Design and construct first overlook on the east side

Participants: Creative solutions would need to be found to relocate the county roads within the reserve. The federal government cannot spend money to relocate a county road unless special legislation is passed. Another solution would be for the county to acquire fee title to the roads and then transfer jurisdiction to the National Park Service.

Interpretive waysides related to the California Trail (other interpretive waysides would be undertaken in a later phase)

Participants: Waysides are expected to be provided by the National Park Service, Harpers Ferry Design Center

Visitor center/administrative offices

Participants: The land on which the visitor center would be built may be leased by the Bureau of Land Management to the state. This would provide opportunities for cost-sharing design and construction between the Bureau of Land Management, National Park Service, and others.

Remaining waysides and waysides for day use areas for recreation

Waysides describing other periods of history than the California Trail

Day use areas for recreation, including rim trails, parking, activity areas, secondary roads to overlooks, and waysides for day use areas

Of the day use areas, the one on the rim would have the highest priority

Participants: Waysides are expected to be provided by the National Park Service, Harpers Ferry Design Center. It is expected that both the National Park Service and the Idaho Department of Parks and Recreation would cooperate in the design and construction of the facilities.

Housing

Employee housing is expected to be part of the reserve's administrative complex at Almo Junction on land owned by the Bureau of Land Management.

Participants: The provision for employee housing is expected to be the responsibility of the Idaho Department of Parks and Recreation. The National Park Service would be expected to cost-share housing design and utility development for the housing area as part of a total development package. It is recognized that some permanent and seasonal staff might elect to reside in Almo or other nearby communities and thus reduce the need for additional housing at Almo Junction.

Maintenance support facilities

Participants: same as for visitor center

Backcountry camping in Indian Grove area

Participants: It is expected that this project would be funded cooperatively.

DEVELOPMENT PHASING SCHEDULE

Areas	Short-Term Phase	Medium-Term Phase	Long-Term Phase
Inside Reserve			
Circle Creek Basin Overlook	X		
Circle Creek Wayside Basin-Nicholson Ranch	X		
Inscription Rocks Wayside	X		
Twin Sisters View Wayside	X		
Corrals/HRS		X	
Turtle Rock		X	
Bath Rock		X	
Parking Lot Rocks		X	
West Breadloaves		X	
Trails Junction Wayside	X		
Twin Sisters Wayside	X		
Primitive Campground	X		
Indian Grove Overlook		X	
Indian Grove backcountry camping	X		
Stabilize interior roads	X		
Realign interior roads		X	
Outside Reserve			
Almo Entrance	X		
Emery Canyon Entrance	X		
Junction (Moulton) Entrance	X		
Granite Pass View	X		
Visitor Center		X	
Trailer Dump Station	X		
Maintenance Facility			X
Employee Housing Phase 1 Phase 2		X	X
Developed Campground	X		

STAFFING AND OPERATING COSTS

Until management is transferred to the state, the area would be administered by an NPS superintendent in Twin Falls and an Idaho Department of Parks and Recreation manager stationed in Almo.

The reserve's operating budget for fiscal year 1993 was approximately $295,000. Of that amount, $195,000 was provided by the National Park Service and $100,000 by the state of Idaho.

Staff for the reserve, shown on the following chart, would be needed to implement the proposal.

The annual cost of the above combined salaries based on step 1 of all pay grades would be $600,000. An additional $300,000 would be required for operating expenses for a total annual operating expense of $900,000 in FY 93 dollars. The positions are described based on the NPS classification system. The state may use different titles for similar jobs.

It is recognized that funding for some specialized positions may be augmented by other entities, including the National Park Service, cooperating associations, volunteers, and others.

Division	FTE
Administration	
Park Manager (GS-12)	1.0
Administrative Technician (GS-5)	0.9
Administrative Officer (GS-7)	1.0
Clerk-Typist (GS-4)	1.0
Resource Management	
Natural Resource Management Specialist (GS-11)	1.0
Park Ranger, Resource Management Specialist (GS-5)	1.0
Park Ranger, (GS-4)	0.7
Historian, (GS-7/9)	1.0
Visitor Protection	
Chief Ranger (GS-11)	1.0
Park Ranger, Visitor Protection (GS-9)	1.0
Park Ranger, Visitor Protection (GS-5)	0.9
3 Park Rangers, General (GS-4)	1.8
Clerk-Typist (GS-4) to be shared with Interpretation and Visitor Services Division	0.7
Park Ranger, Fee Collection (GS-5)	1.0
4 Park Rangers, Fee Collection (GS-3)	1.8
Interpretation and Visitor Services	
Chief of Interpretation (GS-11)	1.0
3 Park Rangers (GS-4)	1.8
Interpretive Specialist (GS-4)	1.0
Maintenance	
Chief of Maintenance (WS-10)	1.0
Maintenance Worker (WG-8)	1.0
Maintenance Worker (WG-6)	0.9
4 Laborers (WG-5)	3.1
Clerk-Typist (GS-4)	0.7
	28.0

ADMINISTRATION AND MAINTENANCE

The reserve's administrative facilities are currently located in a building in Twin Falls leased by the National Park Service and in a building in Almo leased by the Idaho Department of Parks and Recreation. Both leases are from the General Services Administration. Maintenance support and visitor information are provided from the same state-leased structure in Almo.

Administrative and maintenance facilities would be replaced on a site adjacent to the reserve that is owned by the Bureau of Land Management.

Maintenance facilities would be at offices at the Almo junction, as part of the administrative complex and adjacent storage and yard. A total of 110,000 square feet of maintenance storage space would be needed — 10,000 square feet of covered warehousing and 100,000 square feet of open-air yard.

Disposal/boneyard/landfill arrangements would be coordinated with Cassia County. The reserve staff should minimize its need for waste or hazardous materials storage.

No housing is currently provided for reserve employees. Employees must find their own residences in the adjacent communities. However, there is not enough vacant housing in the town of Almo to accommodate the current staff. Housing would be built for up to 12 permanent and seasonal employees east of the proposed operations area. Where suitable housing in the community becomes available for purchase, it may be acquired on an opportunity basis for employee housing. (Please see the previous "Facilities Outside the Reserve, Housing" section for additional detail.) These numbers assume that some reserve staff would be local residents with their own housing.

Because the Idaho Department of Parks and Recreation has primary responsibility for the management of the area and bears resultant operational costs, it is intended that any and all fees generated from visitor use or concession fees of the City of Rocks National Reserve be collected, and used directly for the support of the operation of the reserve. It is recognized that additional mechanisms may be needed to implement these provisions.

PART TWO: ENVIRONMENTAL IMPACT STATEMENT

ENVIRONMENTAL ISSUES

This environmental impact statement considers the environmental impacts of three alternatives for the *Draft Comprehensive Management Plan* for the City of Rocks. This plan must be in compliance with other applicable federal and state environmental laws and local regulations and ordinances. Consideration will be given to the protection of air and water quality (Clean Air Act and Federal Water Pollution Control Act), floodplains and wetlands (EO 11988 and 11990), and threatened and endangered plant and animal species (Endangered Species Act). Consideration will also be given to sections 106 and 110 of the 1966 National Historic Preservation Act and its implementing federal regulations, the Archeological Resources Protection Act of 1979, and the regulations of the Advisory Council on Historic Preservation. These acts and regulations are discussed in the resource sections to which they apply. The major environmental issues to be analyzed were identified through a series of public meetings and consultations with appropriate agencies and organizations (see "Consultation and Coordination" section). These issues are discussed below.

CULTURAL RESOURCES

Preservation of National Historic Landmark Values: The California Trail

In 1964 City of Rocks was designated a national historic landmark in recognition of its importance to the California Trail and the history of American westward overland emigration during the 1840s and 1850s. The national historic landmark boundaries only roughly coincide with the boundaries of the national reserve. Significant trail-related resources within the reserve include about 9 miles of the emigrant trail routes, including some of the best preserved segments of such trails in the nation, 13 "inscription rocks," on which the emigrants recorded their names and dates of passage on the granite, the principal encampment site along Circle Creek and the Twin Sisters landmark. The reserve's trail resources are greatly enhanced by the surrounding landscape, which still looks and feels much the same as it did when the emigrants passed through.

Most of these resources are currently in private ownership. Examples of resources in federal ownership are Camp and Turtle rocks. With the exception of the plowing that occurred on some sections in the early 1900s, the traditional land uses in the region have not caused any major disturbance to these resources, but the trail ruts and rock inscriptions have been slowly deteriorating as a result of natural weathering and inadvertent damage by people and grazing cattle. The recent threat of subdivision and residential home development poses a greater threat to trail resources and the surrounding landscape.

The comprehensive management plan identifies actions needed for the protection, management, and interpretation of the cultural values and historic resources associated with the national historic landmark designation of City of Rocks.

Preservation of the Historic Rural Setting

While the story of the California Trail is the most significant historical theme at City of Rocks, it is a relatively brief part of its history. Few buildings associated with the post-California Trail history of City of Rocks have survived. Some log structures still stand that were built during the early 1930s, with materials salvaged from an earlier stage station. The stone walls of a house constructed about 1903 (now known as the Nicholson house) suggest that early 20th century agrarian life at City of Rocks had changed considerably from pioneer occupation of frontier homesteads, remnants of which still remain in the reserve. Among the surviving resources associated with historic cattle ranching operations in the reserve are cattle trailing routes, expanded grasslands with widely spaced fencelines, water sources, and corrals. The tapestry of land use patterns and images of this historic rural setting imparts an increasingly rare ambience and scenic quality reminiscent of the American West and thus constitutes a significant cultural value of the reserve.

Congress insightfully included the value of this rural character and described a vehicle for protecting it in the establishing legislation for the reserve. The legislation (PL 100-696) states that the management plan will identify those areas that would be properly zoned for private use subject to local ordinances designed to protect the historic rural setting. Congress understood that the pastoral patterns exhibited here were special and recognized the private sector's role in sustaining or destroying those images and patterns through its local ordinances.

Because the rural character was highlighted in the establishing legislation, one of the major issues addressed by the plan is whether the elements of the historic rural setting that post-date the California Trail period should be preserved and interpreted or whether they should be allowed to deteriorate,

which would lead eventually to the restoration of the earlier historic setting of the trail. This issue is closely tied to the interpretation and education concerns discussed below. Also, because some of the elements of the historic rural setting are still used by ranchers pursuing a traditional lifestyle in the reserve, the issue of private land use is discussed below.

Protection of Archeological Resources

The reserve's more than 60 identified archeological sites are subject to damage from vandalism, cattle grazing, and development activities, which could result in irreversible losses of artifacts and cultural information, some of national significance. Because a comprehensive survey has not been conducted, additional significant sites likely remain unknown. Direction is needed for identifying, protecting, and managing prehistoric and historic archeological sites in the reserve.

NATURAL RESOURCES

Air Quality

Protecting and maintaining scenic quality was among the reasons for establishing City of Rocks National Reserve. No air quality indicators are being monitored in the reserve now. Monitoring needs must be determined and a monitoring program instituted to find out if air pollutants are causing adverse effects on scenic quality and other natural resources. The plan provides recommendations for protecting air resources.

Geolcgical Resources

The protection of geological resources is important because the reserve was designated a national natural landmark for its nationally significant rock formations and the unusual processes that formed them. Rock climbing is very popular in the reserve and the Park Service supports technical rockclimbing as a legitimate recreational activity pursuant to NPS management policy. During scoping, some organizations and individuals were concerned that the use of certain technical climbing equipment alters the natural state of rock surfaces, and felt that such use violates NPS management policies and regulations. In recent years, climbing use at City of Rocks has dramatically changed with increased numbers of climbers and new climbing styles and technical equipment used. New technology, such as battery-powered rock drills, have substantially increased the amount of permanent climbing hardware attached to rock faces. Since 1991 however, a county ordinance has been in effect which restricts the use of drills and other power and audio equipment in the reserve. A study was also conducted to evaluate the effects of climbing on the Twin Sisters formation. In addition to technical climbing, rock scrambling is common among all types of users and is widespread throughout the reserve. Some people felt that the increasing use of chalk has also made visible chalk trails on rock faces. Natural rock cracks have been cleaned of dirt and small plants and lichen removed from rock faces with wire brushes. The plan recommends actions to encourage the use of low-impact climbing techniques and to study the effects of rockclimbing activities to determine if the natural state of rock formations or erosion processes in the reserve are being significantly altered. In addition to technical climbing, rock scrambling is common among all types of users and is widespread throughout the reserve.

Water Resources and Water Rights

Public Law 100-696 provided that the federally reserved water rights for that portion of Sawtooth National Forest acquired by City of Rocks National Reserve be transferred to the reserve. However, it excluded the creation of new federally reserved water rights for national park purposes.

To ensure adequate environmental conditions for wildlife and to perpetuate a natural ecological system, water requirements for City of Rocks National Reserve may prove to be much greater than that which can be provided through the exercise of reserved water rights and the state's appropriative rights. If additional water is required, the Park Service and the state of Idaho will need to develop strategies to obtain more water (in accordance with the substantive and procedural law of the state of Idaho) or alter the reserve's management objectives to function within the existing water rights.

Wildlife Management

Publlc Law 101-512 allows for hunting to continue in the reserve with the condition that hunting would be managed to minimize conflicts with other visitor uses. The management of the area may be transferred to the state of Idaho, and the Idaho Department of Fish and Game would continue to manage wildlife and hunting in the reserve according to NPS policies. During scoping some people felt that hunting and the use of firearms in the reserve conflicts with other recreational use and adversely affects wildlife in the reserve. The loss of hunting opportunities was also an issue.

The comprehensive management plan establishes broad objectives for wildlife management based on other reserve issues. A resource management plan that makes recommendations for wildlife management, hunting, and other natural resource concerns will be prepared after the comprehensive management plan is approved.

Threatened, Endangered, and Sensitive Species

There are no federally listed species that are known to occur in the reserve. However, the reserve contains potential habitat for ferruginous hawk and Townsend's bat, both designated by the Fish and Wildlife Service as category 2 species. There is only a limited amount of baseline information for these two species and other sensitive or rare species found in the reserve. Although some species inventories for plants and animals have been done, additional information about reserve species and their important habitat needs to be completed. Monitoring of rare and sensitive plant and animal components would be necessary to protect populations.

Domestic Livestock Grazing

The continuation of livestock grazing activities is important for maintaining the historic rural setting. There are 10 grazing allotments and 10 permittees in the reserve. Most of the individual allotments in the reserve also involve private, Bureau of Land Management lands, and Forest Service lands next to the reserve.

Several concerns need to be considered in the management of grazing within the reserve. The present level of grazing in specific locations may be damaging vegetation beyond the point of recovery. Grazing in sensitive resource areas such as riparian and wet meadow areas may be particularly damaging. Managing livestock to protect fragile wetlands and riparian areas is difficult because cattle are attracted by the large amount of forage and availability of water. Erosion associated with overgrazing may be affecting the water quality of streams and springs. Disease and competition for pasture are continuing concerns in managing both domestic livestock and native wildlife. Finally, as public use increases, there is the potential for conflicts between livestock and park visitors. The plan includes general proposals that address all of these concerns.

During early scoping and public involvement efforts for the City of Rocks comprehensive management plan, a topic of controversy focused on the continuation of livestock grazing in the reserve. A portion of the public wanted existing grazing rights maintained and livestock grazing continued in the reserve, while others felt that grazing was incompatible with the purpose of the reserve and should therefore be eliminated. The plan recommends actions that would ensure sound rangeland management, protect sensitive natural features, and provide strategies that would minimize conflicts between grazing and public use.

VISITOR USE

Interpretive/ Educational Opportunities

As a new unit of the national park system, City of Rocks lacks orientation, information, and interpretive services and media. This plan proposes a well-balanced visitor experience that provides opportunities for visitors to enjoy, understand, and appreciate the variety of natural and cultural resources. Specific media prescriptions will be identified through a separate interpretive prospectus, which will be carried out by the National Park Service. Once management of the reserve is transferred to the Idaho Department of Parks and Recreation, close cooperation will be necessary to ensure that the proposed actions proceed smoothly through the detailed planning, design, and construction phases.

The interpretive and educational potential of City of Rocks would depend in large part on the degree to which outstanding resources can be preserved and made accessible to the public. Because a large portion of the reserve, including most of the California Trail, is currently in private ownership, this would require acquisition of lands or interests in lands from willing sellers (see "Private Landowners and Livestock Grazing Permittees" on the following page).

A key interpretive issue is whether to focus almost exclusively on the California Trail story or to interpret the entire continuum of the area's history. The two action alternatives explore these two approaches. Visitors' understanding and appreciation of the area would be different, depending on which approach was selected.

Some of the traditional activities in the reserve would potentially conflict with interpretive and educational activities. For instance, improvements required for cattle grazing (fences, roads, water tanks) would intrude on the historic California Trail scene. Cattle also intimidate many people, and often the dung is offensive. Recreational activities, notably rockclimbing, would also intrude on a historic trail scene, especially in this area where rock outcrops formed the major landmarks along the trail. Finding ways to interpret the nationally significant stories at City of Rocks, while accommodating traditional land use, presents a major challenge.

Recreation

Rockclimbing. The popularity of technical rockclimbing at City of Rocks has increased significantly in the last decade. Few restrictions are currently placed on the numbers of climbers, access routes, or equipment that can be used. As a result, cliff faces have been scarred, many social trails have been made to the rocks, and conflicts have occurred between climbers and nonclimbing visitors to the

reserve. The comprehensive management and climbing management plan would propose ways to accommodate climbing activities, while protecting the key resources and interpretive values of the reserve.

horseback riding

Camping. No designated campgrounds exist within the reserve. Visitors currently camp in 78 numbered campsites dispersed along the road. This scattered use has resulted in trash problems and landscape scars created by social roads. Conflicts have also arisen between campers and other visitors along the rim of the Silent City of Rocks. The feasibility and extent of camping in the reserve needs to be defined.

Public Access and Accessibility

Hunting. Hunting is authorized by Congress as a compatible activity with City of Rocks and is to be managed in consultation with Idaho Fish and Game to ensure public safety and resource protection. Visitors expressed concern over hearing gunfire in the reserve in a 1991 visitor survey conducted in the reserve between August 30 and September 5, 1991 (NPS 1992).

Accessibility. Other than the current ranger/administrative office in Almo and the restrooms across from Bath Rock, few facilities in the reserve are accessible to people with disabilities. To provide full-spectrum accessibility to proposed facilities within the reserve, any developments must comply with the Uniform Federal Accessibility Standards and be applied during the design and construction of buildings and facilities to the extent required by the Architectural Barriers Act of 1968, as amended.

The design and construction of interpretive media and programs within buildings and on wayside exhibits must also promote full access by people with physical and mental disabilities.

LOCAL COMMUNITIES AND ECONOMY

Character of Surrounding Communities

Rural America is disappearing—subtle landscapes of fields and fencing are being replaced with suburban "ranchettes" and housing subdivisions. In Cassia County, Idaho, this rural image has been safe until now. In a county so homogenous in its heritage that zoning through gentleman's agreement has been effective, it is hard to realize that change brought about by the designation of City of Rocks National Reserve includes regulated zoning for the first time in the county's history.

In Almo, a gateway community of 175 to 250 people, providing for visitor services could change a one-intersection main street, where locals stroll unimpeded, into a trafficway for cars and RVs approaching the reserve. This small town, with fewer than 15 houses and only one general store, may be converted from a hardworking rural neighborhood into a tourist rest stop because of services required by visitors.

Visitors' need for lodging may create the largest structures in town. These could rival the turn-of-the-century store for visual prominence, or be of character, not sensitive to the architecture of the area. Another potential response to visitors' need for lodging could be construction of facilties in areas that would compromise the spaciousness of the open western countryside.

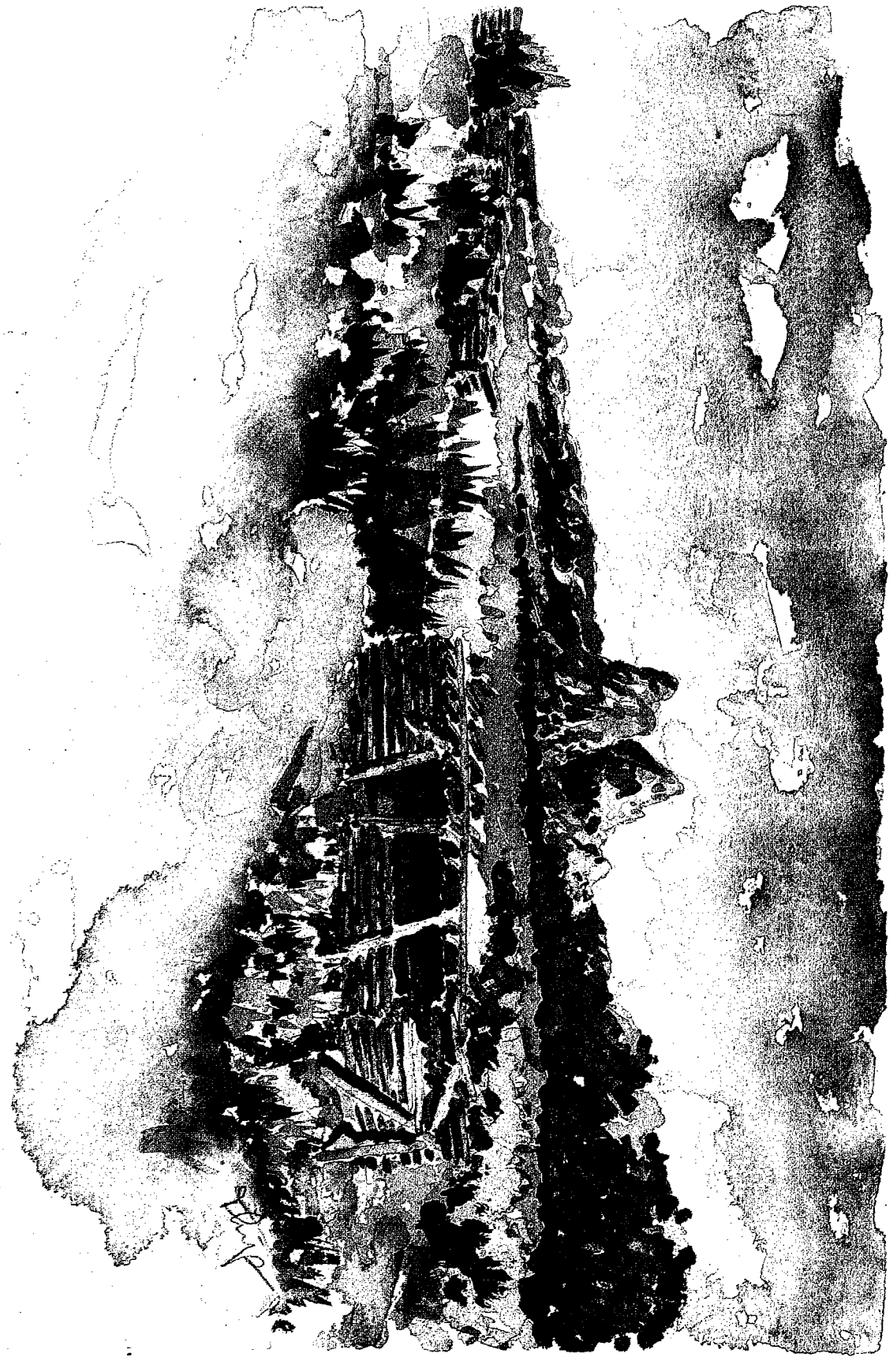
Private Landowners and Livestock Grazing Permittees

The plan forsees the likely need for acquisition of some private lands to increase interpretive and recreational opportunities and protect some wetlands inside the reserve. Such acquisitions would change established land-use patterns that could adversely impact private landowners. However, all interests in private property to be acquired for public purposes within the reserve would be only from willing sellers and would be compensated at fair market value for any interests to be acquired.

Most of the land in private ownership is used for domestic livestock grazing, which is important to the regional economy. Most of the public lands are divided into grazing allotments, and area ranchers rely heavily on federal rangelands. As increasing public use expands, the potential for conflicts between livestock and visitors on federal lands could increase.

Economic Conditions

Concern was expressed at public meetings regarding the costs of implementing the alternatives and the associated impacts on the local economy. The projected increase in number of jobs and the resulting tax revenue could affect the economy.



ALTERNATIVES, INCLUDING THE PROPOSED ACTION

INTRODUCTION

This section describes three alternatives that were analyzed as part of the development of the *Draft Comprehensive Management Plan* for the City of Rocks. The three alternatives are (1) no action/ minimum requirements, (2) the proposed action (used interchangeably with the proposal), which provides for preservation and interpretation of a wide cross section of cultural and natural resources while accommodating most of the existing recreational and private grazing use, and (3) an alternative that would greatly enhance the preservation and interpretation of the California Trail in a primitive natural setting while reducing the amount of recreational use and private grazing in the reserve. Alternative 2 has been revised since the draft plan. (A list of changes is provided in appendix I.) The alternatives were developed around a common management zoning scheme but would differ significantly in the amount and location of lands included in each zone. The zoning scheme for alternative 2 has been revised since the draft plan, while the zoning for alternatives 1 and 3 remains the same. The zoning scheme and the uses that would occur in each zone are outlined below, followed by maps and narrative showing the zoning for each alternative.

A summary comparison of development for the alternatives is shown in table 2 at the end of this chapter. Additional detail concerning development may be found in appendix E.

The intent of the comprehensive management plan is described in the management zoning system below and for each alternative. The management position on acquisition of interests in lands will be further defined in a land protection plan. (Please see the "Management Authorities and Responsibilities" section in part one of this document.)

ZONING FOR ALTERNATIVES 1 AND 3

Preservation and Public Education Zone

This zone would include subzones for the California Trail and the natural area (the two exceptional resource values identified for the reserve) and for the historic rural setting, the preservation and interpretation of which is one of the identified purposes of the reserve.

California Trail Subzone

Outstanding Features (major landmarks, trail remnants, inscription rocks, encampment area)

Emphasis on preserving outstanding features and interpreting them to the public. (NPS acquires fee title on an opportunity basis.)

- Walking, informal picnicking, nature viewing, photography
- No grazing
- No commercial or residential development

Public Access (entire trail corridor, southern encampment area)

Emphasis on allowing visitors to walk along the trail and to wander freely through the encampment area. (NPS acquires visitor access and development easements on an opportunity basis.)

- Walking; informal picnicking; nature viewing; photography; incidental, equipment-free scrambling on rocks
- Grazing continues on public and private lands
- No commercial or residential development

Natural Area Subzone

Outstanding Features (research natural area)

Emphasis on preserving outstanding features and interpreting them to the public. (Entire area currently in public ownership.)

- Nonmanipulative research by permit, walking, photography, nature viewing
- No grazing
- No commercial or residential development

General Natural Area

Emphasis on protecting important resource values. (NPS acquires fee title on an opportunity basis.)

- No grazing
- Hiking, informal picnicking, photography, nature viewing, minimum-impact climbing
- No commercial or residential development

Historic Rural Setting Subzone

Emphasis on preserving the historic rural setting that existed at the time the reserve was established. (NPS acquires development easements on an opportunity basis.)

Public Land

- Cross-country hiking, informal picnicking, photography, nature viewing, minimum-impact climbing
- Grazing continues
- No commercial or residential development

Private Land

- Recreation by permission of landowner only
- Reserve management would request that recreation be limited to the same uses listed for public land in this subzone
- Grazing continues
- No commercial or residential development

Recreation Zone

This zone would include prime recreational areas that provide opportunities for resource-based recreation.

Emphasis on recreational use (NPS acquires fee title on an opportunity basis)

- Climbing, camping, hiking, picnicking, photography, sightseeing
- No grazing
- No commercial or residential development

Development Zone

This zone would include areas for facilities needed to support visitor use and reserve operations.

Emphasis on providing facilities needed to support visitor use and park operations. (NPS acquires fee title on an opportunity basis.)

- Driving, bicycling, picnicking, camping, visitor education facilities
- No grazing
- No commercial or residential development

Private Land

Overlaps zoning. Remains in private use under county zoning unless government acquires sufficient interest on an opportunity basis.

ZONING FOR ALTERNATIVE 2

This zone would include subzones for the California Trail and the natural area (the two exceptional resource values identified for the reserve).

Historic and Natural Preservation Zone

California Trail Subzone

Emphasis on preserving outstanding features (major landmarks, California trail corridor, trail remnants, inscription rocks, encampment area) and interpreting them to the public. For the purpose of zoning in alternative 2 (the proposal) the term California Trail includes the Salt Lake Alternate.

- NPS acquires fee title, visitor access and development easements on an opportunity basis
- No grazing in wetland and riparian areas on public land

Natural Area Subzone

Emphasis on preservation of exceptional natural resource values and providing recreational opportunities where appropriate.

Research Natural Area

Emphasis on protection of natural processes and conducting nonmanipulative research use by permit only.

- No grazing

General Natural Area

Emphasis on protecting important natural resource values and providing for a level of public and private use that does not degrade the natural qualities of the area. (NPS acquires fee title on an opportunity basis.)

- No grazing on wetland and riparian areas on public land

Natural and Recreational Resource Area

Emphasis on providing prime resource-based recreational opportunities in balance with the protection of natural resources. No grazing.

- Entire area in public ownership

Historic Rural Setting Zone

Emphasis on preserving the historic rural setting that existed at the time the reserve was established. (NPS acquires development easements on an opportunity basis.) Climbing and grazing use would be determined by the climbing and grazing management plans.

Public Use and Development Zone

This zone would include areas for facilities needed to support visitor use and reserve operations.

Emphasis on providing facilities needed to support visitor use and park operations. (NPS acquires fee title on an opportunity basis.)

Private Land

Overlaps zoning. Remains in private use under county zoning unless government acquires sufficient interest on an opportunity basis.

ALTERNATIVE 1: NO ACTION

CONCEPT

Alternative 1 constitutes the minimum requirements alternative. Under the no-action alternative there would be no significant change in present management or visitor use. Reserve managers would take the minimum actions necessary to meet legislative requirements, to protect natural and cultural resources, and to address health and safety concerns, but few additional interpretive or recreational programs or facilities would be provided. Livestock grazing would continue on private and most of the public land.

MANAGEMENT ZONING

Management zoning would reflect minimum changes to existing conditions (see Alternative 1 map for zoning and development proposals).

All of the private and most of the public lands in the reserve would be placed in the historic rural setting subzone, where they would be managed to preserve and let visitors experience the historic resources and ongoing ranching activities that characterized the historic rural setting at the time the reserve was established. Livestock grazing would be the principal use of lands in this zone, although day recreation would be an allowable activity on the public lands. Livestock trailing would occur along the north-south and east-west road corridors.

There would be no California Trail subzone in the no-action alternative. Although most of the national reserve is included in a designated national historic landmark for its significant association with the California Trail, the majority of historic resources remain in private ownership, and actions by federal and state land management agencies to protect or interpret cultural resources have been and would be expected to remain minimal. No areas of special concern for cultural resources protection outside the reserve would be identified.

The research natural area would be placed in the natural area subzone, where it would continue to be managed to preserve the exceptional natural resource values of portions of the crescent-shaped rock outcrop. Private recreational use would not occur in this zone.

All of section 36 would be placed in the recreation zone. Principal uses in this zone would be hiking, picnicking, camping, and rockclimbing, with management attention directed at natural resource values.

No special county zoning would be enacted for the reserve under this alternative.

VISITOR USE

The primary visitor attractions would continue to be the California Trail and the recreational opportunities in section 36. The educational experience that visitors received would be largely self-guided and self-determined. The current ranger/ administrative station near Almo would remain as the only public contact point for the reserve. Interpretive media would be limited to the brochure distributed at the ranger station and other publications that might be sold there.

Rock climbing would be permitted on all rocks on public land except the inscription rocks, research natural area, and Pinnacle Pass. People could camp anywhere except the research natural area, and large groups could continue to camp behind Breadloaves. Hunting would be permitted in the reserve, except for section 36 and the research natural area where it is currently prohibited. People would have to obtain permission from landowners to enter, hike, climb, hunt, or camp on private property.

RESOURCE MANAGEMENT

Grazing allotments and visitor use would continue to be managed under the existing management programs of the Bureau of Land Management, U.S. Forest Service, and Idaho Department of Parks and Recreation. Reserve staff would protect certain areas from further resource damage and control the continued growth of new sites as visitation increased. Actions to manage cultural resources would remain limited. Most significant resources would remain in private ownership. Private landowners could request technical assistance through existing state and federal programs, but the reserve would not be staffed to take an active role in facilitating use of these programs.

Climbing use on the Twin Sisters formation would continue. Picnicking would continue in proximity to Twin Sisters formation.

DEVELOPMENT

The existing road network, parking areas, campsites, restrooms, information kiosks, and picnic sites would be retained. Proposed development under this alternative is listed and compared to the development that would occur under alternatives 2 and 3 in table 2 at the end of this section. A detailed description of development actions for all alternatives is in appendix E.

PRESERVATION AND PUBLIC EDUCATION ZONE

Natural Area Subzone

Outstanding Features (research natural area): Emphasis on preserving outstanding features and interpreting them to the public; entire area currently in public ownership.

- Nonmanipulative research by permit, walking, photography, nature viewing • No grazing • No commercial or residential development

General Natural Area: Emphasis on protecting important resource values.

- Hiking, informal picnicking, photography, nature viewing, minimum-impact climbing • No grazing • No commercial or residential development

Historic Rural Setting Subzone: Emphasis on preserving the historic rural setting that existed at the time the reserve was established.

Public Land

- Cross-country hiking, informal picnicking, photography, nature viewing, minimum-impact climbing • Grazing continues • No commercial or residential development

Private Land

- Recreation by permission of landowner only • Reserve management would request that recreation be limited to the same uses listed for public land in this subzone • Grazing continues • No commercial or residential development

RECREATION ZONE: Emphasis on recreational use

- Climbing, camping, hiking, picnicking, photography, sightseeing • No grazing • No commercial or residential development

DEVELOPMENT ZONE: Emphasis on providing facilities needed to support visitor use and reserve operations.

- Driving, bicycling, picnicking, camping, visitor education facilities • No grazing • No commercial or residential development

NOTE: Private land overlaps zoning. Remains in private use under county zoning unless government acquires sufficient interest on an opportunity basis.

ALTERNATIVE 1
NO ACTION
CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service
003 • 20042B • DSC • AUGUST 93

PRESERVATION AND PUBLIC EDUCATION ZONE

NATURAL AREA SUBZONE

OUTSTANDING FEATURES

HISTORIC RURAL SETTING SUBZONE

PRIVATE LAND

PUBLIC LAND

RECREATION

EXISTING FEATURES

CALIFORNIA TRAIL CORRIDOR

GRAVEL ROAD (no change)

CAMPING (defined sites)

TRAIL

LIVESTOCK TRAILING CORRIDOR

SALT LAKE ALTERNATE TRAIL

BEST PRESERVED WAGON RUT REMNANT

PASSES ON TRAIL

NATIONAL RESERVE BOUNDARY

NOTE: See alternative 1 discussion for additional facilities.

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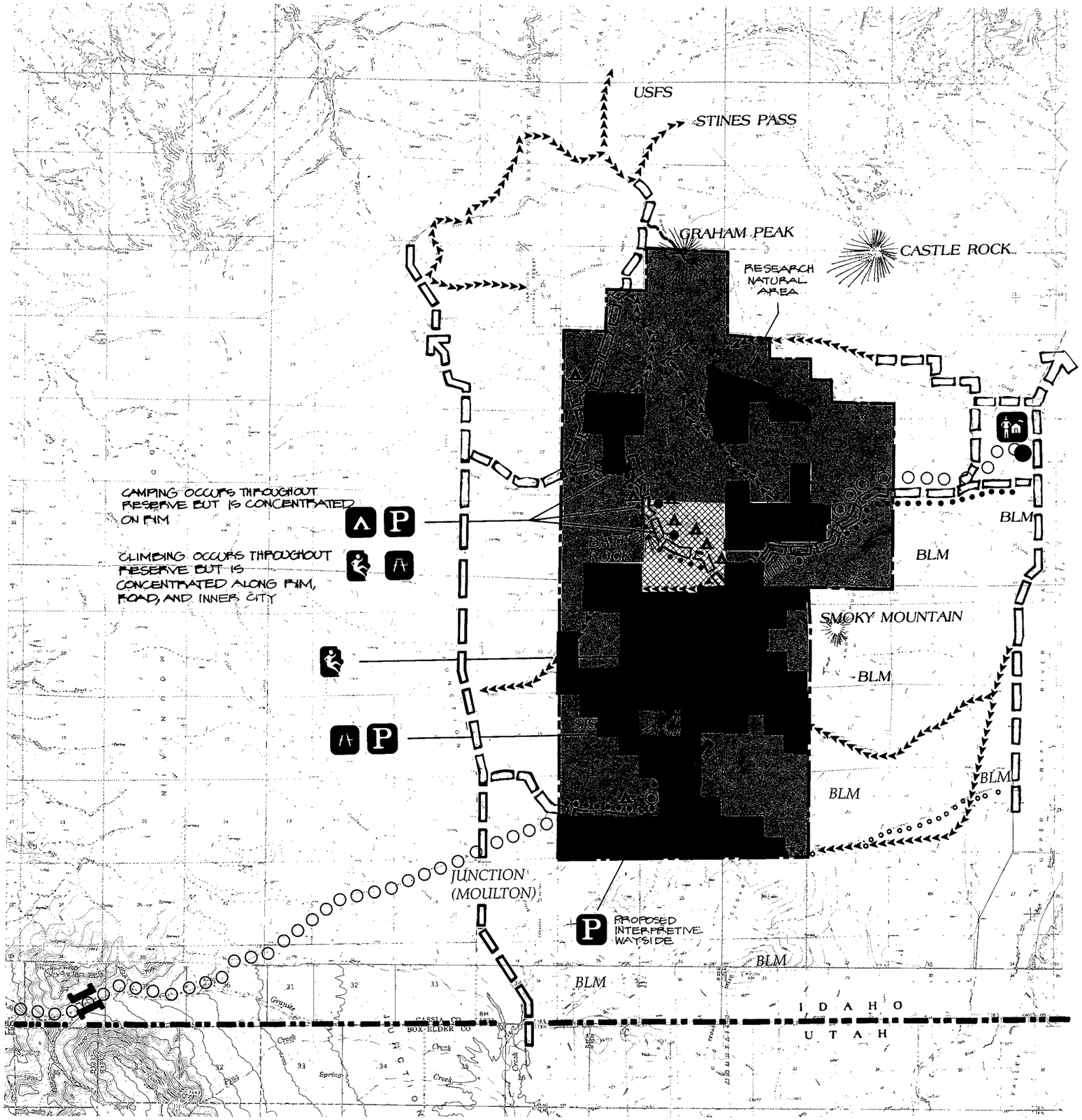
USFS
STINES PASS
GRAHAM PEAK
CASTLE ROCK
RESEARCH NATURAL AREA
CAMPING OCCURS THROUGHOUT RESERVE BUT IS CONCENTRATED ON RIM
CLIMBING OCCURS THROUGHOUT RESERVE BUT IS CONCENTRATED ALONG RIM, ROAD, AND INNER CITY
BATH ROCK
BLM
BLM
SMOKY MOUNTAIN
BLM
BLM
BLM
JUNCTION (MOULTON)
PROPOSED INTERPRETIVE WAYSIDE
BLM
BLM
IDAHO
UTAH
BOX ELDER CO
CASSIA CO

ALTERNATIVE 2: HISTORIC CONTINUUM (PROPOSAL)

CONCEPT

Alternative 2 would preserve and interpret a wide cross section of cultural resources representative of the continuum of history at City of Rocks, expand opportunities for recreational use (principally developed camping), protect natural and scenic values, and leave portions of the reserve in private ownership.

MANAGEMENT ZONING

In the following zoning scheme certain private lands may be shown as included in a zone intended for public use because they were considered by the planning team to be the most suited for that use. In actuality, no private lands would be included in a public use zone without the acquisition, on an opportunity basis, of a sufficient public interest (such as an access easement, a preservation easement, or fee title) to allow for the proposed new use. (See Alternative 2 map for zoning and development proposals.)

Historic and Natural Preservation Zone

California Trail Subzone. This subzone would include the major landmarks, trail remnants, and inscription rocks associated with the California Trail. The foreground of the California Trail area would be approximately 0.5 mile wide along most of the trail corridor but would include Twin Sisters. Its purpose would be to protect the foregrounds of the views from the trails and to allow visitors to experience a landscape reminiscent of the trail period. Most uses within this zone would relate directly to the preservation and interpretation of California Trail-related resources. However, to minimize impacts on traditional private use, livestock grazing would continue to be allowed in some portions of the trail subzone. Twin Sisters, Pinnacle Pass, three of the best trail remnants, the inscription rocks, a portion of the Circle Creek encampment area, and the stage station would be enclosed, and cattle would be excluded from these areas to provide maximum resource protection and to allow visitors to enjoy the areas without having to be concerned about grazing cattle. The National Park Service would acquire fee title to these outstanding areas on an opportunity basis so that they could be enclosed and use could be focused exclusively on interpretive (educational) activities. Grazing and trailing would be excluded from wetlands and riparian areas on public land.

For the remainder of the lands within this zone, the National Park Service would acquire visitor access and development easements on an opportunity basis to allow visitors the opportunity to experience these areas in their currently undeveloped state. The National Park Service would seek sufficient interest in these lands to complement county zoning and to ensure that incompatible commercial or residential development did not occur in the historic viewshed.

Natural Area Subzone. This subzone would include most of the crescent-shaped rock outcrops of the Circle Creek basin, the ridgeline and northern slopes of the reserve, the research natural area, and most of the Indian Grove and Graham Peak areas. Use of this area would focus on natural resource preservation. The National Park Service would seek to acquire the private lands in this subzone on an opportunity basis to protect sensitive habitats and scenic vistas from livestock grazing and development. Grazing and trailing of livestock would be excluded from wetlands and riparian areas on public land in some portions of this subzone.

The use of the research natural area, which is under public ownership, would be nonmanipulative research, education, and other activities that would not detract from the area's research values. Use would be regulated through a permit system. Approximately 100 acres are proposed for addition on the western side.

Historic Rural Setting Zone

Most of the private lands in the reserve, along with some public lands outside the historic and natural preservation zone, are in this subzone. The management intent would be to preserve the historic rural setting and to perpetuate ongoing ranching activities that captured the rural character of the reserve at the time of its establishment. Uses of lands in this subzone would include continued ranching use. Interpretive opportunities would be provided, and day recreation would also be a permitted activity on public lands. The National Park Service would acquire development rights on an opportunity basis to protect the open ranchland character of this subzone from incompatible development.

The area of public land adjacent to and west of the research natural area would be subject to more intense natural resource monitoring and management than other grazing areas to ensure that sensitive habitats were not degraded.

HISTORIC AND NATURAL PRESERVATION ZONE

California Trail Subzone: Emphasis on preserving outstanding features (major landmarks, trail remnants, inscription rocks, encampment area, California Trail corridor) and interpreting them to the public.

Foreground of California Trail

Emphasis on preserving the California Trail corridor and interpreting it to the public. Recreation uses not directly associated with the access or the enjoyment and interpretation of the California Trail would generally be precluded. Precluded activities would be the siting of recreation facilities such as campgrounds and picnic areas and recreation uses such as bicycling, climbing, or scrambling on the Inscription Rocks, Twin Sisters formation, Pinnacle Pass, and other physical features that have cultural significance. Grazing would be discontinued on areas shown in appendix J.

General Use

Emphasis on preserving outstanding features outside the foreground of the California Trail corridor.

Recreation uses not directly associated with access, enjoyment, and interpretation of the California Trail would generally be precluded. Climbing use would be determined based on the climbing management plan. Grazing would be discontinued on areas shown in appendix J. Grazing use in other parts of this area would be determined by the natural resource management plan and grazing management plan.

Natural Area Subzone: Emphasis on preserving exceptional natural resource values and providing recreational opportunities where appropriate.

Research Natural Area

Emphasis on protecting natural processes and conducting nonmanipulative research. Use by permit only. Grazing would not occur.

General Natural Area

Emphasis on protecting important natural resource values and providing for a level of public and private use that does not degrade the natural qualities of the area. Registration required. Grazing would be discontinued on areas shown in appendix J. Grazing in other areas would be determined by the natural resource management plan and grazing management plan.

Natural and Recreational Resource Area

Emphasis on providing prime resource-based recreational opportunities managed in balance with the protection of natural resources. No grazing.

HISTORIC RURAL SETTING ZONE

Emphasis on preserving the historic rural setting that existed at the time the reserve was established. Climbing and grazing use would be determined by the climbing and grazing management plans.

PUBLIC USE AND DEVELOPMENT ZONE

Emphasis on providing facilities needed to support visitor use and reserve opportunities.

NOTE: Private land overlaps zoning. Remains in private use under county zoning unless government acquires sufficient interest on an opportunity basis.

ALTERNATIVE 2
HISTORIC CONTINUUM (PROPOSAL)
CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service
003 • 20040C • DSC • MAY 94

HISTORIC AND NATURAL PRESERVATION ZONE

CALIFORNIA TRAIL SUBZONE

- FOREGROUND OF CALIFORNIA TRAIL
- GENERAL USE

NATURAL AREA SUBZONE

- RESEARCH NATURAL AREA
- GENERAL NATURAL AREA
- NATURAL AND RECREATIONAL RESOURCE AREA

HISTORIC RURAL SETTING ZONE

- PRIVATE LAND
- PUBLIC LAND

PUBLIC USE AND DEVELOPMENT ZONE

- GRAVEL ROAD (proposed)
- RANCH ROAD
- MINOR ROAD
- TRAIL

EXISTING FEATURES

- CALIFORNIA TRAIL CORRIDOR
- LIVESTOCK TRAILING CORRIDOR
- SALT LAKE ALTERNATE TRAIL
- BEST PRESERVED WAGON RUT REMNANT
- PASSES ON TRAIL
- NATIONAL RESERVE BOUNDARY

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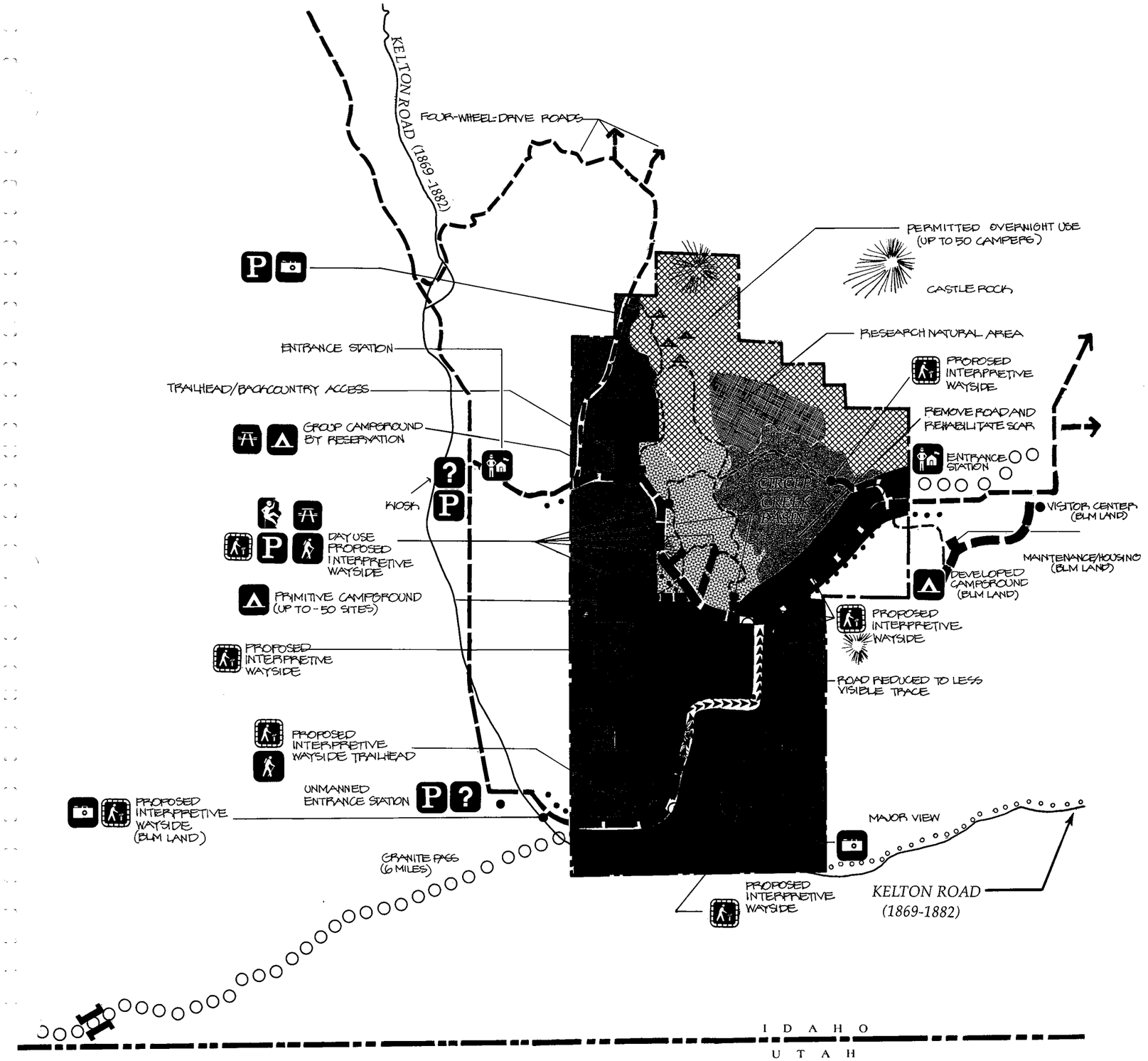

KELTON ROAD (1869-1882)
FOUR-WHEEL-DRIVE ROADS
PERMITTED OVERNIGHT USE (UP TO 50 CAMPERS)
CASTLE ROCK
RESEARCH NATURAL AREA
PROPOSED INTERPRETIVE WAYSIDE
REMOVE ROAD AND REHABILITATE SCAR
ENTRANCE STATION
ENTRANCE STATION
TRAILHEAD/BACKCOUNTRY ACCESS
GROUP CAMPGROUND BY RESERVATION
KIOSK
CIRQUE CREEK BASIN
VISITOR CENTER (BLM LAND)
MAINTENANCE/HOUSING (BLM LAND)
DAY USE PROPOSED INTERPRETIVE WAYSIDE
DEVELOPED CAMPGROUND (BLM LAND)
PRIMITIVE CAMPGROUND (UP TO-50 SITES)
PROPOSED INTERPRETIVE WAYSIDE
PROPOSED INTERPRETIVE WAYSIDE
ROAD REDUCED TO LESS VISIBLE TRACE
PROPOSED INTERPRETIVE WAYSIDE TRAILHEAD
UNMANNED ENTRANCE STATION
PROPOSED INTERPRETIVE WAYSIDE (BLM LAND)
MAJOR VIEW
GRANITE PASS (6 MILES)
PROPOSED INTERPRETIVE WAYSIDE
KELTON ROAD (1869-1882)
IDAHO
UTAH

Public Use and Development Zone

This zone would include modest facilities essential to visitor enjoyment of resources, such as access roads, parking pulloffs, trails, picnic sites, tent campsites, and comfort facilities. The National Park Service would acquire fee title to lands needed for development on an opportunity basis.

COUNTY ZONING

Cassia County would promulgate zoning to preclude commercial and industrial development within the reserve. Residential development in the reserve would be limited to one residence per owner of record at the time the enabling legislation was enacted. The county would adopt design guidelines to minimize the effects of residential development on the historic rural setting.

The protection of historic views extending beyond the reserve boundary would also be a priority. Areas of special concern for their historic landscape values would include

- the foreground of the views along the entrance road from Almo, which is also the route of the historic trail and from which the rock outcrops are first sighted
- the view from the trail looking east toward Smoky Mountain
- the views to the south and east from Pinnacle Pass
- the foreground of the views from the segment of the trail west of the reserve boundary leading to Granite Pass, which was the next guiding landmark beyond Pinnacle Pass and a major milestone on the journey to California

Other areas would be of special concern because of their importance to visitors' first impressions of the reserve. They would include the foregrounds of the views along the Oakley and Junction (Moulton) entrance roads.

The National Park Service, the Idaho Department of Parks and Recreation, and Cassia County would offer to work in partnership with landowners in these areas to encourage complementary management consistency with design guidelines designed to perpetuate a historic rural setting compatible with the one existing inside the reserve.

VISITOR USE

In addition to the California Trail story, stories would be told of the people who settled here, beginning with the prehistoric Indians and continuing through the Shoshones, the early cattlemen, the homesteaders, and the ranchers who run cattle in the reserve today. Some of the reserve's exceptional natural resource areas and habitats would also be interpreted to show how changes in vegetation and wildlife have resulted from climatic influences and human manipulation.

A new City of Rocks visitor center would be constructed outside the reserve at the Almo Junction. An east-west road would lead from the visitor center to interpretive waysides and trailheads at the Circle Creek Basin overlook, the Nicholson ranch, the inscription rocks, a high point overlooking the Twin Sisters basin, the rim of the Silent City, and Indian Grove. To reach the stage station and Twin Sisters areas, visitors would exit the west side of the reserve, travel south on the county road, and re-enter the reserve via the existing road farther south. A system of hiking and horseback riding trails would encourage visitors to leave their cars and spend time exploring the reserve on foot or horseback. The reserve staff would work closely with the surrounding communities to develop a loop tour route that would link related sites outside the reserve, greatly enhancing visitors' opportunities to see and experience sites related to the area's history.

The majority of climbing rocks would remain available to rock climbers; however, climbing would not occur in the research natural area, where the activity would be visible from 1/4 mile of each side of the California Trail or in the Twin Sisters vicinity, Pinnacle Pass, the inscription rocks, and other physical features that have cultural significance. Trails would be designated to the more heavily climbed rocks to reduce the number of social trails to the rock faces. A climbing management plan developed with input from the local climbing community would define strategies for protecting sensitive resources from climbing impacts.

Primitive camping, group camping, and backcountry camping would be available within the reserve. A tent campground of up to 50 sites would be provided in the southwest corner of section 36, a three-group campground would be provided near Breadloaves, and up to seven backcountry sites would be available for up to 50 people in the Indian Grove area. A 100-site developed campground would be provided outside the reserve boundary phased in 50-unit increments.

also a horse staging area is proposed here (p. 53) (p. 344)

RESOURCE MANAGEMENT

The proposed action would establish a more systematic and comprehensive program for the preservation, protection, and interpretation of cultural resources. Archeological and historic sites would be inventoried, and resources illustrating the history of the area, including archeological sites at Indian Grove, California Trail landmarks and remnants, the inscription rocks, the stage station site, a historic homestead site, and the Nicholson ranch, would be preserved. A list of sites that could be interpreted is shown in table 2. All actions would comply with section 106 of the 1966 National Historic Preservation Act as amended (16 USC 470 et seq.) and its implementing federal regulations.

Reserve managers would strive to maintain the highest degree of integrity of the air, water, biological, geological, and scenic resources in the reserve by establishing a resource baseline to determine the present condition of these resources, monitoring changes to resource conditions, identifying and, if possible, mitigating the sources of changes. The picnic area adjacent to Twin Sisters and associated parking area would be relocated to the south side of the road across from Twin Sisters. Reserve managers would continue to cooperate with the Bureau of Land Management, U.S. Forest Service, state and local governments, and landowners to pursue compatible management on adjacent lands. A resource management plan would be developed to guide resource management. A detailed discussion of the topics to be covered in the plan is provided in part one of this document in the "Resource Management" section.

Management actions to protect the natural environment would include the following:

Some areas might be closed to recreational use during certain times to avoid adverse effects on sensitive resources, such as nesting golden eagles.

Wetlands would be protected from vegetation trampling, soil compaction and erosion, and pollution.

The use of recreation vehicles, including nonmotorized trail bikes and snowmachines, would be confined to roads and trails specifically designated for those uses.

Unauthorized roads and trails would be closed and allowed to revegetate.

Camping would be managed under a permit system and would be allowed only in designated campsites.

Heavily disturbed areas would be revegetated.

To help preserve the sense of quiet and awe that is a significant value associated with the City of Rocks, no noise-generating equipment, including generators, radios, or power tools, would be allowed away from the road corridors. No firearm use would be allowed except for the purpose of hunting.

For areas where grazing would be allowed, a grazing management plan directed at protecting the natural diversity of native biological communities would be developed and implemented.

DEVELOPMENT

Development inside the reserve would include the east-west road and the road from the Junction (Moulton) entrance to Twin Sisters with interpretive overlooks, four picnic areas, a primitive campground, a group campground, and a system of hiking and horseback riding trails and appropriate trail heads and staging areas. A visitor center and administrative facility would be established outside the reserve boundary at the City of Rocks junction on the Almo road. A maintenance area, developed campground, and amphitheater would also be built outside the reserve on Bureau of Land Management property. The east-west road that crosses the reserve would be relocated south of the inscription rocks and the Silent City. Secondary dirt roads would be closed to all use except access to private land. Specific development under the proposal is compared to the development that would occur under alternatives 1 and 3 in table 2 at the end of this section. A detailed description of development actions for all alternatives is in appendix E.

ALTERNATIVE 3: CALIFORNIA TRAIL EMPHASIS

CONCEPT

Alternative 3 would greatly enhance the protection of the reserve's exceptional cultural, natural, and scenic resources and tell the California Trail story through a variety of media and interpretive programs, while allowing for reduced amounts of compatible recreational and private use.

MANAGEMENT ZONING

Most of the exceptional cultural, natural, and scenic resource areas in the reserve, including the landscape visible from the historic trails and the essential habitat for species of special concern, would be included in the California Trail subzone or the natural area subzone. Because most of these areas are now in private ownership, this alternative would require the acquisition of public interests in these lands on an opportunity basis. Outside the preservation zone, the public lands would be managed for recreational use, and the private lands would remain in livestock grazing. Livestock trailing would be allowed along the east-west road corridor between Almo and Oakley on a permit basis. (See alternative 3 map for zoning and development proposals.)

In the following zoning scheme certain private lands may be shown as included in a zone intended for public use because they were considered by the planning team to be the most suited for that use. In actuality, no private lands would be included in a public use zone without the acquisition, on an opportunity basis, of a sufficient public interest (such as an access easement, a preservation easement, or fee title) to allow for the proposed new use.

Preservation and Public Education Zone

California Trail Subzone. The California Trail subzone would be expanded under alternative 3 to include not only the trail corridors and the Circle Creek basin, but also the foreground and the middle ground of the views seen from these areas. It would also include a portion of the western arm of the rock crescent to provide a silence overlook from which visitors could experience a quietness reminiscent of the trail period. The National Park Service would acquire fee title to these outstanding areas on an opportunity basis so that they could be available exclusively for interpretive (educational) activities. The management intent of this subzone would be to preserve the major landmarks, trail remnants, inscription rocks and viewshed associated with the California Trail and to give visitors the opportunity to walk the entire length of the trail while experiencing the trail and its historic landscape in a natural state, looking much as it did at the time of the overland emigration. Modern intrusions, such as roads, vehicles, corrals, grazing cattle, and recreational rockclimbing, would be removed from the scene.

Natural Area Subzone. The natural area subzone would be expanded over alternative 2 to include most of the rock crescent, the Twin Sisters ridge, and the habitats associated with them. Only a small portion of the crescent containing the most popular climbing rocks would be excluded from this zone. This subzone would also include an important stand of piñon/juniper woodland at the northern extent of its range.

Use of this area would focus on natural resource preservation. The National Park Service would acquire fee title on an opportunity basis to protect exceptional and important resource values. The research natural area would be expanded to encompass the entire area that was originally proposed. Use throughout this zone would generally be limited to helping the public see and learn about natural resources to the extent possible without causing resource damage. However, opportunities for backcountry day recreation, including dispersed hiking and climbing, would be available in the piñon/juniper woodland in the southeast portion of the reserve. As in the other alternatives, the proposed use of the Twin Sisters formation may be modified based upon research/data obtained during the moratorium on climbing use.

The front country recreation area, which is under public ownership, would include the portion of the southern arm of the rock crescent containing the most popular areas for hiking, picnicking, and rockclimbing. This area would be managed to support day recreation with attention to protecting natural resource values. No overnight use would occur in the reserve.

Historic Rural Setting Subzone. Three parcels of private land outside the exceptional resource areas would be placed in this subzone. Although the historic rural setting would not be an interpretive theme under this alternative, private grazing use would be considered a compatible use in areas outside the viewshed of the California Trail and

away from the rock outcrops. These private lands would not be accessible to the public without the owners' permission. The National Park Service would acquire development rights on an opportunity basis to protect the open ranchland character of this zone from incompatible development.

Development Zone

Only facilities essential to interpretation and day recreation in specific designated areas would be provided in the reserve. No backcountry trails or campsites would be provided. The National Park Service would acquire fee title to lands needed for development on an opportunity basis.

COUNTY ZONING

County zoning would be the same as described for alternative 2 and would include areas of special concern outside the reserve boundaries.

VISITOR USE

Greater emphasis would be placed on helping visitors experience the historic trails, while allowing them to maintain a sense of discovery and self reliance. The routes of both the California Trail and the Salt Lake Alternate would be protected and made accessible at many points so that people could walk along as much or as little of the trail corridors as they wished. The trails would not be fenced because it would alter the wide-open character of the landscape as it appeared in 1843-69. The best preserved trail segments and the inscription rocks would be preserved for visitors to see, and a variety of programs would be provided inside the reserve to tell stories about the discovery and use of the trail route and other aspects of the great westward movement of Americans in the mid 1800s. Other aspects of the historic continuum would receive attention only to the extent of providing an interpretive and historical context for understanding the trail era.

As described under alternative 2, a visitor center would be established outside the reserve boundary at the Almo junction, and an east-west road would lead from the center to interpretive overlooks and day use areas inside the reserve. The road from the Junction (Moulton) entrance to Twin Sisters would lead to interpretive waysides and portions of the California Trail in the southern end of the reserve. The reserve staff would also work closely with the surrounding communities to develop a loop tour route that would link related sites outside the reserve.

The reserve would be managed as a day use area only, with development to support recreational use minimized to avoid intrusions into the historic scene. The area open for rockclimbing would extend from just north of Bath Rock to the southern and western edges of the enlarged research natural area. No campsites would be available inside the reserve and no recreational trails would be developed. Visitors would be encouraged to walk and hike along the historic trail corridors following natural landmarks much as the emigrants did.

RESOURCE MANAGEMENT

Reserve managers would seek to return the area as much as possible to a more natural setting without modern intrusions, but they would not attempt to re-create a trail scene with all the attendant activity and environmental impacts associated with the period of peak emigration. All cultural resources unrelated to the trail, including the Nicholson ranch buildings and the ranch buildings at the stage station site, would be inventoried, evaluated, and protected in accordance with a cultural resource management plan.

Management would also seek fee title to all lands visible from the trail corridors. Livestock grazing would be excluded from these public lands, and the vegetation visible from the trails would be managed as much as possible to create a more historic appearance. Reserve managers would work cooperatively with adjacent private landowners to restore the native grasslands and reverse the encroachment of piñon-juniper that has accelerated as a result of overgrazing and the absence of natural fire in the ecosystem. All actions taken to promote native species, simulate the effects of natural fire, and control noxious weeds would be developed after full consideration of all the concerns of the multiple owners and managers within the reserve. If suitable habitat could be maintained and incompatibility problems with domestic livestock could be solved, consideration would be given to reintroducing native wildlife, such as bighorn sheep.

The research natural area would be expanded to include more of the rock crescent that provides potential habitat for species of special concern and some vegetation types not found within the existing boundaries. This addition was part of the original proposal for the research natural area but was not subsequently included in the designated area.

As in alternative 2, reserve managers would strive to maintain the highest degree of integrity of the air, water, biological, geological, and scenic resources in the reserve by establishing a resource baseline to determine the present condition of these resources, monitoring changes to resource conditions, and

PRESERVATION AND PUBLIC EDUCATION ZONE

California Trail Subzone: *Outstanding Features (major landmarks, trail remnants, inscription rocks, encampment area): Emphasis on preserving outstanding features and interpreting them to the public.*

- Walking, informal picnicking, nature viewing, photography • No grazing • No commercial or residential development

Public Access (entire trail corridor, encampment area): Emphasis on allowing visitors to walk along the trail and to wander freely through the encampment area.

- Walking; informal picnicking; nature viewing; photography; incidental, equipment-free scrambling on rocks • Grazing on public and private lands • No commercial or residential development

Natural Area Subzone: *Outstanding features (research natural area): Emphasis on preserving outstanding features and interpreting them to the public (entire area currently in public ownership).*

- Nonmanipulative research by permit, walking, photography, nature viewing • No grazing • No commercial or residential development

General Natural Area: Emphasis on protecting important resource values.

- Hiking, informal picnicking, photography, nature viewing, minimum-impact climbing • No grazing • No commercial or residential development

Front country recreation: Emphasis on recreational use with management attention to protect natural resources.

- Climbing, camping, hiking, picnicking, photography, sightseeing • No grazing • No commercial or residential development

Historic Rural Setting Subzone: Emphasis on preserving the historic rural setting that existed at the time the reserve was established.

Public Land

- Cross-country hiking, informal picnicking, photography, nature viewing, minimum-impact climbing • Grazing continued • No commercial or residential development

Private Land

- Recreation by permission of landowner only • Reserve management would request that recreation be limited to the same uses listed for public land in this subzone • Grazing continued • No commercial or residential development

DEVELOPMENT ZONE: Emphasis on providing facilities needed to support visitor use and reserve operations.

- Driving, bicycling, picnicking, camping, visitor education facilities • No grazing • No commercial or residential development

NOTE: Private land overlaps zoning. Remains in private use under county zoning unless government acquires sufficient interest on an opportunity basis.

ALTERNATIVE 3
CALIFORNIA TRAIL EMPHASIS
CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service
003 • 20039 A • DSC • AUGUST 93

PRESERVATION AND PUBLIC EDUCATION ZONE

CALIFORNIA TRAIL SUBZONE

- OUTSTANDING FEATURES

NATURAL AREA SUBZONE

- OUTSTANDING FEATURES
- GENERAL NATURAL AREA
- FRONT COUNTRY RECREATION (natural resource impact monitoring)

HISTORIC RURAL SETTING SUBZONE

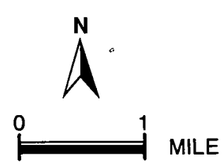
- PRIVATE LAND

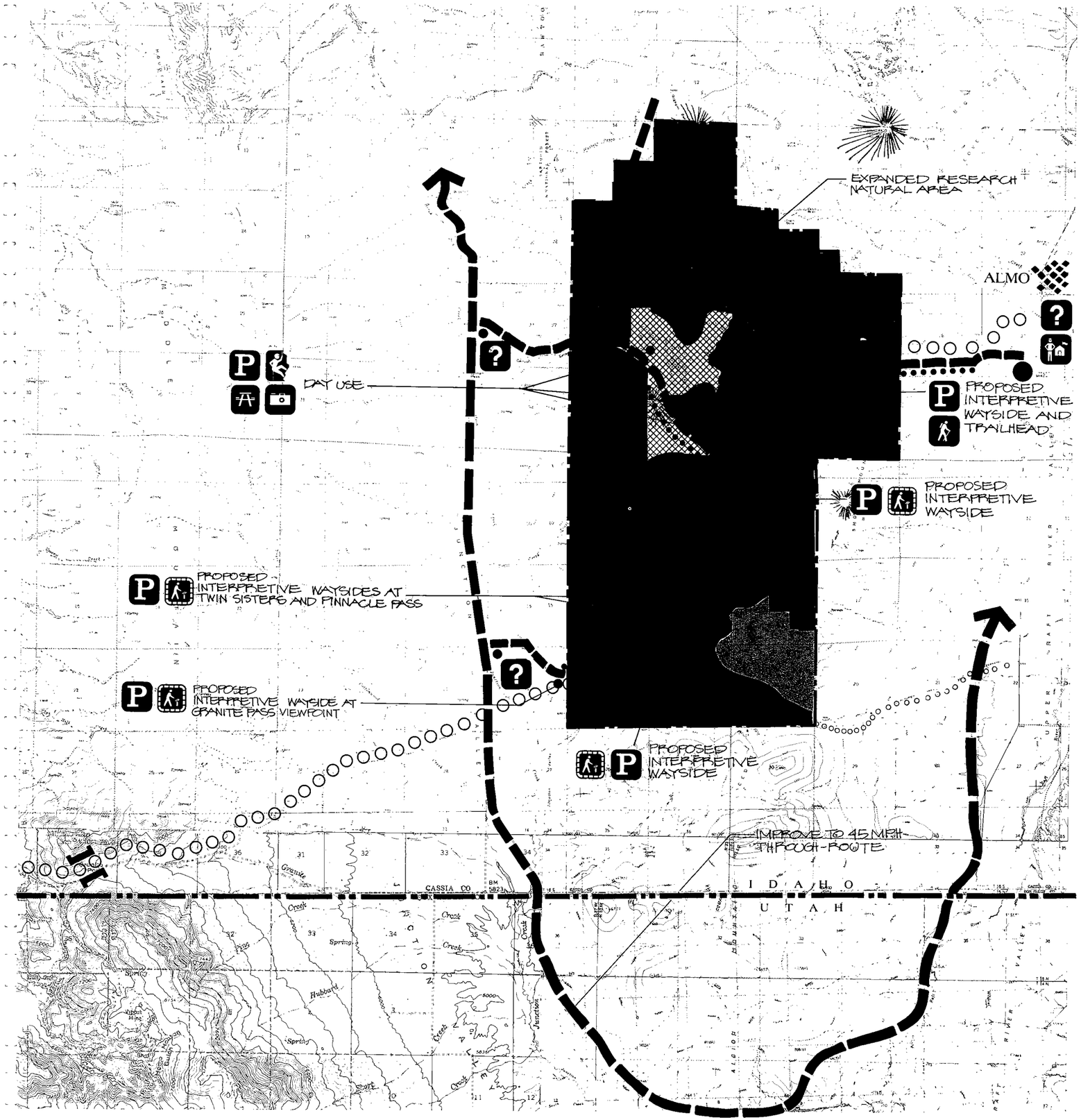
DEVELOPMENT ZONE

- GRAVEL ROAD (proposed)
- TRAIL

EXISTING FEATURES

- CALIFORNIA TRAIL CORRIDOR
- LIVESTOCK TRAILING CORRIDOR
- SALT LAKE ALTERNATE TRAIL
- BEST PRESERVED WAGON RUT REMNANT
-][PASSES ON TRAIL
- NATIONAL RESERVE BOUNDARY




EXPANDED RESEARCH NATURAL AREA
ALMO
DAY USE
PROPOSED INTERPRETIVE WAYSIDE AND TRAILHEAD
PROPOSED INTERPRETIVE WAYSIDE
PROPOSED INTERPRETIVE WAYSIDES AT TWIN SISTERS AND PINNACLE PASS
PROPOSED INTERPRETIVE WAYSIDE AT GRANITE PASS VIEWPOINT
PROPOSED INTERPRETIVE WAYSIDE
IMPROVE TO 45 MPH THROUGH-ROUTE
CASSIA CO
I D A H O
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identifying and, if possible, mitigating the sources of changes.

DEVELOPMENT

Development inside the reserve would include a tour road with interpretive overlooks and four picnic areas. All facilities would be located where they would not be visible from the trail. A visitor center and administrative facility would be established outside the reserve boundary at the City of Rocks junction on the Almo road. A maintenance area would be built outside the reserve on Bureau of Land Management property. As in alternative 2 reserve managers would work cooperatively with representatives of Cassia County and the Federal Highway Administration to replace the north-south road that parallels the trail through the Twin Sisters basin with a new through-route that would skirt the south end of the reserve. The road to Twin Sisters from the southwest boundary would remain; however, the north-south connection retained in alternative 2 for local and private use would be removed. Other roads would end just inside the boundary to provide access points to the California Trail. The east-west road would be relocated south of the inscription rocks and the Silent City. Consideration would be given to eliminating commercial traffic except for local agricultural trucks on this route. Secondary dirt roads would be closed to all use except access to private land. Development is listed in detail and compared to the development that would occur under alternatives 1 and 3 in table 2 at the end of this section. Detailed development actions are listed in appendix E.

ALTERNATIVES CONSIDERED, BUT REJECTED

An alternative that would seek to preserve the California Trail in a vast primitive setting would have discontinued all private use of the reserve, including domestic livestock grazing, which would have been incompatible with the setting. The alternative was rejected because (1) Congress indicated, through the type of zoning it specified, that some private use should continue within the reserve, and (2) responses to the alternatives workbook showed very little public support for this alternative.

TABLE 2: SUMMARY COMPARISON OF DEVELOPMENT, ALTERNATIVES 1-3

Site	Alternative 1: No Action	Alternative 2: Proposal	Alternative 3
Circle Creek Basin		Construct 1 mi. of 20-foot secondary road from east boundary to new Circle Creek basin overlook interpretive wayside w/parking for 20 cars at the first Circle Creek basin overlook	
		Obliterate 3.5 mi. of 20' gravel road from Nicholson ranch to west boundary	Obliterate 3.5 mi. of 18' gravel road from Nicholson ranch to west boundary
		Construct 4.0 mi. of 20' gravel road from Nicholson ranch to the west boundary	Construct 4.0 mi. of 18' gravel road from Nicholson ranch to the west boundary
		Rip back 1.5 miles of 10' hardened 4WD road to a 3' natural surface trail corridor	Rip back 1.5 miles of 10' hardened 4WD road to a 3' natural surface trail corridor
	Define parking at Nicholson ranch	Construct interpretive wayside/trailhead for 5-10 vehicles and 2 RVs at the Nicholson house 1-2 compartment vault toilet interpretive wayside w/parking for 5-10 cars at the inscription rocks	Construct interpretive wayside at the Nicholson house
this is not to be a trailhead	see p. 54 contradicts 2 horse trailers horse corral where is this?	interpretive wayside w/ parking for 5-10 cars at the Twin Sisters basin overlook interpretive wayside and parking for 5-10 vehicles and 2 horse trailers at corral site west of road junction	interpretive wayside w/ parking for 5-10 cars at the Twin Sisters basin overlook
Rim/Silent City Day Use Area	Define and retain 15 parking/camping areas (approx. 6,000 sq. ft.) along rim	Obliterate and revegetate All parking/camping areas (approx. 16,000 sq. ft.) along rim 3 mi. of social trails 5 mi. of social roads	Obliterate and revegetate All parking/camping areas (approx. 16,000 sq. ft.) along rim 3 mi. of social trails 5 mi. of social roads
		Improve 2.5 mi. of existing hiking trails within the Silent City	
		Construct 1 mi. fully accessible trail from Turtle Rock to Parking Lot Rocks along the rim (existing trail alignment)	Construct 1 mi. fully accessible trail from Turtle Rock to Parking Lot Rocks along the rim (existing trail alignment)
	Construct 1-2 compartment vault toilet		

Site	Alternative 1: No Action	Alternative 2: Proposal	Alternative 3
Turtle Rock	None proposed	Construct picnic area (3-5 tables) 15-20 space parking lot to accommodate day use, picnicking, rim trail access, and climbing access interpretive wayside 1-2 compartment vault toilet	Construct picnic area (3-5 tables) 6-10 space parking lot to accommodate day use, picnicking, climbing, and Silent City access
Bath Rock	Provide 3-5 picnic tables	Construct picnic area (5-8 tables) Define 10-25 space parking lot to accommodate day use, picnicking, rim trail access, and climbing access interpretive wayside Construct 1-2 compartment vault toilet	Construct picnic area (5-8 tables) 22-25 space parking lot to accommodate day use, picnicking, and climbing access Obliterate existing 25-car gravel parking lot
Parking Lot Rocks	None proposed	Construct picnic area (3-5 tables) 6- to 10-car parking lot to accommodate climbing, rim trail access, and Silent City access 1-2 compartment vault toilet	Construct picnic area (3-5 tables) 20-30 space parking lot to accommodate day use, picnicking, and climbing access for this area and Breadloaves
Breadloaves Group Camping Area	Define sites	Improve/Construct trailhead for trail to Indian Grove with parking for 15 to 20 cars, service vehicles, and 2 trailers 3 group primitive campsites with tables, tent pads, and fire rings and parking for 3 cars each 2 two-compartment vault toilets	None proposed
Primitive Campground/Trailhead	None proposed this is not primitive	Construct Up to 50 primitive campsites, including tables, tent pads, and fire rings centralized parking for 10-50 vehicles 2 two-compartment vault toilets 1 mi. of trail to rim climbing area Improve 0.5 mi. of 18' gravel access road (existing 4WD alignment) 4.8 mi. of hiking trail from the primitive campground: 1 segment to a high point; 1 segment to Twin Sisters	Revegetate area

Site	Alternative 1: No Action	Alternative 2: Proposal	Alternative 3
Indian Grove (North Area)	Obliterate 1.5 mi. of existing 4WD road/trail from Emery Canyon Pass to Indian Grove 1.5 mi. of existing 4WD road up Graham Creek Construct 7 mi. of hiking and horseback riding trail from Breadloaves to Indian Grove (half in existing alignment)	Obliterate 1.5 mi. of existing 4WD road from Emery Canyon Pass to Indian Grove Construct 7 mi. of hiking and horseback riding trail from Breadloaves to Indian Grove (half in existing alignment Designate Up to 7 unimproved backcountry campsites 3 parking spaces and overlook 3 backcountry composting type toilets	Obliterate 1.5 mi. of existing 4WD road/trail from Emery Canyon Pass to Indian Grove 1.5 mi. of existing 4WD road/trail up Graham Creek Construct parking lot for 15-20 cars above Indian Grove overlook vault toilet
Backcountry	None proposed	Obliterate 1.5 mi. of existing ranch road Construct 7 mi. of hiking and horseback riding trail from Breadloaves to Indian Grove	Obliterate 1.5 mi. of existing ranch road
Twin Sisters Basin	None proposed	Rip back 2 mi. of 16' gravel road to create a minimally discernible ranch road for local use through the Twin Sisters basin Construct interpretive wayside/trailhead at the junction of the California Trail and Salt Lake Alternate (5-7 cars) interpretive wayside with parking for 5-7 cars, 1 vault toilet, trailheads at Twin Sisters Remove 2 vault toilets, picnic tables, and parking at Twin Sisters Construct 4 mi. of loop hiking trail between Twin Sisters and the stage station site interpretive waysides at Pinnacle Pass and stage station site	Rip back 2 mi. of 16' gravel road to create an unmarked, minimally discernible route for private use only through the Twin Sisters basin Construct interpretive wayside at Twin Sisters (15 cars) and at the junction of the California Trail and Salt Lake Alternate (3-5 cars) Remove 2 vault toilets and parking on north side of Twin Sisters Construct 4 mi. of hiking trail from Twin Sisters to the stage station site

Site	Alternative 1: No Action	Alternative 2: Proposal	Alternative 3
OUTSIDE RESERVE		Construct	Construct
Visitor Center	Existing ranger and administration station in Almo	approximately 9,500 sq. ft. visitor center/administrative facility	7,500-9,000 sq. ft. visitor center
	Existing parking for 20 cars	parking lot (35 to 45 cars, 8 RVs, and 2 buses)	parking lot (35 to 45 cars and 5 RVs)
	Construct		
	comfort station and new septic system and maintenance warehouse	well and septic system	well and septic system
		water distribution system	
		electrical service and distribution	
		bulletin case	entrance kiosk on road
Sanitary Dump Station	None proposed	double dump station septic tank, leachfield	None proposed
Reserve Headquarters/ Operations/Employee Housing	Purchase or lease lots or housing for 2 permanent quarters and 4 seasonal quarters	Construct	Construct or purchase
		12 permanent and/or seasonal quarters	6 permanent quarters 6 seasonal quarters
		10,000 sq. ft. of total maintenance storage space, including 8,000 sq. ft. covered shop space and warehousing	10,000 sq. ft. of total maintenance storage space, including 7,500 sq. ft. covered warehousing
Developed Campground	None proposed	Construct	None proposed
		developed campground with 80-100 sites with hookups	
		2 mi. of 18' gravel access road (existing 4WD alignment)	
		100-seat amphitheater (expandable to 200-seat) w/ 20-car parking lot	
		flush toilet facilities	
		well and sewage system	
		bulletin case	
Almo Entrance	None proposed	Construct	None proposed
		5- to 10-car/3 RV pulloff and manned entrance station	
		Construct	
		3-5 car pulloff and unmanned entrance kiosk	
Emery Canyon Entrance	None proposed	Construct	Construct
		5- to 10-car/3 RV pulloff and manned entrance station	3-car/RV pulloff and signs
Junction (Moulton) Entrance	None proposed	Construct	Construct
		3-5 car pulloff and unmanned entrance kiosk	3-car pulloff and signs
Granite Pass View	None proposed	Construct	Construct
		wayside w/ 3-5 car pullout	wayside w/ 3-5 car pullout
Roads	None proposed	None besides those described above	Construct

AFFECTED ENVIRONMENT

CULTURAL/VISUAL ENVIRONMENT

OVERVIEW

Prehistory

The earliest known cultures to inhabit present-day southern Idaho were big-game hunting peoples near the end of the Pleistocene Era. By 7,500 before the present, the cultural scene had evolved into the Desert Culture of the Archaic Period, emphasizing a seed and root gathering economy with grinding components. An exception to this generalization, however, has been found at the Weston Canyon rock shelter east of City of Rocks, where the inhabitants pursued a sheep and bison hunting economy that appears to have lacked a seed and root grinding component.

By 5,000-4,500 before the present, village life in pit houses had appeared along the Snake River in present-day southwestern Idaho. The peoples living in these villages relied partly on salmon for their diet. In recent times salmon have ascended the Snake almost to Shoshone Falls near Twin Falls. The history of the riverside villagers in southern Idaho spanned several thousand years. These villagers made pottery described as "Shoshoni." The villages near the fishing falls were some 75 miles northwest of the City of Rocks — a three- to four-day walk for bands of adult foragers.

The identity of the inhabitants of southern Idaho during the two millennia before white contact is an issue of considerable debate. Many investigators have seen what they believe to be Fremont-style pottery in southern Idaho, and three sites at City of Rocks appear to have such artifacts. It is not known whether the pattern was traded or produced locally or if the people who made it knew how to grow crops like the sedentary Fremont cultures in Utah. Fremont ceramics have been found occasionally in late Fremont contexts (ca. 1400 A.D.), evoking thoughts of refugees from Utah. Often these shards are mixed in with those that can be linked with the Shoshone, suggesting that the two groups were living in proximity.

History

Prior to the 1840s Pocatello's Northern Shoshone band ranged over a broad expanse of country from upper Goose Creek and the upper Humboldt-Thousand Springs area to Raft River, with City of Rocks as a part of its territory. More possessive than many other Northern Shoshone, they tended to exclude others from utilizing the region. Sometimes referred to as "wild wheat-eaters," Pocatello's people were dependent on hunting and gathering of seeds and roots. They harvested pine nuts around City of Rocks. That crop, isolated from other pine nut areas farther south, gave Pocatello's band a distinctive culture. Pocatello's Northern Shoshone also went northwest to fish at Salmon Falls and east to Wind River where they sometimes wintered with Washakie's Eastern Shoshone.

Competition between American and British fur trading interests accounted for white discovery and penetration of the City of Rocks area. Discovered in 1826 by Peter Skene Ogden's Snake Brigade, a fur trapping effort organized by the British Hudson's Bay Company, the Granite Pass and City of Rocks area offered little attraction to fur hunters because it possessed modest beaver resources. When Ogden's trappers ascended the Raft River and crossed Granite Pass to reach Goose Creek on June 11, 1826, they concluded that the vicinity offered poor fur resources.

After Ogden turned his Snake Brigade over to John Work in 1830, he ascended the Raft River to Edwards Fork near City of Rocks, where he encountered a buffalo herd and six beaver, which his men caught. British trappers did not return to the City of Rocks country after Work concluded that it lacked enough beaver to justify further attention.

American mountain men who competed with Hudson's Bay Company trappers attempted to find new routes between the Great Salt Lake and California. All the routes explored indicated exceptional problems for passage from Utah directly west into Nevada — findings that eventually led to a reexamination of Granite Pass. Returning from a California expedition in 1834 Joseph R. Walker followed an upper Humboldt-Goose Creek route that took him close to Granite Pass. After 1840 Walker and other mountain men shifted from trapping to guiding overland emigrant parties.

In 1842 Joseph B. Chiles brought a small California party back to Missouri to open a practical emigrant road for later migration. Chiles had been with the Bidwell-Bartleson party that had gone overland to California the previous year. The route used had proven that the Bonneville salt flat west of Salt Lake was unsuitable for wagon traffic. Ascending a Humboldt route already utilized farther west,

Chiles's party found that Granite Pass offered a practical emigrant route for California-bound traffic. Continuing past City of Rocks and descending Raft River, they used the existing Oregon Trail route to Fort Hall and Soda Springs. Chiles sent his main California Trail emigrant party via City of Rocks and Granite Pass in 1843 under the direction of Walker, his long-time friend, and thereafter regular California Trail emigrants passed through City of Rocks.

By 1846 Granite Pass and City of Rocks began to accommodate overland emigrants to Oregon. To avoid obstacles on the regular Oregon Trail, Jesse Applegate explored a southern Oregon connection to the California Trail, thus bringing Willamette Valley wagon trains that adopted Applegate's route through City of Rocks and Granite Pass.

In 1848 Mormons passing overland from California to Salt Lake found that after passing through Granite Pass they could diverge over a new direct route from City of Rocks to Salt Lake without going to Fort Hall. H. W. Bigler's Mormon battalion group, completing its long trip to Utah from California, met Samuel J. Hensley, who apprised them of such a route that he had just traveled. Abandoning plans to go to Fort Hall, Bigler's men opened the new route (named the Salt Lake Alternate) in time to accommodate California Gold Rush overland wagon traffic that desired to detour via Salt Lake City on the journey west.

After crossing the Raft River, the California Trail swung south, leaving the northern Oregon Trail route and the Snake River. Proceeding south up the Raft River Valley, the California Trail turned west following Cassia or Cache Creek into the mountains. This route provided emigrants with a passage around the marshes of the upper Raft River to a narrow pass that took the wagon trains over the summit of the mountain. The City of Rocks provided sheltered campsites with a good water supply and pasturage for the emigrants' animals. The section of the California Trail that passed through the City of Rocks itself was sometimes called the Fort Hall Road, and it passed near two large conical rock formations, called the Twin Sisters, at the southern edge of the City of Rocks. Just south of these landmarks, the California Trail connected with the Salt Lake Alternate. From the junction of the two trails the California Trail swung westward toward Granite Pass, which is visible on the horizon from the southwest boundary of the reserve and served as the next landmark on the trail to California. The trail continued southwestward over Granite Pass and on to Goose Creek, which it followed into northeastern Nevada through Thousand Springs Valley to Humboldt Wells and the Humboldt River.

Three major groups formed the overland migrations who passed through this area — pioneer families moving to California and Oregon, Mormons searching for a permanent settlement, and thousands of California 49ers heading west for the gold fields. The number of overland travelers reached its peak in 1852 when some 52,000 people passed over the California Trail and through the City of Rocks. Thus, the California Trail was the longest, most heavily traveled, and most significant route of westward overland emigration in 19th century American history. Many of the overland emigrants recorded their trips in diaries and other accounts, revealing considerable data on the trails and their impressions of City of Rocks, a landmark spectacle that soon gained widespread fame as a leading attraction along the California Trail. One such emigrant, James F. Wilkins, identified the monumental granite assemblages as "The City of Rocks" by August 12, 1849, and the appellation soon gained general acceptance.

At various times during the 1850s transcontinental mail and express service was conducted by way of City of Rocks and Granite Pass. This service, however, was hampered by severe winter weather, Indian attacks in the southern Idaho-northern Nevada region, and financial difficulties of the operators. Under one such mail contract in 1858, George Chorpenning built stations along his route at approximately 20-mile intervals, one of which was at Goose Creek west of Granite Pass and another of which may have been near or in City of Rocks at a site later used for a Boise-Kelton Road stage station.

The impacts of two decades of wagon traffic on his people's way of life, which included overgrazing, depletion of game, and loss of other food sources, caused Pocatello to have his warriors attack an Oregon Trail emigrant party above Massacre Rocks on August 9-10, 1862, and several California Trail groups near City of Rocks in early August. These and other incidents, including six or more documented battles that took place near Almo after September 1860, in which a number of people were killed (the newspaper reports of which were often exaggerated), led to military retaliation at Bear River on January 29, 1863, where some of Pocatello's people were camped with a substantial band of Cache Valley Shoshone. As a result of the military

pressure Pocatello agreed to negotiate a treaty at Box Elder, Utah, on July 30, 1863, providing compensation for the Indians in exchange for the emigrants' unobstructed access to their routes, including the vicinity of City of Rocks. By the late 1860s Pocatello decided that his band would be better off settled on Fort Hall Reservation, and he arranged for a Bannock Creek home. Thereafter, City of Rocks received little attention from the Shoshone except for small family groups that continued to travel there to harvest piñon pine nuts.

Following completion of the transcontinental railroad in 1869 a road was developed from Kelton, Utah, to Boise, Idaho, to provide a connection for postal service, express, and freighting operations between the railroad and the burgeoning mining communities of southern Idaho. As a result a stage station east of the junction of the old California Trail and Salt Lake Alternate just south of Twin Sisters at City of Rocks served the thriving Boise-Kelton traffic until 1882, when construction of the Oregon Short Line Railroad supplanted all stage and freight service through City of Rocks.

Responding in part to the growing market for meat by the expanding Idaho mining communities, cattle ranching began in the City of Rocks vicinity in 1875. A natural corral west of Castle Rock below Graham Peak led James Q. Shirley, who had joined Lou Sweetzer in introducing a herd of 2,000 Texas longhorns to upper Raft River, to fence a cove ranch site and build a modest ranch house at City of Rocks. Other ranchers soon moved into the area. By 1878 John Stines and Buck Holmes had built ranch cabins in Shirley's large corral area. In 1880 George Graham built a house a half mile from Shirley's cabin on a site still occupied by that area's major extant ranch structure. Graham's place also served as a local school from 1882 to 1916 when it and other nearby one-room schools were consolidated in Almo. Jensen's store, which continues as the Almo store, was first constructed in Shirley's City of Rocks cove.

Limited tracts of good ranch land in the City of Rocks area soon led to population expansion in adjacent areas. From the late 1870s to the early 1890s Mormon settlements began to dot the valleys adjacent to City of Rocks. These agricultural settlements depended on the City of Rocks area for their water supply. In 1878 George W. Emery, governor of Utah from 1875-80, developed an extensive ranch on the Raft River, employing a Mormon staff. A post office was established near City of Rocks at Alamo (a Spanish term for cottonwood trees common to the area) in 1881. The name Alamo was contracted to Almo, and 15 Mormon families formed a church branch there in 1882, one year after a church had been organized at Elba on upper Cassia or Cache Creek. Mormon settlement between City of Rocks and Granite Pass resulted in the organization of a Mormon church ward at Moulton in 1916. Farther north, Mormon settlement around Oakley supported a church ward established in 1882.

Increasing precipitation following a severe drought that ended in the late 1880s, and newly developed dry farming methods led to expansion of crop planting in the City of Rocks area between the mid-1890s and the 1920s. Sagebrush was cleared, fences were built, and grain and hay crops were planted. Roads in and near City of Rocks were moved to section lines in places, and plowing brought surface changes to some California Trail segments. During this period the present road from Almo to Moulton was built across the City of Rocks area, although its alignment may have been improved during the 1930s.

At least six identifiable ranches were developed in the City of Rocks area during the 1895-1920 period. Four occupied Grahams Cove and Circle Creek sites, and surface evidence indicates that at least two ranches were established west of the stage station. The two most important ranch sites are Graham's ranch, which he sold to John Jacob Breusch in 1902, and Hull's Circle Creek ranch, which featured livestock raising.

More arid conditions and a severe agricultural depression after World War I resulted in retrenchment of dry farming operations in southern Idaho during the 1920s. Mechanized farm equipment eventually permitted some crop cultivation, but a continuing farm recession resulted in consolidation of farm holdings back into stock ranches and grazing operations in the City of Rocks area.

More recent utilization of the City of Rocks area includes fenced livestock ranches and tourist recreation. Section 36 was purchased as state park land in March 1973, and tourists have come to the area in increasing numbers during recent years to take advantage of opportunities for rockclimbing, hiking, picnicking, and camping. To preserve and interpret the significant natural and cultural resources of the area City of Rocks National Reserve was established in 1988.

NATIONAL HISTORIC LANDMARK

An area of approximately 22 square miles (14,080 acres) in the City of Rocks vicinity (including a large area within the present reserve boundaries) was listed as a historic district on the National Register of Historic Places on October 24, 1963. The determination of the area's significance was based on its association with events that have made a significant contribution to the broad patterns of American history (criterion A). City of Rocks was designated a national historic landmark on July 19, 1964, and is listed in *History and Prehistory in the National Historic Landmarks Program: 1987* under theme X, "Westward Expansion of the British Colonies and the United States, 1763-1898," subtheme D, "Western Trails and Travelers," facet 4, "California Trails and Settlement of California." The national historic landmark boundary was revised on August 6, 1987, to encompass some 12,480 acres.

The City of Rocks National Historic Landmark includes the valley and basins formed by spectacular granite monoliths through which the California Trail and the Salt Lake Alternate passed. The landmark boundary follows the north, east, and west sides of the City of Rocks valley and the Circle Creek and Twin Sisters basins and extends north to Castle Rock, the end of the stone monolith formations that can be viewed from the California Trail corridor. The landmark boundary stretches south to include a portion of Emigrant Canyon where the California Trail and the Salt Lake Alternate intersected below the prominent Twin Sisters formation.

This area includes some 9 miles of the California Trail and Salt Lake Alternate route corridors comprising some of the best preserved remnants of such overland emigrant routes in the nation. Within the landmark boundaries are emigrant inscriptions on 13 rocks, six small segments of the California Trail that have been identified as maintaining their original rut or defile contours, and the principal emigrant encampment site at City of Rocks in the Circle Creek basin. The narrow defile of the Pinnacle Pass incline over which the emigrant wagons crossed the ridge to pass out of the City of Rocks vicinity includes several features that provide a glimpse of the difficulties encountered by the emigrants as they traversed the rugged terrain of the overland trail. Among these are the wagon-wheel-worn rocks near the approaches to the pass and at its apex, and a cable-cut in the rock that may be the result of pulling/braking the overland wagons over the steep grade.

The extent of the significant fabric of the California Trail includes not only the trail remnants, landmarks, and inscriptions rocks, but also the expansive landscape the emigrants observed as they crossed through the City of Rocks on their westward trek. Thus, the "viewshed," or the extent of the views seen from the two emigrant trails, is a significant feature of the national historic landmark.

The landscape visible from the trail corridors today still retains many of the attributes and features that guided and awed 19th century emigrants, although it will never again have all the character of that particular historic period. At the time of the overland emigration from 1842-69, City of Rocks was a primitive area, much wetter in Circle Creek and at Pinnacle Pass than today. Native bunch grasses and fescues prevailed in the basins, and coniferous forest covered the uppermost reaches of the surrounding hills. The trail corridor itself was probably littered with cast-off equipment and goods, was unsanitary, and was overgrazed. At any given time during the summer months, wagon parties were camped in Circle Creek basin, where water and forage sustained both animals and people. Game sightings might have included bighorn sheep and beavers. This wild but trammeled area was a crowded, transitory haven, where routes were created at random, the resources were for the using, and views included a steady stream of travelers.

Today City of Rocks is less trammeled, but also less wild. For all the changes that have occurred over the intervening 150 years, however, the landscape still looks and feels much the same as it did to the emigrants. For example, the first major impression is still one of enclosure. The vistas at City of Rocks are quite different from those on the surrounding open plains — they are defined by the encircling stone formations that alternately close in and open up, adding great variety to the scenery. The Circle Creek basin, where many of the emigrants camped because of the water and forage it offered, remains an open, expansive valley with a flowing creek, ringed by towering rock formations offering a sense of security and comfort to plains-weary travelers. The bighorn and beaver are gone, but coyotes still interrupt the nighttime silence. The Twin Sisters monolith, which appears on the southwest horizon beyond the inscription rocks, continues to provide a focal point and sense of direction across the next open valley, sometimes referred to as the Twin Sisters basin, to Pinnacle Pass. The area around Twin Sisters is a particularly important part of the trail viewshed, since this regional landmark could be

seen by people approaching from the east as well as the north, and marked the junction of the California Trail and Salt Lake Alternate. Emigrants passing here knew they were a few days' ride out of Salt Lake City and beginning the portion of their journey across the desert.

For purposes of analyzing impacts on the California Trail, the trail viewshed is considered to be the area within the foreground (up to 1/4 mile on either side of the identified route) and the middle ground (1/4 mile up to 3 miles) that comprises the significant continuous view along the trail. The viewshed contracts and expands following the topographic edges of ridgelines that frame the scene. The distant background is also an important part of the views from the trail, but it is far enough in the distance that land uses incompatible with the historic setting are generally not discernable from the trail.

Disagree - What about houses?

Three important views and their viewshed along the California Trail warrant special attention (see the California Trail Viewshed map). None contain high degrees of scenic quality, but they are important because they are views experienced by travelers when trying to find their way along the trail. These landmark views are

1. the view south toward Twin Sisters from the California Trail corridor as the ground rises into the basin in front of two spires

2. the view northwest towards Twin Sisters along the Salt Lake Alternate Trail at the stage stop

3. the view southwest to Granite Pass, 1/4 mile outside the southwest boundary of the reserve

The first view is barren in the foreground, without vegetation or groundform to frame the scene. The viewer is directed to the focal point of the highest two spires, but their dominance is lost in the jumble of crags and peaks along the Twin Sisters ridge and the lengthy distance from the viewer. Yet, the view retains validity in immediately setting up the trail course to Pinnacle Pass, once the lowest saddle along the ridge.

The second view from the stage stop to Twin Sisters is the most dramatic view of the spires. From this angle, the separation of the two is apparent. Their individual and distinctive forms and textures are vividly perceived. Their strength as a dominant focal point is more evident in the shortened middle ground that makes them appear close to the viewer.

The absence of competition from the serrated ridge they lie in allows a sharp contrast within this view of rolling sagebrush hills and smooth granite domes.

The third view is expansive and open, with no foreground textures or containment. The distant mountain pass is a subtle but important focal point experienced from outside the reserve.

OTHER HISTORIC RESOURCES

Aside from the cultural resource values associated with the national historic landmark designation, the most significant historic resources in the national reserve are the stage station site and the Nicholson house. The original structures that served the Boise-Kelton stage traffic between 1869 and 1882 are no longer extant. The present log structures near the stage station site at the junction of the California Trail and Salt Lake Alternate just south of Twin Sisters at the site were built during the early 1930s with materials salvaged from the earlier stage station buildings. The rebuilt structures served farming and ranching purposes. Despite these changes, however, the historic landscape at the stage station site retains much of its integrity and affords the opportunity to interpret the significant stage and freighting period.

The remnants of one farm or ranch structure survive from the dry farming era (mid-1890s to mid-1920s) at City of Rocks. Stone walls of a house constructed by John Hull about 1903 on his Circle Creek ranch (currently known as the Nicholson house) afford the opportunity to interpret another important chapter in the historic continuum of the City of Rocks.

Other important historic resources affording examples of other themes in the historical development of City of Rocks include the remnants of scattered homestead sites and a partially collapsed log cabin along Circle Creek, near the Nicholson house and a mica mine. Extant resources in the reserve associated with historic cattle ranching operations include scattered cattle trailing routes, water sources, windmills, corrals, and fencelines.

Many of the various historic resources described in this section not only serve as representative examples of significant themes in the historic continuum of the national reserve, but also contribute to the ambience of the reserve's historic

rural setting. The historic rural setting is the sum total of ranching land use patterns and artifacts accumulated through 150 years of human use and development. It is the spacious open expanse and the fencelines, corrals, trailing routes, and water sources of ranching operations. It is the large acre, fenced fields and gravel roads on section lines. It imparts an increasingly rare and scenic quality reminiscent of the American West and thus constitutes a significant cultural value of the reserve.

At the time of establishment in 1988, and now, the historic rural setting in the reserve has an open, unbuilt character. Dense sagebrush or grass interspersed with sagebrush covers all the level to rolling terrain. Thick, dark stands of squat piñon pine and Rocky Mountain juniper blanket the hillsides. The northern end of the reserve has lush grasslands around springs and occasional aspen groves in broad drainages.

Sixteen ranchers trail cattle across the area in concentrated and staggered drives twice a year, and grazing activity covers all areas except most of the state-owned section 36. Prime summer pasture includes the Graham Creek and Walters Creek allotments and Circle Creek basin.

Dryland farming is no longer practiced, although fenced fallow fields are still apparent. Remnant historic structures at the stage station and the Nicholson ranch are abandoned and in disrepair. Fence lines of shaggy juniper and barbed wire fall on section and property lines, which breaks expanses of sagebrush. Unmilled posts and wire-form gates cross roads that are four-wheel-drive gravel. One small, seasonally used corral is near Elephant Rock. Winter conditions can range from windswept, frozen plains in the heart of the basins to deep, undisturbed snows in the Graham Peak drainages. The severe weather conditions require closure of the east-west route, and forces local traffic out of the reserve to the southwest along the north-south road. The north-south road also closes in the winter but later than the east-west route.

ARCHEOLOGICAL RESOURCES

Archeological surveys and testing have been carried out at the reserve over the past four years to assess the nature and extent of the reserve's archeological resources. The results of this effort have been provided to the state historic preservation officer and will be used to develop a long-term strategy for archeological investigations at the reserve as defined in a programmatic agreement covering sections 106 and 110 responsibilities.

GRANITE
PASS

ETHNOGRAPHIC RESOURCES

Consultation with interested American Indian groups has begun under the direction of the regional anthropologist, who has met with representatives of the Fort Hall Shoshone-Bannock tribes. In addition to establishing a long-term consulting relationship with these tribes, which may have interests in several NPS sites, information is being sought regarding sites of special significance and interest to the tribes within City of Rocks, for which protection and management strategies will have to be developed. Tribal representatives of the Fall Hall, Shoshone-Bannock tribes came to the City of Rocks during 1993 to view plan proposals to assist in their review of the draft plan.

NATURAL/VISUAL ENVIRONMENT

CLIMATE

City of Rocks National Reserve has a semiarid climate characterized by low to moderate precipitation, great extremes in both daily and seasonal temperatures, and low relative humidity. Due to the prevailing westerly winds, rain and snow are mostly from pacific air masses. The rain shadow effect of the Sierra Nevada Range allows only the strongest storms to contribute much precipitation. Average annual precipitation is approximately 14 inches at the lower elevations of the reserve and may exceed 22 inches in the highest areas near Graham Peak. Most precipitation occurs from March through June. Average snow depths for higher elevations during March and April range between 35 and 68 inches. The summers are hot and dry with frequent thunderstorms.

The closest weather station is in Oakley, located northwest of and at a lower elevation than the reserve. Conditions in the reserve are probably slightly different than Oakley. Weather records for Oakley are shown in table 3.

TABLE 3: TEMPERATURE DATA, OAKLEY

Measurement	Degrees Fahrenheit
mean annual temperature	48
extreme recorded high	105
extreme recorded low	-27
average winter temperature	31
average winter daily minimum	21
average daily summer temperature	67
average daily summer maximum	83

AIR QUALITY

City of Rocks has been designated a class II area for air quality purposes of controlling increases in air pollution under the Clean Air Act. Due to the low population density and lack of large emission sources near the reserve, air quality is generally very good.

Air quality data for the reserve has not been systematically collected, and since the few air quality monitoring stations in the region are located near known pollution sources, the data from these stations probably does not represent City of Rocks air. High particulate matter concentrations occur in the reserve when strong winds increase dust emissions from exposed soils in agricultural fields or on dirt roads. Smog can sometimes be seen near the reserve when prevailing winds carry pollution from nearby population centers.

Air quality in the west-central United States, including southern Idaho, generally has the best visual quality anywhere in the country (Sisler et al. 1993). Craters of the Moon National Monument, the closest NPS air monitoring site to the reserve, has more pristine visual air quality than any other NPS monitoring site in the continental United States. However, air quality monitoring data at Craters of the Moon show a trend in deterioration, with significant decreases in visibility in recent years (NPS 1991, Malm et al. 1994). The reserve's air quality might be deteriorating similarly, because City of Rocks is located near the same air pollution sources affecting Craters of the Moon. Even slight increases in air pollutants could cause major decreases in visibility.

Air quality is important for health, visitor enjoyment, scenic vistas, and preservation of natural systems and cultural resources. Most elements of a park environment are sensitive to air pollution. Notable air-quality-related values at City of Rocks are the visibility and the scenery.

TOPOGRAPHY AND GEOLOGY

City of Rocks is in the northeast extremity of the Basin and Range Physiographic Province. The reserve is in the southern part of the Albion Mountains, bordered to the east by the Raft River valley and to the north by the Snake River valley. The most notable landscape features of the reserve are the very large number of monumental outcrops that surround the City of Rocks basin. Large numbers and areas of outcrops form the northern crescent-shaped backwall of the basin where it is highest. Lines of rock towers, including Twin Sisters, continue on the western perimeter of the basin. Smaller and more isolated towers jut from the floor of the basin. Elevations rise from 5,650 feet where Circle Creek meets the reserve boundary to 8,867 feet at the top Graham Peak to the north.

The landscape of City of Rocks has been sculpted from the upper parts of the Cassia batholith, a granitic pluton that intruded the older metamorphic rock of Green Creek complex about 30 million

years ago. The Green Creek complex contains some of the oldest rocks in the western United States, dated at about 3.5 billion years. The Twin Sisters represent the opposite sides of a contact between 3.5-billion-year-old precambrian metamorphic rock (southeast) and 70-million-year-old (or less) Cretaceous-Tertiary igneous rocks (northwest). The granite has eroded into a fascinating assortment of shapes as high as 200 feet. The range of altitude within which these outcrops are dispersed over slopes of the basin is unusually large. The smaller ones in the floor of the basin are more than 1,000 feet below the summits of the highest ones.

Rock formations in the reserve developed through an erosion process called exfoliation, during which thin rock plates and scales sloughed off along joints in the rocks. The joints, or fractures, probably resulted from contractions when the rock cooled or from expansions when overlying materials eroded away and eliminated confining pressure. Strongly developed vertical joints in the rocks caused the distinct north-south orientation of most of the rock formations. A second set of vertical joints orient east-west and are perpendicular to the first set. Third and fourth sets of dome-shaped and horizontal joints also formed. The dome-shaped joints resulted in the formation of the larger granite dome towers called *bornhardts*. Most of the remaining towers, large and small, are also bornhardt remnants. The horizontal joints resulted in the formation of the few rectangular shaped *tors* in the reserve. Some rectangular shaped rock formations in the reserve are actually bornhardt remnants.

Some outcrops of moderate height are neither tor-like nor bornhardt-like, and these include large, curved sheets of rock. Perched boulders are common, but large debris at the base of formations is rare. At a smaller scale the surfaces of many rocks were further shaped by case-hardening and weathering, resulting in numerous depressions on the rock surfaces. There are more than 500 panholes in one small area of the reserve. The most notable panhole is located on top of Bath Rock and frequently fills with water from rain or snowmelt.

The principal natural value of the reserve, and the main reason it was designated a national natural landmark, is that it demonstrates the exfoliation process on a small scale. The same process, on a much larger scale, shaped Half Dome in Yosemite.

SOILS AND SOIL EROSION

The U.S. Soil Conservation Service has completed a preliminary soil survey for portions of the reserve. The majority of mountainside soils (slopes greater than 20 percent) are shallow (less than 20 inches to bedrock) and composed of very gravelly or cobbly loam or coarse sandy loam with large rock fragments exposed at the surface. The basin soils (slopes less than 20 percent) are moderately to very deep (greater than 60 inches to bedrock) and composed of loam or sandy or gravelly loam.

The majority of the soils in the reserve are highly erodible. Wind erosion potential is moderate for some soils in the reserve. Water erosion hazard is severe for most mountainside soils and moderate for basin soils. Soil erosion is greatest near roads on steep slopes and intermittent stream channels such as those tributary to Circle Creek and in Emigrant Canyon. Erosion in these areas has formed deep gullies wherever the soil-binding vegetation has been disturbed. Some of the exposed soil banks are over 8 feet high and nearly vertical with large clods of organic soil common near the bottom of these soil banks. In heavily grazed areas, most of the protective vegetative ground cover is lacking and soil is exposed. In undisturbed areas of the reserve watershed vegetation effectively protects soil from the erosional forces of wind, precipitation, and runoff.

WATER RESOURCES

Surface water is limited to a few small headwater streams and springs. Graham Creek, Circle Creek, and intermittent streams in Heath Canyon and Emigrant Canyon flow east toward the Raft River. Trail Creek drains west to Junction Creek, which courses around the southern end of the reserve to the Raft River. The headwaters of Emery Canyon flows from the northwest portion of the reserve west to Birch Creek, which eventually flows to Goose Creek. Both Raft River and Goose Creek flow into the Snake River.

Surface water in the reserve that flows to Goose Creek and Raft River is protected for use as agricultural water supply, cold water habitat, salmonid spawning, and primary and secondary contact recreation under Idaho water quality standards. Surface water in the reserve is used primarily for agricultural purposes. Water quantity and quality of the reserve streams and springs have not been extensively studied. Streamflows are reduced during the summer when water is diverted for agricultural purposes. The chemical components of the limited surface water quality data for the reserve are within criteria for designated uses.

Cattle concentrated in riparian zones accelerate soil erosion and contribute fecal coliforms to reserve streams and springs. Most of the soils in the reserve are highly erodible, and several severely eroded areas contribute sediment to streams during high flows corresponding to storm events and spring snowmelt. High stream sediment and associated turbidity can negatively affect stream organisms both in and outside the reserve far downstream from the source of particulate matter.

Little is known about the status of groundwater in the reserve. The chemical components of water in several wells tested in the reserve are within criteria for designated use. Groundwater use outside the reserve combined with recent drought is thought to have decreased water flow to springs in the region. Such effects may be occurring but have not been documented within the reserve.

WATER RIGHTS

Idaho's water law is based on the doctrine of prior appropriation. Under this doctrine, the entity that first diverts water for beneficial use has the prior right to use the water, against all other appropriators who may wish to use water later. The federal government also may hold federal reserved water rights, which arise from the purposes for which the land is reserved. City of Rocks is entitled to federal reserved water rights on that portion of the reserve acquired from the Sawtooth National Forest, and the amount claimed is for the minimum necessary for national forest purposes.

The state of Idaho is currently conducting a water rights adjudication process for the Snake River basin, which includes City of Rocks. Under this process, all entities with water rights in the Snake River basin must file a water rights claim with the state. The purpose of the adjudication is to decide exactly how much Snake River water is currently allotted; where and how water is being used; and how much remains to be allotted. The National Park Service has filed federal reserved and state appropriative water right claims for City of Rocks National Reserve for the Snake River basin adjudication.

Sufficient water for all wildlife, stock, and visitor needs may not be provided through the exercise of limited reserved water rights designated by Congress for this unit. Where reserved rights are insufficient, appropriative water rights will be acquired.

WETLANDS AND FLOODPLAINS

City of Rocks was zoned as an area of minimal flooding by the Federal Emergency Management Agency. The creeks and drainages of the reserve are subject to flooding during summer months when thunderstorms can produce large quantities of precipitation in a localized area. The hazards from these summer floods are considered minimal.

Many small wetlands exist in the reserve, typically in riparian areas next to streams and springs. Because of the aridity of the region, these wetlands, although quite small, are important resources for many forms of life. Wetlands in the reserve have been mapped from aerial photos by the U.S. Fish and Wildlife Service and the National Park Service (see Vegetation map). The wetlands map for the reserve is for orientation purposes only and is not intended to represent jurisdictional wetland boundaries. Site-specific wetland studies would be required to identify the precise location of wetland boundaries.

VEGETATION

The vegetation map was prepared by mapping professionals in the Geographic Information Systems Division of the Washington Office of the National Park Service, using the 1987, 1:40,000, National Aerial Photography Program, color infrared photography. Professionally accepted techniques for photointerpretation, mapping, and digitizing were used in the development of this product. However, the map has not been field-verified for accuracy. U.S. Fish and Wildlife Service National Wetland Inventory data have been merged with the mapped vegetation classes.

A total relief of 3,000 feet and a variety of exposures and rock/soil types produce many different types of vegetative communities in City of Rocks. Today most of the plant cover, except vegetation on steep, rocky exposures, is considerably changed from its natural condition. The changes over time were caused by a combination of man-induced factors, including intense grazing, dryland farming, fire suppression, brush control, seeding, development of roads and trails, and camping.

The dominant plant communities in the study area include (1) piñon/juniper woodlands and forest, (2) conifer/aspen woodlands and forests, (3) riparian scrub and herbaceous wetlands, (4) big sagebrush and grasslands, (5) mixed scrub, (6) mountain mahogany scrub, (7) high elevation meadows, and (8) other unvegetated areas (see Vegetation map and appendix C).

Big Sagebrush/ Grasslands (37% of the reserve)

The arid open valley floors of the Circle Creek basin and upper Emigrant Canyon were originally covered with a mosaic of vegetation dominated by open stands of big sagebrush with an understory of native perennial grasses such as Idaho fescue. Today, most of the City of Rocks basin is covered by monotypic stands of big sagebrush interspersed with plants with little or no forage value, such as tansy mustard, rabbitbrush, and exotic russian thistle, peppergrass, cheatgrass, and halogeton. Crested wheatgrass (another exotic) dominates the understory where private landowners and the Bureau of Land Management have improved range for livestock. Areas with sagebrush steppe vegetation in a natural condition are scarce in southern Idaho.

Piñon/Juniper Woodland and Forest (37% of the reserve)

The piñon pine/juniper woodlands occur adjacent to the sagebrush areas in the rockier and rougher terrain of the reserve. These woodlands are dominated by single-leaf piñon pine and Utah juniper interspersed with mountain big sagebrush, curlleaf mountain-mahogany, Rocky Mountain juniper, chokecherry, bluebunch wheatgrass, and Great Basin wild rye. The reserve contains the northernmost range of the single-leaf piñon pine. The piñon pine seed is edible and is gathered by local residents. The trees of this cover type may grow to 30 feet in height but are generally less than 15 feet tall. They are bushy and almost as wide as tall. When destroyed by fire, this type gives way temporarily to grass or shrubs.

Mixed Scrub (8.7%of the reserve)

The higher slopes are covered with mountain big sagebrush, mountain snowberry, serviceberry, and bitterbrush, with other shrubs, grasses, and herbs growing in the openings between the shrubs.

Conifer/Aspen Woodland and Forest (6.8% of the reserve)

The mountain woodlands are characterized by groves of aspen, stands of douglas-fir and lodgepole pine, or open meadows located on the upper stony/grassy slopes of the reserve. Quaking aspen communities occur in canyons containing perennial or intermittent streams. Narrowleaf poplar, thinleaf alder, serviceberry, chokecherry, and snowberry occur in the understory of the aspen groves. Rocky Mountain juniper occurs more frequently in the aspen understory than elsewhere in the area.

Riparian Scrub and Herbaceous Wetlands (2.6% of the reserve)

Riparian vegetation is limited to a small portion of the reserve adjacent to stream courses and springs. Riparian zones are associated with water and occur as important transition zones between aquatic and terrestrial communities. These transition zones have a greater quantity and diversity of plant species than adjoining land. They provide food, water, and cover

VEGETATION

CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service

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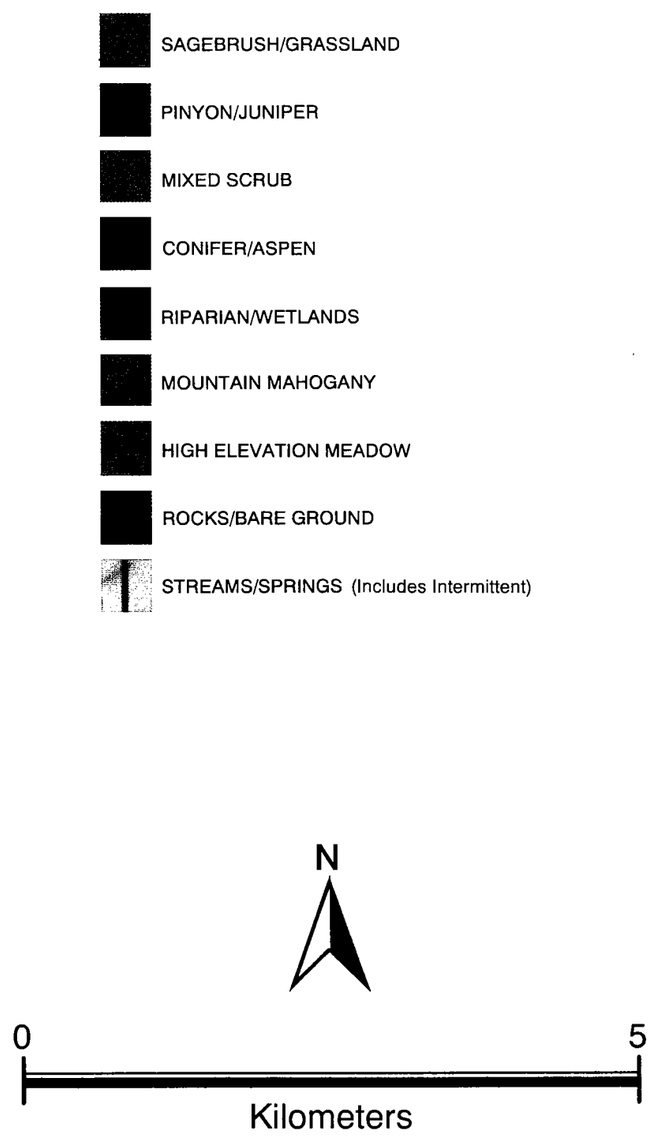

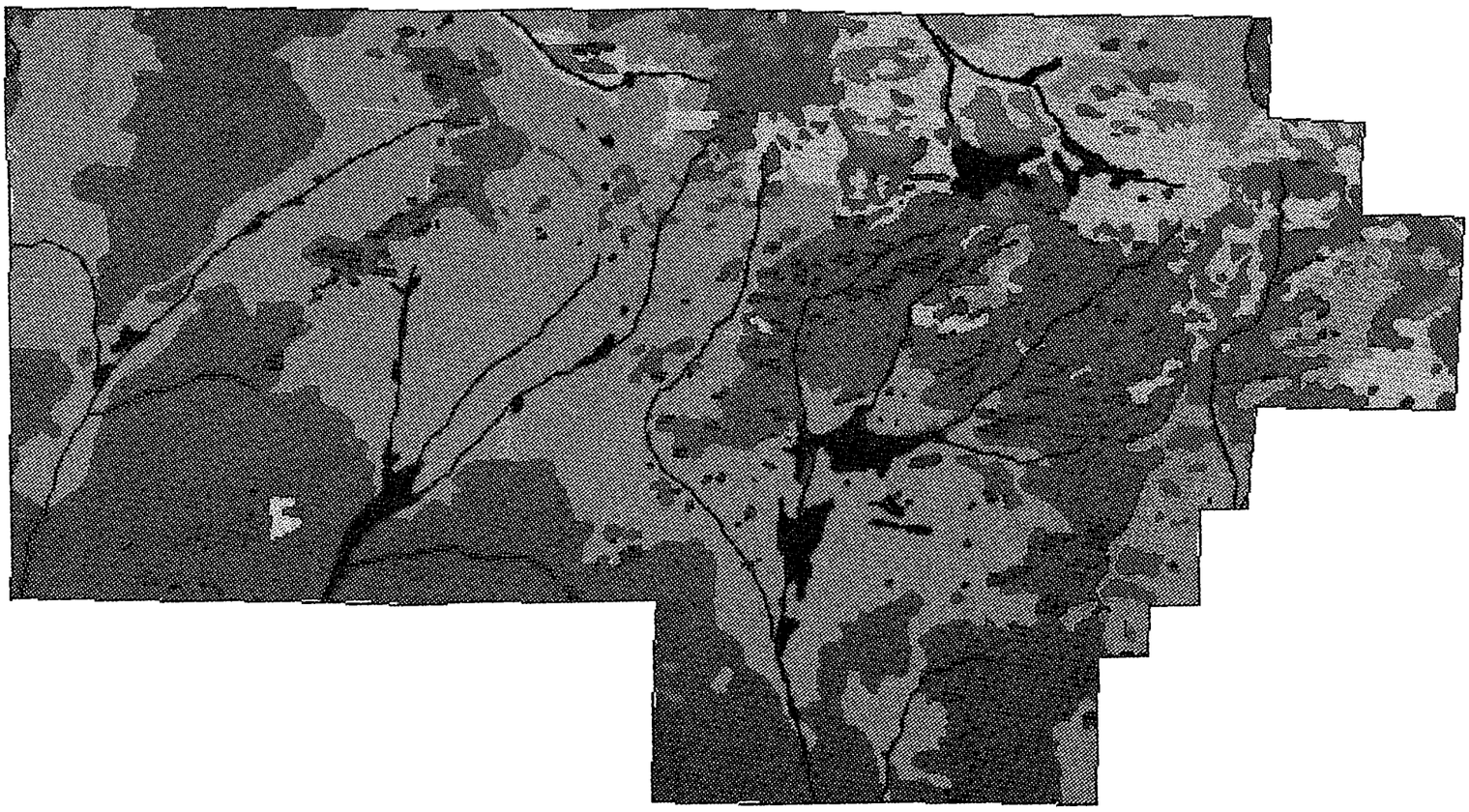

for both wildlife and livestock. Overgrazing has altered much of the riparian areas in the reserve, causing accelerated soil erosion and elimination of typical riparian plant species. Typical riparian plants found in the reserve includes aspen, willow, Rocky Mountain maple, box-elder, thinleaf alder, chokecherry, rushes, sedges, and bluegrasses. Much of the riparian vegetation in the reserve is located in wetland areas mapped by the U.S. Fish and Wildlife Service.

Mountain Mahogany Scrub (2.4% of the reserve)

On some higher mountain slopes of the reserve, stands of nearly pure curlleaf mountain mahogany are present. They occur next to or are surrounded by piñon/juniper on sites that are less rocky and steep. Other species found growing with the mountain mahogany includes limber pine, mountain snowberry, Idaho fescue, and bluebunch wheatgrass.

High Elevation Meadows (2.0% of the reserve)

Mountain meadows near the upper ridges contain a combination of grasses, herbs, sedges, and wildflowers. Various species introduced through human activities, including wheatgrass, cheatgrass, halogeton, and others, are also present.

Other Unvegetated Areas—Bare Ground/ Rock (3.8% of the reserve)

This category includes the many exposed rock formations with colonies of various lichens and bare ground disturbance such as mining spoils.

RARE AND SENSITIVE PLANT SPECIES

Preliminary field surveys have discovered the presence of three rare and sensitive plants. The reserve has been only partially surveyed and data are incomplete. There are no known federally listed or candidate plant species within the boundaries of City of Rocks National Reserve.

The Idaho Natural Heritage Program and the Idaho Native Plant Society maintain lists of plant species considered threatened or worthy of additional concern. Three plants on these lists are present in the reserve, including Simpson's hedgehog cactus, narrow-leaved Indian paintbrush, and Kruckeberg's swordfern (see appendix C).

The Simpson's hedgehog cactus is a solitary-stemmed cactus known to occur in rocky or sandy soils among low sage along the Graham Peak ridgeline. Future botanical surveys may find this cactus on other wind-swept slopes in the reserve. This cactus is widespread in southern Idaho. The primary threats to this species are exploitation from cactus collectors and any ground-disturbing activities.

The narrow-leaved Indian paintbrush is a perennial plant known to occur in rocky shallow soils along the ridge west of Indian Grove to Finger Rock. This variety is common outside Idaho in western Utah and eastern Nevada. The northernmost known occurrence of this variety of Indian paintbrush is in the reserve. The primary threat to this species is any ground-disturbing activity. Although the narrow-leaved Indian paintbrush is not palatable to cattle, heavy grazing may affect the plant.

The Kruckeberg's swordfern is found in the cool, moist micro-habitats in the granite formations at City of Rocks. The fern grows in rock crevices and normally is found at higher elevations than at City of Rocks. The primary threats to this species are trampling or removal by visitors along rockclimbing routes.

WILDLIFE

The diverse habitat of the reserve supports a large variety of mammals, birds, reptiles, and invertebrates. Streams in the reserve provide only marginal fish habitat and likely do not support any fish.

Mammals

A partial list of mammals in the reserve includes mountain lions, mule deer, rocky mountain elk, coyote, bobcat, badger, porcupine, red fox, cliff chipmunk, mountain cottontail and pygmy rabbits, blacktail jackrabbit, snowshoe rabbit, northern grasshopper mouse, merriam shrew, several species of voles, and a variety of bats. Pronghorn antelope and bison were probably common a century ago. Bighorn sheep were common throughout the area until the early 1900s. Hunting by settlers, range exploitation by domestic livestock, and disease transmitted by livestock led to the population decline.

Birds

City of Rocks has a large assortment of bird species and is a favorite area of local bird-watchers. The reserve provides excellent breeding and prey habitat for many raptor species including golden eagle, prairie falcon, red-tailed hawk, northern harrier, sharp-shinned hawk, Cooper's hawk, American kestrel, turkey vulture, and great-horned owl. Swainson's hawk and ferruginous hawk are less abundant in the reserve. Other common bird species includes blue grouse, sage grouse, piñon jay, Clark's nutcracker, common nighthawk, rock and mourning doves, cliff swallow, mountain chickadee, rock and house wrens, mountain bluebird, hermit thrush, solitary and warbling vireos, green-tailed towhee, Virginia's warbler, Brewer's blackbird, and various sparrows.

Reptiles and Amphibians

A number of reptile and amphibian species occur in the reserve area. Common amphibians that could be found near water in riparian areas include boreal toad, Great Basin spadefoot toad, and northern leopard frog. Typical lizard species include the western whiptail, western fence lizard, long-nose leopard lizard, sagebrush lizard, and northern desert horned lizard. Snakes include the western rattlesnake, Great Basin gopher snake, striped whipsnake, and wandering garter snake. The western rattlesnake is the only strongly venomous snake found in the reserve.

Invertebrates

Invertebrates are common throughout the reserve, but data on insects, spiders, and mites are limited due to lack of studies.

THREATENED AND ENDANGERED SPECIES

No federally listed threatened or endangered species occur in the reserve. However, two category 2 candidate species, the ferruginous hawk and Townsend's big-eared bat, occur or may occur in the reserve and are under review by the U.S. Fish and Wildlife Service for consideration as endangered or threatened species (see Appendix B: Consultation with U.S. Fish and Wildlife Service, and Appendix C: Rare and Sensitive Species in or Near City of Rocks National Reserve).

Ferruginous Hawk

Ferruginous hawks have been observed in the reserve and are known to nest nearby. This bird is very adaptable when selecting nest sites, and most of the reserve provides potential nesting habitat. Ferruginous hawks prefer to nest in trees but commonly nests on shrubs, rock outcrops, cliffs, manmade structures, and on the ground. They will build alternate nests (more than one nest) and regularly use nest sites from previous years. Eggs are typically layed in April and hatch in about 33 days. The young are ready for first flight at 40 to 50 days of age. The young are dependent on adults for about 28 days after first flight. Ferruginous hawks eat primarily small and medium-sized mammals, also some birds, cold-blooded vertebrates, and a few insects. The most frequently eaten prey is blacktail jackrabbit. The decline of the ferruginous hawks has been attributed to habitat alteration related to agriculture, overgrazing, and fire suppression. Ferruginous hawks are very sensitive to human disturbance during nesting periods.

Townsend's Big-eared Bat

Although no bat surveys have been completed within the reserve, surveys conducted near the reserve strongly suggest that Townsend's big-eared bats probably roost in rock caves within the reserve. These bats generally roost in areas easily reached by flying; therefore, they are seldom found in small cracks or crevices in rocks. They will roost in buildings or mines. Big-eared bats generally hibernate during the winter in caves and mines where temperatures range from 55 degrees Fahrenheit to just above freezing. They feed on insects and forage only late at night. Townsend's big-eared bats are extremely sensitive to close human presence and abandon roost sites after even the slightest disturbance.

OTHER ANIMAL SPECIES OF SPECIAL CONCERN

Several other rare or sensitive animal species were identified during the scoping process that may require special protective management considerations (see "Consultation and Coordination" section and appendixes B and C). Some cliff-nesting raptor species, denning mountain lions, and roosting bats could be adversely affected by human activities in the reserve. Native animal populations will be protected unless they provide a direct threat to visitor safety.

Golden Eagle

Six breeding pairs of golden eagles (a relatively high density) were observed during a 1991 raptor survey. Their active nests were located in or near the reserve. Preferred nest sites are on cliffs or tall trees growing on steep slopes. A pair of birds may build more than one nest. Some nest sites are used year after year. Eggs are usually layed in March or April and hatch in about 45 days. The young are ready for first flight at about 65 days of age. Jackrabbits, cottontail rabbits, ground squirrels, and sage grouse are preferred food. Carrion is frequently eaten. Other small mammals, birds, reptiles, and fish are also occasionally eaten. Golden eagles are sensitive to human presence during breeding periods.

Red-tailed Hawk

Six breeding pairs of red-tailed hawks and their nests were located in the reserve during the 1991 raptor survey. This species prefers nesting in tall trees well up a slope or on a ridge or hilltop, but will occasionally nest on cliff ledges. Breeding pairs occasionally reuse old nests during successive years. Eggs are layed anytime from March to early May and hatch in about 34 days. The young are ready for first flight at about 45 days of age and are dependent on adults for an additional 30 to 70 days. Red-tails feed primarily on small mammals. Birds, reptiles, fish, and carrion are also occasionally eaten.

Prairie Falcon

In the reserve, prairie falcons usually select laying sites on sheltered cliff ledges at least 30 feet above the ground. Prairie falcons do not build nests but will scrape together any loose material available, such as gravel, at the laying site. Breeding birds commonly return to the same nest site of previous years. Eggs are normally layed in April and hatch in about 31 days. The young are ready for first flight in about 36 to 41 days. As soon as the young are capable of sustained flight, they leave the area. Favorite prey includes ground squirrels, and as many birds (such as mallard, sage grouse, rock dove, and sparrow) as opportunity allows. Occasionally eaten species include cottontails, jackrabbits, a few rodents, small common lizards, grasshoppers, and crickets. Breeding prairie falcon pairs are sensitive to human disturbance.

Rocky Mountain Mule Deer

Mule deer occur in many varied habitats throughout southern Idaho. Mule deer require the juxtaposition of food, cover, and water like other cervids. Areas without water available within 1 mile show decreased use (Mackie 1970). Cover is used for both hiding and thermal regulation. Browse is the primary vegetation used by mule deer except in spring when herbaceous materials are preferred. Summer and winter ranges are most often geographically separate areas (Wallmo 1981).

Mule deer seasonally use habitat in and near the reserve. The abundance and availability of winter browse interspersed with piñon pine and juniper cover in southern portions of the reserve and east of Smoky Mountain and Cedar Hills provides important wintering habitat. Deer winter ranges are restricted by snow depths greater than 18 inches and reduced where snow depths are greater than 12 inches (USFWS 1982). Deer typically do not use the reserve area during severe winters. In the fall deer move north to south through the reserve and east of the reserve to winter ranges, then retrace this route in the fall back to summer ranges. Large numbers of deer have been observed migrating along a corridor just east of Smoky Mountain and Cedar Hills (personal comm., Randy Smith, IDF&G 1994).

Mountain Lion

Mountain lions are common in the Albion Mountains and the reserve. The rugged terrain north and northwest of the Circle Creek basin has been identified as important denning habitat for the regional mountain lion population. Litters of usually two or three are born in the summer. Idaho State University biologists estimate the current reserve population to be three to six adults in winter with four kittens. Mountain lions prey upon a variety of other animals, with deer being the most common food. The reserve provides important migration and wintering habitat for mule deer, and mountain lions typically follow the seasonal movements of the deer. In the fall lions move north to south from the denning area to the dense piñon/juniper covered slopes of the Smoky Mountains and Cedar Hills to the Utah narrows area, then they retrace this route in the spring. Mountain lions are sensitive to large numbers of people concentrated in denning areas.

Bats

The City of Rocks area has an unusually high diversity of bat species. Bat species collected in the area include the Townsend's big-eared bat, desert pallid bat, big brown bat, small-footed myotis, and silver-haired bat. The desert pallid bats have not been found elsewhere in southern Idaho. Cracks, crevices, and caves in the rock outcrops in the reserve provide suitable roosting habitat for bats. Roosting bats are sensitive to human disturbance, especially during hibernating periods.

Cliff Chipmunk and Piñon Mouse

Both the cliff chipmunk and piñon mouse are rare in Idaho. Cliff chipmunks are found on rock cliffs and piñon-juniper habitat in the reserve, which is the northernmost limit of their small range. The piñon mouse has been reported to occur in the City of Rocks area. (Larrison, E.J. and D.R. Johnson 1981). However, no piñon mice were collected within the reserve during recent small mammal surveys. Pinyon mice prefer open woodland and brushy areas, especially piñon and juniper covered hillsides like those in the reserve, where they eat a variety of seeds, berries, and insects.

SPECIAL NATURAL DESIGNATIONS

National Natural Landmark

National natural landmarks are nationally significant natural areas designated by the secretary of the interior. To be nationally significant, a site must be one of the best examples of a type of biotic community or geologic feature in its physiographic province. City of Rocks was designated a national natural landmark in 1974 because it contains the best example of bornhardt rock formations in the region, and probably the country, and possesses considerable scenic beauty.

Research Natural Area

Research natural areas are part of a national network of field ecological areas designated for research and education and/or to maintain biological diversity. The research natural area is set aside permanently and is managed exclusively for approved nonmanipulative research—research that samples but does not alter the existing condition. Prior to City of Rocks becoming a unit of the

national park system, the Bureau of Land Management and U.S. Forest Service designated a 312-acre undisturbed area of the reserve as a research natural area to preserve important vegetation types with unique and special characteristics and outstanding examples of geological processes of scientific interest. The research natural area is located among rock outcrops north of the City of Rocks basin, where the rugged terrain effectively protected most of the vegetation in the area from cattle grazing and other uses. The special features of the site are the high degree of habitat and floristic diversity: the area contains the northern limit of the piñon-juniper vegetation type, an example of a sagebrush steppe vegetation type in a rare natural condition, and excellent examples of bornhardt rocks formed by exfoliation processes.

SCENIC QUALITY

Scenic quality is excellent when views contain high degrees of unity, vividness, and visual intactness (naturalness). Seven of 24 viewpoints in the reserve were identified as having these outstanding qualities (see Scenic Viewpoints map). The first five demonstrate the vivid alpine character of the Great Basin geomorphic region in the reserve. The remaining two are distinctively different than the first five and embody the best of the Snake River Plain geomorphic region. Sagebrush is the dominant element, instead of rocks, and there is less variety in the groundplain. A complete discussion and ranking of scenic vistas can be found in the study, *Visual Resources Analysis* (NPS 1990). The superior and excellent viewpoints are listed below in order of quality from highest to lowest.

Superior Views

1. The view from the Almo Park road, southeast, across and above Indian Grove. The viewer is in an elevated position (the view is below and away) on a cliff edge with visibility extending to the Raft River. Mountains are 20 miles away. This view is the most expansive in the reserve and contains the greatest variety of texture, form, and depth. It is the most dramatic and vivid of all the inventoried views.

2. The view from the Almo Park road looking southeast across Taylor's springs and pasture area. The viewer is in a normal position (at grade) along sweeping, lush fields that serve as a setting for many of the peculiar and individual rock massings/fins of the upper Silent City of Rocks. This view has abundant ephemeral images such as cloud displays, cattle, and seasonally changing color.

3. The views north into the Silent City from Bath and Turtle rocks and the view southeast into the Silent City from Parking Lot Rocks. These views are rim overlook views, where the viewer is slightly elevated, with good enclosure, expansive displays of rock, intricate depth, and strong background focal points, one of Graham Peak and one of distant Twin Sisters. These views can appear chaotic just from the sheer quantity of rock form. These three views are so similar in composition, their scenic quality is nearly equal.

4. The view from Emery Canyon Pass south and east into the reserve. The viewer is at grade looking into the core of the reserve.

This view is in an area of unique wetland/springs activity, fairly contained, with considerable depth to strong rock focal points in the background. The suggestion of water adds an ephemeral highlight.

5. The view from the northwest boundary up to Emery Pass. The viewer approaches the pass from below, with a shortened view to a strong rock focal point. Water, cattle, seasonal color, and cloud display combine to create a lush, vivid landscape, unique in City of Rocks.

Excellent Views

6. The view west into the Silent City from Circle Creek basin. The viewer stands in a well-defined broad bowl. Enclosure is good with ridges and rock groupings forming walls around the view. The basin form loses the focal point possibility, although Graham Peak is evident. Variety in textures and forms is greatly enhanced by the rocks, climbing out of the basin onto the horizon.

7. The view on the trail from Pinnacle Pass north toward the Circle Creek basin. The viewer is perched in a slot between rock walls looking over a broad basin. Sagebrush hills roll into the basin and onto the north ridge of the Silent City. This view is expansive, but not particularly vivid.

3A
NATIONAL RESERVE BOUNDARY

SCENIC VIEWPOINTS & VIEWSHEDS

CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service

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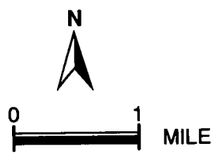


NATIONAL RESERVE BOUNDARY

EXTENT OF SUPERIOR SCENIC QUALITY

VIEWS

1 - INDIAN GROVE OVERLOOK

2 - TAYLOR'S PASTURE OVERLOOK

3 - A) BATH ROCK VIEW TO CITY

B) TURTLE ROCK VIEW TO CITY

C) PARKING LOT ROCKS VIEW TO CITY

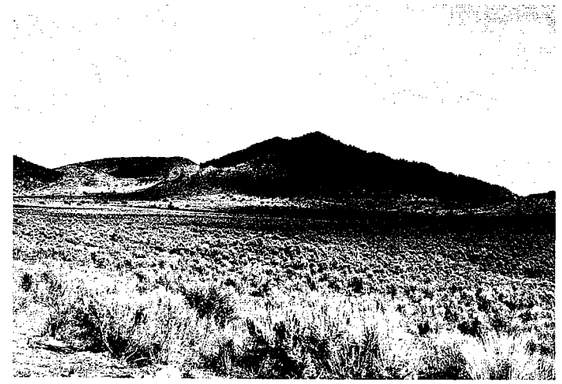
4 - FROM EMERY PASS

5 - TO EMERY PASS

6 - CIRCLE CREEK BASIN

7 - PINNACLE PASS NORTH

8 - CIRCLE CREEK OVERLOOK



Mountainous ridges with alpine meadows reflect Great Basin geomorphology.

Typical view: Sagebrush cover is typical of the Snake River plain.

Weathered rock spines with rare evergreen cover create the dramatic expression that is City of Rocks.

8. The view from Circle Creek Basin Overlook provides a panoramic view into the Basin and includes Graham Peak and Twin Sisters.

Generally, superior scenic quality is concentrated in the north, within the Silent City, on its edges, and from overlooks above it. The first five views are full, detailed, vibrant landscapes with depth contributing the critical element to their greatness. The remaining two scenic views get their strength from enclosure created in the middle of the views, giving the viewer a sense of one big expansive room.

VISITOR USE

Overview

Existing Visitor Use Levels. Because City of Rocks is a new unit of the national park system, the National Park Service has not begun to record visitation statistics. The Idaho Department of Parks and Recreation has intermittently kept data on visitation and estimates that the area received 42,000 visitors in 1988 and between 75,000 and 80,000 visitors in 1989.

The only detailed visitation data comes from a 5 1/2-month study conducted by the Bureau of Land Management in 1987. Specifically the study covered the snow-free period from Memorial Day through mid-November. The report states, "It is suggested that peak use of the City of Rocks occurs in the April 15 to June 15 period; however, no data has been collected to support or disprove this use pattern." A summary of the results is shown in table 4.

TABLE 4: 1987 VISITATION

Dates	Recorded Visitation	Projected Visitation
5/24 - 5/27	2,667	
5/28 - 6/30	5,919	
7/1 - 7/31	7,368	
8/1 - 9/1	6,765	
9/3 - 10/1	4,879	
10/2 - 10/29	2,579	
10/30 - 11/12	1,522	
	31,699	
Subtotal	31,699	
Projection for the remainder of 1987		14,800
Total		46,500

Daily figures revealed that heaviest visitation occurred on weekends. "Normally, there is a 40- to 70- percent increase in the number of visitors on a Saturday or Sunday as compared to a weekday." Based on the area available for parking and constraints on placement of parking areas, visitation is expected to level out at 80,000 to 100,000 visitors per year.

Visitation figures for 1990 to 1994 from the Idaho Department of Parks and Recreation are shown in table 5.

TABLE 5: 1990-1994 VISITATION

Months	1990	1991	1992	1993	1994
January-March	13,856	10,200	16,530	9,079	8,753
April	8,320	8,288	9,576	6,023	4,684
May	9,285	11,360	12,573	9,247	9,176
June	8,786	15,317	14,064	10,856	
July	9,597	11,408	9,297	11,652	
August	9,701	11,183	10,442	11,052	
September	11,306	11,708	11,468	11,343	
October	7,349	10,644	11,312	5,782	
November	3,312	5,579	2,172	5,141	
December	3,400		*	1,234	
	85,081	95,507	97,764	81,409	
*December 1992 through March 1993					

Throughout the study period, data also were collected on the percentage of visitors engaged in various recreational activities. The results of that data are shown in table 6. Although horseback riding was observed during the study, this activity was not reflected in the surveys.

TABLE 6: 1987 PERCENT OF VISITORS PARTICIPATING IN ACTIVITIES

Activity	Percent
Camping	31.9
Rock climbing	31.4
Sightseeing	14.5
ORV use	6.1
Mountain biking	4.9
Picnicking	6.4
Hiking	5.0

More recent visitor use data comes from a survey conducted by the Cooperative Park Studies Unit at the University of Idaho between August 30 and September 5, 1991. The following excerpts from the results help profile visitors to the reserve:

> Sixty-four percent of visitors were in family groups. Sixty-five percent of visitors were visiting City of Rocks for the first time.

Thirty-six percent of visitors were 21 to 35 years old.

Visitors from foreign countries comprised 6 percent of the visitation to the reserve. Seventy-eight percent of American visitors came from Idaho and Utah.

Fifty-eight percent of visitor groups spent less than a day at the reserve. Of this group, 74 percent stayed four hours or less. Fifty-five percent of the visitors who stayed more than one day spent between two and five days.

Sightseeing (70 percent), rockclimbing (58 percent), photography (47 percent), hiking (44 percent), tent camping (35 percent), and picnicking (32 percent) were the most common activities reported by visitors during their stay.

Most visitors (58 percent) said no other visitor activity affected their visit. Those visitors (42 percent) who answered yes to this question listed watching rockclimbing, obnoxious campers, crowds, and gunfire as activities that affected their visit. The survey did not specify whether these effects were positive or negative.

Interpretive/ Educational Opportunities

As a new unit to the national park system, no interpretive facilities, media, or programs are provided at City of Rocks. No signs on the major highways direct people to the reserve, and few signs inside the reserve identify or interpret significant resources. A building outside the reserve near Almo is currently used as a temporary ranger station where visitors can get basic information and orientation.

Inside the reserve, roadside signs direct visitors to the Silent City, although no on-site media is provided to interpret the significance of the resources. The California and Salt Lake Alternate trails are marked only by small yellow T-shaped markers, installed by the Oregon-California Trail Association. Pinnacle Pass is marked by a broken, faded, homemade sign erected by a Boy Scout troop.

Recreational Opportunities

The multitude of impressive rock formations within the reserve and the topography of the rural landscape provide a wealth of recreational opportunities. The 1987 BLM study and the 1991 visitor survey clearly showed that camping, hiking, and rockclimbing are major recreational activities within the reserve. Most activity occurs on the weekends; visitors in the area during the week are usually climbers.

Other forms of recreation include picnicking, horseback riding, mountain bicycling, motorcycling, off-road vehicle (ORV) use, hunting, cross-country skiing, snowmobiling, pine nut gathering, sightseeing, and photography. Most of the recreational uses are concentrated in section 36.

The use of the reserve for rockclimbing, camping and sightseeing dramatically in the last decade. City of Rocks has achieved national and international attention in the climbing communities, and climbers now represent the highest percentage of reserve users.

Currently, few regulations, staff, or facilities exist to control the location, volume, or extent of recreational activities that may conflict with other visitors.

Climbing. The popularity of City of Rocks for rockclimbing has increased significantly in the past decade, even though the NPS feasibility study conducted in 1973 did not mention climbing as a recreational activity.

Many climbers come to the reserve from nearby Pocatello, Idaho Falls, and Boise, Idaho, the greater Salt Lake City, Utah, area and from Jackson, Wyoming. Based upon a 1991 user survey, roughly 40 percent of all climbers come from Utah, 35 percent from Idaho, and 25 percent from other states or foreign countries. During a competition held in 1989, however, climbers arrived from 27 states and four foreign countries. Climbing literature also has promoted the exceptional challenges offered in the reserve, and the number of national and international users continues to grow.

The favorite climbing areas listed by respondents to the visitor information survey were: Bath Rock, Breadloaves, Dolphin, Elephant Rock, Parking Lot Rock, Morning Glory Spire, Twin Sisters, and Window Rock.

Well over 600 climbing routes are in the reserve. The establishment of new routes has been greatly reduced since a county ordinance prohibited the use of power drills. Permanent bolts are visible on some rock faces. Numerous social trails have been created by climbers seeking access to rock faces, resulting in some serious erosion problems.

Rockclimbing opportunities occur on some private lands inside the reserve. While climbers, along with other users, are directed to obtain landowners permission prior to entry on private land, some incidents of trespass have occurred.

Camping. Demographics indicate that most campers come from Idaho and Utah. A further breakdown shows that roughly 50 percent of the campers are from Idaho, 40 percent from Utah, and 10 percent from other states.

Visitors currently camp in designated campsites, with section 36 receiving the greatest use. People like to camp near the rim of the Silent City, and large groups often camp in an area behind Breadloaves. Backcountry camping also is permitted anywhere on public land, and campers can obtain permission from landowners to camp on private property.

The 1987 BLM survey identified 51 campsites within section 36. The report states that at no time were all the sites occupied. "At the busiest of times, such as Labor Day Weekend, only 35 of the 51 sites were occupied. Even so, this level of use gives the appearance of saturation with the unoccupied sites being close to occupied sites and having little visual screening. The empty sites usually did not offer privacy."

Reserve officials believe that the number of sites continued to grow from 1987 until 1992, when designated campsites were limited to 78 sites.

Public campgrounds are in the north portion of the Albion Mountain division of Sawtooth National Forest, which abuts the northern boundary of the reserve. However, due to high resource impacts in the Albion Mountain unit, the Forest Service plans to phase out its camping facilities.

Camping is permitted on BLM land holdings adjacent to the reserve. These areas are managed primarily for grazing, and no formal campsites exist on these lands.

Public camping areas are on adjacent public lands administered by the Forest Service and Bureau of Land Management. At least nine private campgrounds operate within a 50-mile radius of the reserve; the closest one is in the Burley area.

Public Safety/ Accessibility

Hunting. Hunting poses a danger to visitor safety in the reserve. Currently, hunting is restricted only from section 36. Other recreational activities (such as camping and hiking) also may occur anywhere on public lands. This creates potential safety hazards that would be difficult to manage. Special legislation allows hunting to continue in the reserve, and charges the superintendent with establishing management policies to ensure public safety.

Accessibility. The temporary ranger station near Almo has been retrofitted for mobility impaired, including access to the restroom. The restrooms in the parking lot across from Bath Rock are also accessible. No other accessible facilities are currently provided.

LOCAL COMMUNITIES

Character of Surrounding Communities

The reserve is in Cassia County, one of eight counties in the south-central Idaho region known as the Magic Valley. Cassia County represents 14.6 percent of the region's total population and ranks third in the state for total farm income. This income includes crops from developed croplands and products from agricultural processing centered in Burley. The county's population grew by more than 14 percent from 1970 to 1980 and decreased by 18 percent from 1980 to 1990. The growth of individual communities, including Cassia County, is shown in table 7.

TABLE 7: POPULATION OF ADJACENT COMMUNITIES

Community	1970	1980	1990*	% Change
Albion	229	286	305	+31
Burley	8,079	8,525	8,702	+7
Declo	251	276		
Malta	196	196	171	-13
Oakley	656	663	635	-3
Cassia County	20,300		19,532	-4

*Based on census data

Most of the small towns surrounding the reserve were established by Mormon settlers, and Mormons currently dominate the area.

The economic base of Cassia County is agriculture and the agriculture-related industry. Major employers include Simplot Foods, The South Idaho Press, Boise Cascade, and Del Monte. Burley is the county seat and serves as the wholesale and retail trade center for the eastern portion of the Magic Valley.

The county's land use and ownership patterns generally reflect those of the region. Rangeland

covers 68 percent of the county, and 28 percent of the land is used for agriculture. Fifty-seven percent of the county's land is controlled by the federal government and 40 percent is privately owned. Unincorporated lands of Cassia County are zoned by the county as a "multipurpose zone." Zoning of incorporated lands is the responsibility of the incorporated units.

Almo, the closest town to the reserve, lies 2 miles east. The current population in the vicinity of the unincorporated town is about 175-250, according to local officials. It is not identified in the census data because it is unincorporated. Although statistics show the population as 15 inside the town's limits, locals living 3 to 10 miles out consider themselves part of Almo. The post office has approximately 50 boxes, and there are two rural mail routes.

The layout of the consolidated part of Almo is typical of Mormon colonies (Arrington 1979). Elements include a wide north-south main street, the ward church one block off the main intersection, the school and store at this junction, houses and barns clustered around the main intersection, and fields radiating away from the town center. This pattern evolved from the European farm village and was successfully developed by homogenous religious and immigrant groups in the Midwest and Utah/Idaho, including the Amana colonies in Iowa, the Amish colonies in Pennsylvania, and various ethnic settlements in Minnesota, Wisconsin, and Iowa. Inherent in this layout was a communal use of water and a convenient communication and social network.

Structures in town originally were made with logs harvested from the hills behind Almo and milled there. Limited use of locally quarried white-quartz granite replaced log construction by 1900. The advent of a brick operation in Almo supplied materials to Albion and Declo and allowed for fine masonry early in the life of surprisingly remote locations. The Tracy store in Almo, the hotel in Declo, and the normal school in Albion are excellent examples of the craftsmanship achieved using the russet native sandstone brick.

The store/post office serves as the primary commercial center of the community. The elementary school, diagonally across from the store, is also a sandstone brick building that doubles as the community meeting hall. The ward church is the predominant social center with church-sponsored sporting and other events. The reserve's administration log building, previously a residence, is the only other nonresidential use in the town.

The quality of life in Almo is quiet, peaceful, family-centered, and community-oriented according to interviews with residents. Local crime is nearly nonexistent. Citizens claim they can walk out their door and hear the sounds of the wind and their neighbors' chickens 1/4 mile away. They also describe themselves as quiet, private folks who are comfortable and content with their lives. As in many rural locations, youthful restlessness causes departures. Within the last eight years, some of the former residents have returned to the Almo area to raise their families, which may account for the increase in enrollment at the elementary school.

Land uses adjacent to town include dryland farm fields and the cemetery. Visual details include hayfields that crowd into the town edge; houses, barns, and yard gates that stand close to the gravel county road; bridges constructed of peeled logs; and fences with crafted wooden gates. Horses occasionally graze unrestrained within the road right-of-way and cattle graze in nearby pastures. Occasional driving of cattle between pastures is typical in the road right-of-way.

On the other side of the reserve, corrals and loading chutes, along with dilapidated buildings from a small ghost town, suggest a more rugged pioneer existence. Gray, weathered log and wood-shingled structures in Moulton seem timeless. Unmilled logs and milled lumber are used for livestock containments in this area. Remnants of a historic line camp indicate a more recent tie to ranching and cattle raising operations on this side of the reserve. Lands are privately owned, in sagebrush cover, and in grazing use, with no current structures visible from roads exiting the reserve.

The town of Oakley, 17 miles from the reserve, on the western side of the Albion mountains, is the predominant commercial and residential center in southern Cassia County. The town was settled by colonizing Mormons at the same time as the eastern side. Historically, it served as the religious center of the county, with the larger stake house located here, until Burley became the county seat. The town has a developed downtown district of commercial and residential uses that has been designated a national historic district. Quarrying of mica-like sheets of ferrous-colored Oakley stone has created the major industry in town. This stone, suitable for veneer and paving applications, can be

seen throughout the region as well as on buildings in town. The recent renovation of the historic opera house included Oakley stone paving on the lobby floor.

Statistically, the town is about six times larger than Almo, has a slightly higher rental vacancy rate, and a population that is thinner in the ranks through the young adult to middle-age group than either the county average or the eastern side of the mountains. The town is surrounded by mostly potato and sugar beet fields that are irrigated.

Community Services

Fire Protection. There are five special fire protection districts in Cassia County. Because Almo and Elba are not within a fire district, no unit will respond.

Police. The sheriff's department in Burley coordinates with reserve staff to respond to medical and search and rescue emergencies. A deputy is assigned to the town of Almo specifically for this purpose. A telephone response often requires an hour or more from Burley, 50 miles away.

Health Care. Quick response unit service is provided in the town of Oakley, however, representatives from these services state they do not have funds in their budgets to respond to emergencies in the reserve. Cassia Memorial Hospital in Burley has 42 beds. City of Rocks has a quick response unit that responds to the reserve with backup from Malta and Burley.

Housing. Census data shows rental vacancy rates of 9.2 percent countywide, 0 percent in Almo, 20 percent in Oakley, 10 percent in Burley, and 14.3 percent in Albion. Locals that were interviewed claim that rentable residences are not available in Almo. Albion, 20 miles north of Almo, is the closest town where apartments/houses can be rented.

Schools. There are 15 schools in Cassia County administered by three school districts. The total enrollment in 1987 was 5,177.

Elementary schools are in Almo, Oakley, Albion, Declo, and Malta. Secondary schools are in Malta, Oakley, and Burley. Enrollment at the Almo Elementary school is 30. Within the last eight years it has shown a small but steady rise.

High schools are in Burley, Declo, and Malta. Community education programs are offered in Burley and Malta. The curriculum is coordinated with College of Southern Idaho in Twin Falls and Idaho State University in Pocatello. The mean educational level for Cassia County residents is 12.2 years.

LOCAL ECONOMY

Private Landowners and Livestock Grazing Permittees

Most of the private land in and surrounding the reserve is used for domestic livestock grazing. Livestock grazing is important to the regional economy. Most of the public lands are divided into grazing allotments, and the area ranchers rely heavily on federal rangelands. The U.S. Forest Service, Bureau of Land Management, and now the National Park Service administer 10 allotments in and around the reserve. Currently, there are 10 permittees grazing cattle on 6,981 acres of public land in the reserve with an estimated 504 active animal-unit months (AUMs). Livestock are grazed on another 5,234 acres of privately owned land. Grazing is excluded from the remaining 2,331 acres of public land in the research natural area, state-owned section 36, and other federal land not within a grazing allotment. In addition to the 10 allotments in the reserve, the Almo Flat allotment located entirely outside the reserve could also be affected. There is one permittee grazing cattle on 1,134 acres of federal, 640 acres of state, and 174 acres of private land within the Flat Allotment with about 253 active AUMs. The heaviest cattle grazing occurs from June through October. Ranchers that graze cattle in or near the reserve frequently trail cattle across the reserve from one allotment to another. Table 8 shows the allotment sizes and approximate active AUMS in the reserve.

Visitor Services

Limited commercial facilities are available in the small communities immediately adjacent to the reserve. Although services are currently limited to groceries, gasoline, and basic camping supplies in these communities, a full range of services is available within a 50-mile radius of the reserve. In this area visitors can find lodging, camping, restaurants, gasoline, automobile services, and many other necessities.

The communities of Burley and Twin Falls offer the greatest volume and variety of services. Both have an abundance of motels, gas stations, and restaurants. Twin Falls is served by commercial airlines and bus companies. Shoshone, 30 miles north of Twin Falls, has a train station at which the Union Pacific Railroad and Amtrak stop.

At least nine private campgrounds operate within a 50-mile radius of the reserve. Several are in the Burley area.

TABLE 8: PRIVATE ALLOTMENTS AND APPROXIMATE AUMS IN THE RESERVE

Allotment (number of permittees)	Allotment Size		Approximate Active AUMs	
	Approximate Total Acres	Reserve Acres[1] (Percent on Federal Land)	Total	Estimated in the Reserve
Graham Creek (1)	3,186	2,665 (100%)	253	201
Walter Creek (1)	1,715	898 (99%)	202	106
Circle Creek (1)	1,474	1,118 (100%)	23	16
Trail Canyon (3)	2,891	1,365 (64%)	188	89
Tracy Lane (1)	641	395 (93%)	77	47
Heath Canyon (1)	2,745	1,674 (58%)	21	13
Smoky Mountain (1)	1,127	31 (100%)	54	1
Junction Seeding (8)	6,520	66 (100%)	490	5
Moulton (1)	654	150 (0%)	56	13
Sparks Basin (1)	3,141	173 (0%)	228	13
Total (10)[2]	24,094	8,535 (0%)	1,592	504

[1]Includes public and private range
[2]Some permittees graze cattle on two or more of the listed allotments

Tourism literature (a color brochure entitled *Touring Mini-Cassia Land*, and a single-page map entitled "City of Rocks Loop Tour") promotes a 75-mile loop tour beginning at Burley. The brochure suggests traveling to Oakley on Route 27, then on to City of Rocks. The map directs people to Declo, Malta, Albion, Elba, Almo, City of Rocks, Oakley, and back to Burley.

According to the "1992 Visitor Services Project" draft report, the per capita expenditure of a visit to City of Rocks is $19.04.

FACILITY ANALYSIS

Regional Access Roads

Two exits from I-84 provide the most convenient access to the reserve. About 15 miles east of Burley, I-84 bends southeast toward Salt Lake City. On this portion of the interstate the Sublett/Malta exit allows visitors to travel west to Idaho Route 77, then turn south onto the county road to Elba and Almo. The Declo exit (just west of Burley) takes visitors south on Route 77 past Albion. Travelers then turn west onto the county road to Elba that later turns south to Almo. Another popular route is I-84, east along Idaho route 41 to Stravell, Naf, and Almo or Stravell, Bridge, and Almo. The 1991 visitor survey found that approximately 75 percent of visitors entered the reserve from the east side. Another access option from Burley follows Idaho Route 27 south to Oakley. The unpaved Birch Creek Road from Oakley leads to the Emery Canyon Road, which enters the west side of the reserve. (See the Vicinity map in part one of the document.)

The county roads on either side of the reserve will no longer be maintained by the state. Cassia County does not have funds to maintain them, and it is feared that the condition of the roads will continue to deteriorate.

There are no signs on the interstate highway for City of Rocks. There is one sign at the intersection of Route 77 and the county road to Elba and one along the road from Oakley.

Applying factors of 2.8 visitors per vehicle to total number of visitors estimated by the Idaho Department of Parks and Recreation (between 75,000 and 80,000 visitors in 1989) indicates that 26,800 to 28,600 vehicles enter the reserve via the various access routes.

Regional Contact Facilities

The Idaho Department of Parks and Recreation has recently leased a log building just south of Almo to use as a temporary headquarters and visitor center. The structure lies outside the reserve boundary near the east entrance. This is currently the only visitor contact center for the reserve.

Internal Roads and Parking Areas

The reserve contains approximately 10.5 miles of primary roads, all maintained by the county. These are gravel roads with no constructed subbase and no shoulders that vary from 16 feet to 22 feet wide. The road network is a Y configuration, with one road crossing the reserve from northeast to northwest, and another turning off that road to head south and exit the reserve near the southwest corner. The roads are not plowed, requiring four-wheel-drive in snowy or wet weather.

Before entering the reserve on the northeast, Cassia County 77 follows the historic California Trail alignment for 2.5 miles out of Almo, climbing 300-400 feet as it approaches the boundary. Inside the reserve the road gains another 400 feet in elevation to the Y intersection, 2.5 miles inside the reserve. Proceeding northwest to the Emery Canyon Pass exit, the road steadily gains another 800+ feet in the 2- to 3-mile stretch to the pass. The road levels out for a brief quarter mile, where an abandoned Forest Service road trace to Almo Park enters on the north. This road trace, previously USFS Road 562, and now being reclaimed, follows a draw 2.5 to 3 miles up to Indian Grove. Forest Service access to Almo Park

has been relocated along a new gravel alignment to the west and within the reserve. The primary reserve road leaves the unit 0.75 mile from Emery Pass and makes a quick descent down Emery Canyon and Birch Creek drainage 16 miles to the town of Oakley.

Proceeding south from the Y, the road climbs over a slight saddle and then descends gently to a point 1.25 miles south of the intersection, where it makes a right-angle turn to the west, along section lines, heading for a slot pass through the Twin Sisters ridge. This road alignment was blasted through by the Civilian Conservation Corps in the 1930s in an effort to create a safer traverse than Pinnacle Pass, the only other opening in this forbidding ridge of monolithic rock. Pinnacle Pass lies 0.25 mile to the southeast of the road. The road descends rapidly from the ridge to a draw below, swings around a substantial rise and exits the reserve about 2.5 miles from Twin Sisters, heading west towards Moulton and Granite Pass. The road makes a criss-cross pattern and follows the California Trail for most of its length. A mile and a half before the exit, a gated, well-defined side road comes in from the east, paralleling the Salt Lake Alternate. Visitors can walk along this road to the stage stop site. This road exits the reserve about 2 miles east of the junction with the north-south road.

Four-wheel-drive roads up Trail Creek, Graham Creek, Heath Canyon, and Graham Peak (8,867 feet elevation) offer additional access into the reserve. Traces of four-wheel-drive roads also head up Circle Creek draw and follow the bases of ridges like Smoky Mountain.

Many social roads have been created along the rim above the Silent City. Paralleling the main reserve road and cutting in the scant quarter mile to the edge, loops take off and break into the road at a number of random spots. Most of these roads have been worn by the desire to get to scenic views on the rim to the northeast, popular rock faces, and ad hoc campsites. Resource damage in the form of land denuded of vegetation is most evident here.

Parking areas have been defined at Bath Rock and at the Twins Sisters picnic area. The Bath Rock area measures 50 by 200 feet and holds 25 cars. It is gravel and is informally contained by milled post and pole split-rail fencing. This area, which contains a new restroom facility, serves people using Bath Rock for technical climbing and scrambling and provides access to rim overlooks into the Silent City. The 15-car parking area on the north side of Twin Sisters is also gravel. It services the picnic area and provides climber access to the Twin Sisters ridge.

Pull-off, informal parking occurs at

- the well site—five cars
- numerous campsites along the rim and main road—60+ cars
- the Breadloaves formation—50 cars
- Parking Lot Rocks—a cul-de sac turnaround-three to six cars
- the Nicholson house—five cars

Trails

No designated trails exist, but visitors have hiked, biked, and ridden nearly everywhere in an effort to reach climbing rocks, to find backcountry experiences, and to seek overlooks. The climbing guide suggests hiking and mountain biking uses on most of the four-wheel-drive roads. Seven loop routes are described for mountain biking use. These routes go up Trail Creek and around the back side of Twin Sisters, down Emigrant Canyon, through Circle Creek, up through the Silent City by way of North Circle Creek, up through Indian Grove, up to Graham Peak/Almo Park, and outside and around the entire reserve. Many of these routes cross private property and require gate openings and closures. Horseback riders use all the canyons and the main road when trailing cattle, and they occasionally ride up Circle Creek basin to Indian Grove for leisure.

Restrooms

One vault toilet at the Twin Sisters picnic area is set on the rock ridge. Although placement is visually acceptable, lack of accessibility is obvious.

Two vault toilets behind Bath Rock are more typically located side by side, out in the open. A new vault toilet at the north end of the parking lot is of rough sawn cedar and brown in color. The surrounding light rock and dark green piñon pine do little to soften the visual intrusion of this structure. Weathering of the wood over time may change the harsh contrast.

Camping

A formal picnic area at Twin Sisters, built by the Bureau of Land Management, has three tables nicely tucked into the rocks and piñons on the north side of the ridge. Each site has a wonderful view to the north. The trail to this area continues to an Picnic Areas archeological site that is fenced with chain-link and not accessible to the public.

Informal picnicking occurs at any rim campsite that is not occupied and at the group campsite at Breadloaves.

In 1986 some 51 informal camping sites were identified along the rim of the Silent City, adjacent to the main road. None had improvements, although fire rings were established by users. Campsites have increased as the area's popularity has grown, and camping use is restricted to 78 designated campsites. In addition, Breadloaves serves group camping and can handle 25 cars and 25 tents.

Utilities

Two overhead powerlines from Raft River Rural Electric cross the reserve from southwest to northeast following the south and east sides of the reserve roads from Moulton to Almo.

Water is pumped at one public location in the reserve at Emery Spring. New facilities include a hand pump for a 75-foot deep well.

No main lines or septic systems exist in the reserve.

Dams

A survey is underway at the reserve for all dams on federal property. If we propose to acquire land, dams on that land will be evaluated. The National Park Service will place dams within the reserve or affecting the reserve on the NPS official inventory of dams. All stream control structures that affect the reserve will become subject to the National Park Service Dam Safety Program (NPS-40). It is anticipated that the only dams that will be found in the reserve are small earthen ones used for stock watering.

Hazardous Waste

Before any acquisition of realty is completed, the applicability of Secretarial Order 3127 and 602 DM 2 will be considered. These documents require the performance of a hazardous waste survey prior to any acquisition. If any pollution is subsequently discovered, the responsibility for purchase approval rests with the Office of the Assistant Secretary for Policy, Budget and Administration.

The hazardous waste survey will include a comprehensive survey for evidence of underground storage tanks that may exist within the property boundaries. This should include a survey of past and present sources for heating of any structures that may be or have been on site. Should evidence of an underground storage tank be encountered, a subsurface investigation will be conducted to assess for possible releases to the environment.

If any landfills, dump sites, or other evidence of spills and leaks are found or are suspected to be within the park boundaries, the sites would be investigated for hazardous materials contamination in accordance with Environmental Protection Agency and Departmental Guidelines.

Mineral Development

Within its boundaries, the City of Rocks had one mining claim, declared abandoned and void by the Bureau of Land Management in February of 1991. The only workings were two shallow bulldozer cuts, each 500 feet long. There are also two abandoned sand and gravel pits; both are partially reclaimed. A plugged and abandoned exploratory oil well and two abandoned mica mines are on private land within the unit's boundary. Local residents believe that the quartz at the abandoned mica mines may have economic value. However small, the mines could be reopened. The NPS Mining and Minerals Branch briefly examined the gold and mica sites. In their current condition, heavy metals do not appear to be concentrated or accessible at these sites, hence degradation of ground water quality is probably not a concern. However, secondary impacts from reactivating the mines could cause groundwater contamination. The Mining and Minerals Branch also reviewed plugging data for the well site. The well appears to be properly plugged. An improperly plugged well or contaminated soil at the well site (e.g., if chemicals or petroleum products were spilled at the site) may also lead to groundwater contamination. The reserve suspects that soil contamination is inhibiting plant growth within a 30-foot diameter of the well casing. The site should be investigated to determine factors inhibiting plant growth. Contaminates may also be washed into the surface waters. Erosion at all mine sites may also cause degradation of surface waters. To closely examine mine and well impacts to surface and groundwater, the reserve may contact the Mining and Minerals Branch and the Water Quality Division for assistance.

ENVIRONMENTAL CONSEQUENCES

OVERVIEW OF MAJOR IMPACTS

To most observers City of Rocks appears to be a highly natural area. The marks left by people — in the form of trails, homesteads, fields, and other modest developments — have been relatively insignificant in scale. Because the area was never heavily settled or developed, the few historic sites and structures have been left alone to slowly melt into the landscape, providing a relatively complete picture of the many periods of the area's history. The area remains highly scenic, with a colorful and richly textured mix of enclosed and expansive views created by the rocks, vegetation, and occasional signs of human settlement.

But the land is not pristine. The natural biological diversity and riparian and wetland habitats of the reserve have been substantially altered by decades of road and facility development, domestic livestock grazing, fire suppression, dryland farming, seeding, and brush control. These activities, which have helped shape the livelihoods and the quality of life of generations of Cassia County residents, have unavoidably resulted in irretrievable losses of soil and the introduction of highly competitive nonnative plants that are nearly impossible to eliminate. As a result, the original vegetative communities and the distinct assemblage of animals dependent upon them have been permanently lost. The vegetation and habitats evolving today are different from those that existed before human uses occurred.

Unlike farming, livestock grazing has appeared to be a sustainable use of this landscape. However, the decreasing biological diversity and degradation of wetlands is causing a decline in natural productivity that is affecting the amount of forage available for wildlife and livestock. More recent recreational uses are also diminishing the biological diversity of the reserve.

Human use would continue to shape and be shaped by the natural and cultural environments at City of Rocks. The exact character of that relationship would differ, depending on which alternative was implemented.

ALTERNATIVE 1 (NO ACTION)

The no-action alternative would allow continued intensive use of natural habitats and cultural areas for public recreation and private livestock grazing and residential and commercial development with only the legal minimum action taken to protect resource values. The principal impacts, including the unavoidable adverse impacts, of this management strategy would be as follows:

Slow deterioration of historic sites and structures and archeological sites related to the California Trail and other periods of the reserve's history would continue. This would be an irreversible loss of historic and archeological values.

Modern developments and incompatible activities would intrude into the historic views from the California Trail and the reserve's historic rural setting. This would cause a long-term but theoretically reversible impact, although the investments involved for new development would make its removal unlikely in the foreseeable future.

Disturbance of 88 acres of soils, vegetation, and habitat for campsites, roads, trails, and private development (0.6 percent of the reserve) would continue, causing a long-term but reversible effect.

Degradation and reduced productivity of natural plant and animal communities caused by domestic livestock grazing and suppression of natural fire would continue on 89 percent of the reserve, including 95 percent of the riparian and wetland areas. The productivity of damaged riparian areas and wetlands, damaged upland areas, and severely eroded areas would be substantially diminished for extremely long time periods. Even with possible future changes in grazing management and rehabilitation of these areas, long-term impacts and diminished productivity would be expected to last for many years. Soil loss would be irretrievable.

A total of 12,215 acres of public and private land for livestock grazing would continue to be available. However, the natural productivity of this land would continue to be decreased by loss of soils and invasions of woody species and nonnative plants.

All public lands for rockclimbing and other recreational activities, including tent and RV camping, would continue to be available.

The impacts of rockclimbing would continue.

These impacts include soil compaction and erosion; vegetation damage and wildlife disturbances; impacts associated with the use of bolts, motorized drills, chalk, and the creation and reinforcement of hand and foot holds; the accumulation of litter and human wastes; increased foot and vehicle traffic around popular climbing areas; impacts to the park experience and wilderness values for other park users and visitors, including visual impacts of climbers and equipment; and increased administrative activities such as search and rescue. Impacts can be found on approach and descent routes, bivouac sites, and climbing staging and viewing areas, as well as the rock itself. FR Vol 58, No 112/June 14, 1993.

The character of surrounding communities would be changed by weekend traffic, and the integrity of Oakley Historic District could be compromised because of new construction.

Reserve visitor expenditures and expenditures from reserve operations and construction could benefit the economy.

ALTERNATIVE 2 (PROPOSAL)

Alternative 2 would manage public recreation and private livestock grazing to accommodate these uses while minimizing their adverse impacts on the natural and cultural environment. The principal impacts, including the unavoidable adverse impacts, of this management strategy would be as follows:

Historic sites and structures and a small number of archeological sites related to the California Trail and other periods of the reserve's history would be stabilized and preserved. Archeological resources would be managed in accordance with section 110 of the NHPA and an archeological research and management plan to be developed in consultation with the state historic preservation office.

Modern development and incompatible activities in the historic views from the California Trail and the reserve's historic rural setting would be reduced and managed to minimize the potential for future intrusions.

An additional 52 acres of soils, vegetation, and habitat inside the reserve would be disturbed by increasing visitor use and new campsites, roads, trails, and parking. This disturbance would be partially offset by the restoration of 28 acres of currently disturbed areas, for a net disturbance of 24 acres. The total area of land disturbance for new facilities outside the reserve would be 77 acres. Although in the very long term, these changes would be reversible and the natural biological productivity could return to the area, it would be unlikely in the foreseeable future. Although most developed areas could be restored to previous conditions over time, the use of the land and financial resources to implement this alternative would, in the practical sense, be an irretrievable commitment of resources. In areas that were restored, the natural biological productivity would be expected to increase indefinitely.

Domestic livestock grazing would continue to degrade and reduce the natural long-term productivity of plant and animal communities in areas where grazing would continue. The diminished productivity of damaged riparian areas and wetlands, damaged upland areas, and severely eroded areas would be difficult to reverse and would continue indefinitely. Even with the changes in grazing, fire management, and rehabilitation of these areas, long-term impacts and diminished productivity could be expected to last for many years. Eventually, however, the effect of these practices would be a gradual increase in natural diversity within and among species populations, biotic communities, and the landscape as a whole on lands within the reserve. Native perennial grasses and forbs would increase in extent and diversity as the preponderance of woody species, such as big sagebrush and piñon pine, was reduced. Some nonnative plant species are well established in the reserve, and it would not be feasible to eliminate many of them. Also, continued livestock grazing would presumably continue to introduce additional nonnative species into the reserve in future years.

Grazing could be phased out on an unknown amount of lands to be identified for resource protection in the resource management plan and grazing management plan. The local economy could be somewhat adversely affected by a reduction in agricultural-related employment and local expenditures. The gradual recovery of the natural productivity of this land might eventually increase its forage value.

A high percentage of rock formations would be available for climbing and hiking, and resources would be available within the reserve for tent camping and primitive tent camping. Climbing use would be regulated according to the climbing management plan.

The character of surrounding communities would change because of increased car and bus traffic and economic activity.

The integrity of the Oakley Historic District could be compromised because of potential incompatible development in response to tourism.

Economic benefits from visitor expenditures would likely remain the same as now, and reserve expenditures for operations and construction would be of much greater economic benefit than alternative 1 and about the same as alternative 3.

ALTERNATIVE 3 (CALIFORNIA TRAIL EMPHASIS)

Alternative 3 would focus on the maintenance and enhancement of the reserve's exceptional historic and natural resource values and would limit traditional grazing and recreational uses to those that could be accommodated without any potential for adverse effects on those values. The principal impacts, including the unavoidable adverse impacts, of this management strategy would be as follows:

Historic sites and structures related to the California Trail, including foreground and middle ground of the views seen from the trail, would be stabilized, preserved, and interpreted. Other historic and archeological resources would be inventoried and evaluated to determine the appropriate level of treatment.

Modern development and incompatible activities in the historic views from the California Trail would be eliminated, and management would minimize the potential for future intrusions.

An additional 21 acres of soils, vegetation, and habitat inside the reserve would be disturbed by increasing visitor use, roads, and trails, and restoration of 28 acres of currently disturbed areas, for a net restoration of 7 acres. The total area of land disturbance for facilities and roads outside the reserve would be 77 acres.

Although in the long term these changes would be reversible and the natural biological productivity could return to the area, it would be unlikely in the foreseeable future. Most developed areas could be restored to previous conditions over time, but the use of the land and financial resources to implement this alternative would, in the practical sense, be an irretrievable commitment of resources. In areas that were restored, the natural biological productivity would be expected to increase indefinitely.

Production of natural plant and animal communities in most areas of the reserve, including most riparian and wetland areas, would gradually recover as livestock grazing was phased out.

Grazing on public lands within the reserve would be eliminated and the availability of private land for livestock grazing would be significantly reduced because reserve managers would seek to acquire most of the land inside the reserve on an opportunity basis. The land inside the reserve available for grazing would decrease by 11,424 acres, resulting in a loss of forage to local ranchers; local economy could be adversely affected by a reduction in agricultural-related employment and local expenditures.

About 48 percent of rock formations would be available for climbing and all opportunities for camping on lands inside the reserve and protection of rock formations from permanent damage from some climbing methods would be eliminated.

The character of surrounding communities would change because of increased traffic; however, there would be a possible advantage to local communities in providing lodging accommodations.

Economic benefits from visitor expenditures would likely remain the same as now, and reserve expenditures for operations and construction would be of much greater economic benefit than alternative 1 and slightly less economic benefit than alternative 2.

IMPACTS ON THE CULTURAL/VISUAL ENVIRONMENT

HISTORIC RESOURCES

National Historic Landmark Values: The California Trail

The principal cultural resource values of the national historic landmark consist of the emigrant trail corridors, intact trail remnants and inscription rocks, and the viewshed seen from the trail corridors. These values would be adversely affected by several actions: New ground disturbance would cause further damage to the trail corridors and destroy the integrity of the intact trail remnants. People or cattle rubbing against the rock inscriptions would result in the loss of these resources. Modern intrusions in the foreground or middle ground of the views from the trails, including structures, roads, fences, or other nonhistoric elements such as automobiles and recreationists, would result in the loss of the historic landscape values of the trails. Failure to protect and preserve the principal cultural resource values of the national historic landmark would result in their continuing deterioration or loss.

The trail viewshed could also be degraded because natural areas could be diminished by private development and visitor/reserve development.

Alternative 1. Cultural resource management actions would remain limited. Although most of the national reserve is included in a designated national historic landmark, the majority of the significant resources remain in private ownership, and actions by federal and state land management agencies to protect or interpret cultural resources have been minimal.

Under this alternative cultural resources and their associated values inside the national reserve would be left to deteriorate naturally, consistent with visitor safety requirements and the provisions of federal historic preservation laws and NPS *Management Policies*. Resources outside the reserve would not receive any special attention.

The likelihood of damage to preserved intact remnants of the California Trail from new ground disturbance would be high. The rock inscriptions would continue to suffer defacement from people or cattle rubbing against them. Damage to trail remnants and inscription rocks would be irreversible.

The historic landscape (the foreground and middle ground of views from the California Trail and Salt Lake Alternate corridors), the three individual historic views, and visual experience would likely suffer adverse impacts from the development of private residences, roads, and fences, and the introduction and/or proliferation of other nonhistoric elements such as automobiles, overhead utilities, cattle grazing operations, and recreational activities. Development would probably occur in two of the three dominant basins in the reserve. Changing the open character of the major portion of the viewshed, the basin floors, by adding residential development, would completely alter the values for which the reserve was set aside.

The trail viewshed would also continue to be compromised by road crossings in four places and by the reserve road paralleling the trail for most of its 6 miles, obviously breaking across the foreground of three major views. The constant traffic and overhead utilities would continue to disrupt and degrade the visual experience.

Conclusion. The California Trail remnants and the inscription rocks would continue to deteriorate as a result of natural weathering and human activity, and views from the trail would likely be degraded by incompatible development. The existing natural condition of the trail viewshed would likely be lost in a few years.

Alternative 2. The proposal would establish a systematic and comprehensive program for the preservation, protection, and interpretation of the broad cross section of cultural resources in the national reserve. This would provide for the preservation of cultural resources illustrating the historic continuum of the area.

All actions would comply with section 106 of the 1966 National Historic Preservation Act as amended (16 USC 470 et seq.) and its implementing federal regulations. Compliance would be in accordance with the programmatic memorandum of agreement between the Advisory Council on Historic Preservation, the National Conference of State Historic Preservation Officers, and the National Park Service.

Preservation/stabilization and interpretation of the inscription rocks/encampment area, the Twin Sisters/Pinnacle Pass area, and the California Trail corridor would ensure their long-time protection for public enjoyment. All on-site media and devices to interpret these resources would be designed and

placed to avoid impacts and to minimize visual intrusion on the historic scene.

The potential for damage to trail remnants and features caused by new ground disturbance or for damage to emigrant rock inscriptions caused by cattle or people rubbing against them would be minimal.

The acquisition and protection of outstanding resource areas and the realignment of some public roads would minimize modern intrusions in the foreground of the views from the trail. The only modern intrusions within 1/4 mile of the main trail corridor would be some fencelines and grazing cattle in some sections of the trail (cattle would be excluded from other sections). Development easements on private property would help limit intrusions in the middle ground of views from the trail. However, the middle ground would still contain some modern intrusions, including roads, parking lots, automobiles, fencing, and other minor ranch-related structures (such as windbreaks or water tanks), grazing operations, recreationists, and possibly residences if development easements could not be acquired from willing sellers.

Portions of all three important trail viewpoints would be protected by public ownership. Identifying areas of special concern outside the reserve boundary would help ensure that limited views from the California Trail, including the foreground view along the California Trail corridor between City of Rocks and Granite Pass, would be protected through county zoning specified to discourage any structural development.

Views would also be protected through the relocation of the east/west road to the south by eliminating two road crossings of the viewshed corridor and trail. Downsizing of the road across Twin Sisters basin and burying overhead utilities would eliminate many of the intrusions from the predominant views to and from Pinnacle Pass and, in turn, lessen the impact on the naturalness of the historic landscape of the California Trail. The existing undeveloped character of the sloping hillside would be retained and the basin section would be restored to a more natural grassland condition, except for the presence of cattle and fences.

Conclusion. The long-term preservation of historic trail remnants and inscription rocks would be ensured, and the foregrounds of the views from the trail would be protected from incompatible intrusions. The visual qualities of the trail viewshed, including naturalness, would be protected through county zoning, acquisition of remaining development rights on an opportunity basis, cooperative management, and design that would include only nonstructural, modern-day ranching images.

Alternative 3. A more systematic and comprehensive program for the protection, preservation, and interpretation of cultural resources in the reserve would be established. The California Trail story would be told through a variety of media and programs while protecting the reserve's exceptional cultural resources and allowing for reduced amounts of compatible recreational and private use. The acquisition and preservation management of all the trail-related resources and most of the other exceptional cultural resources in the reserve, including the landscape visible from the historic trails, would ensure the long-term preservation of this exceptional cultural area. Because most of these areas are now in private ownership, this alternative would require the acquisition of public interests in these lands from willing sellers. The best preserved intact trail remnants and the emigrant rock inscriptions would be preserved and interpreted. Therefore, all potential for damage to trail remnants caused by new ground disturbance or to the rock inscriptions by people or cattle rubbing against them would be eliminated.

All actions would comply with section 106 of the 1966 National Historic Preservation Act as amended (16 USC 470 et seq.) and its implementing federal regulations. Compliance would be in accordance with the programmatic memorandum of agreement between the Advisory Council on Historic Preservation, the National Conference of State Historic Preservation Officers, and the National Park Service.

Discontinuing grazing and removing fences would help preserve the wide-open character of the landscape as it appeared in 1843-69. The potential for private development in the viewshed would be eliminated through fee acquisition; however, some public facilities, including the road across the reserve, an access road into Pinnacle Pass, and four visitor parking areas with interpretive waysides would intrude upon the historic scene. All on-site media and interpretive devices would be designed and placed to minimize their visibility.

As in alternative 2, identifying areas of special concern outside the reserve boundary would help ensure that significant views from the California Trail, most notably the view toward Granite Pass, would be protected from incompatible development through county zoning.

Views would be protected, as described in alternative 2, through the relocation of the east/west road to the south by eliminating two road crossings of the viewshed corridor and trail. Closure of the road across Twin Sisters basin would eliminate most of the vehicles, utilities, and roads from the predominant views to and from Pinnacle Pass, which would lessen the impact on the naturalness of the historic landscape.

Fee-simple ownership of the entire extent of the trail viewshed would remove all ranching nuances from the view. Through vegetation management, a combination of native grasses and forbs would be introduced to reasonably create a workable facsimile of natural trail conditions and a healthy ecological system.

As a result, the viewshed would appear less rigid than under present conditions. Wind action and direction could be noticed in a predominantly grassland system, adding ephemeral values and greater scenic quality.

This alternative opens up the Salt Lake Alternate to full protection and public access. Visitors could view both the historic remnants of the stage stop and the undeveloped primitive character of Emigrant Canyon. Removal of braided road alignments in the canyon would also help to restore the character of area.

Conclusion: The long-term preservation of historic trail remnants and inscription rocks would be ensured, and the entire viewsheds visible from the historic trails would be protected from all incompatible intrusions except facilities for visitor access and interpretation.Vegetation management in the California Trail viewshed would enhance the viewshed by increasing its naturalness.

Additional access to the Salt Lake Alternate Trail and full management for restoration of a more natural scene would increase the integrity of the viewshed seen from the California Trail corridor.

Historic Rural Setting

The historic rural setting would be adversely affected by elimination of historic structures or features as a consequence of deterioration by natural forces or destruction by human activity or modern development. Intrusions into the foreground of views associated with the historic rural setting caused by incompatible development for commercial, residential, or recreational use would result in the loss of the cultural and scenic qualities reminiscent of the American West.

Alternative 1. Historic resources unrelated to the California Trail but contributing to the ambience of the reserve's historic rural setting would not be afforded protection or preservation treatment. Thus, these resources could be eliminated by the effects of natural deterioration or human activity. Incompatible commercial and residential development would be likely to intrude into the foreground of the viewsheds of these historic resources, adversely impacting their contextual significance and detracting from their contribution to the historic rural setting.

The north-south road through Almo to the reserve turnoff might be paved because of the pressure to reduce dust and meet visitor demands for convenience. Suggestions to pave the 17-mile main entrance route from Utah into Almo are currently being considered.

If retirement homes or seasonal residences were built in the reserve, unseen areas from the trail might experience a change in use from open range to residential. The historic rural setting values within the reserve would not change, but residential uses outside the reserve might cause problems if contemporary structures are built on previously vast, undeveloped landscapes.

County zoning would determine the extent that strip commercial development would have on the historic rural setting and would attempt to minimize the effects of structures and subdivisions on areas around the historic setting.

Conclusion: The historic rural setting would be degraded by a loss of contributing historic elements and the intrusion of incompatible modern features. County zoning would determine the effects of residences within the reserve and commercial uses along road corridors on the historic setting of the reserve.

Alternative 2. Significant cultural resources associated with the principal themes of the historic continuum — the Nicholson house, the stage station, a homestead site, and traditional ranching sites — would be afforded the same level of preservation management as key trail-related resources, thereby ensuring their long-time protection for public enjoyment. All on-site media and devices to interpret these resources would be designed and placed to avoid impacts and minimize visual intrusion on the historic scene. The acquisition of development easements would minimize intrusions from incompatible commercial or residential development.

Road relocations, treatments to keep the surfaces gravel, parking areas located to remain hidden from the predominant east-west route, interpretive waysides and their parking areas situated to minimize visual intrusions to the open basins, and the intention of most visitor-related development to be absorbed into the town core patterns would all contribute to the intent of keeping the existing rural setting.

Land within the foreground of the trail corridor would be directly controlled by federal interest. Other lands in the reserve remaining in private ownership would be zoned for ranching uses, with county jurisdiction and implementation joint with reserve management. Uses on these lands could include structures, but grazing and ranching practices would be the predominant use.

Other sites in the reserve would be left as is, and surface and subsurface remains would be allowed to deteriorate naturally, consistent with visitor safety requirements and the provisions of federal historic preservation laws and NPS *Management Policies*.

Areas of special concern outside the reserve, the entrance roads in from Junction Valley and Almo junction are recommended for county zoning that would protect these areas from any kind of commercial strip development.

The landscape would be retained in its current visual condition. Existing ranching uses would continue, leaving the landscape open, with scattered pastures of cattle and a legible human presence. Design guidelines would apply ranching images to any reserve and nonreserve development.

Conclusion. The long-term preservation of significant resources associated with the historic continuum and the protection of views from incompatible commercial development would perpetuate the reserve's historic rural setting.

Alternative 3. Under this alternative all historic resources unrelated to the California Trail and Salt Lake Alternate, including the Nicholson house and the ranch buildings at the stage station site, would be inventoried and evaluated to determine the appropriate level of treatment, subject to visitor safety requirements and the provisions of federal historic preservation laws and NPS management policies.

Any sense of contemporary ranching would be removed from the California Trail subzone and natural area subzone, leaving the landscape unfenced, without livestock and modern intrusions within the complete trail viewshed and only slightly less primitive in the remainder of the reserve. Design guidelines would sculpt town-related development and encourage a similarly spacious approach to the trail viewshed outside the reserve.

Conclusion. Nonhistoric resources that contribute to the reserve's historic rural setting would eventually be lost in the California Trail subzone and the natural area subzone.

ARCHEOLOGICAL RESOURCES

Archeological Site Disturbance

Most of the known archeological sites are delicate and vulnerable to relic hunter depredations. Many of the sites have been picked over, damaged by relic collectors, obscured by depositions, or disturbed by farming and grazing operations. Further deterioration or destruction of the archeological sites in the reserve by natural forces or human activity would result in the loss of significant resource values associated with the prehistoric and historic evolution of the area.

Alternative 1. Treatment of archeological sites would require consultation with the Idaho state historic preservation officer. Archeological resources would be protected where possible from adverse effects of development; however, sites would remain subject to natural deterioration, inadvertent damage by human activity, and vandalism, and some sites would eventually be lost.

Conclusion. Archeological resources would remain highly susceptible to natural deterioration, inadvertent human damage, and vandalism, and some important resources would be lost.

Alternative 2. A comprehensive inventory and survey would identify and establish the significance of archeological sites throughout the reserve, thereby helping ensure their long-term preservation. Where possible, areas with known concentrations of archeological resources would be avoided as development sites.

Before earth-disturbing activities commenced, archeological testing would be conducted to determine the nature and extent of the archeological resources to be effected. Testing would be carried out in consultation with the Idaho state historic preservation officer in order to avoid or minimize effects or, failing that, to mitigate effects. Consultation with the state historic preservation officer would also be conducted for treatment of historic sites with archeological elements, such as some cultural resources associated with the California Trail and the Salt Lake Alternate and the homesteading era.

Public use of such facilities as campgrounds, picnic areas, trails, and interpretive sites would affect nearby archeological resources. Easily accessible resources would be vulnerable to surface disturbance, vandalism, and theft. New trails could increase the likelihood of archeological sites being disturbed, and resources would be vulnerable to inadvertent or deliberate destruction. Vandalism and inadvertent damage to known archeological resources would be partially mitigated by initiating on-site patrols, monitoring to detect vandalism, illegal collection, and other deterioration, and educating visitors about the value of these resources and the importance of protecting them. However, nationally significant sites would have first priority, and the protection of other sites would depend on manpower and budget constraints. It is likely that some archeological sites would be subject to damage from vandalism, cattle grazing, or development activities, resulting in irreversible losses of artifacts and cultural information of regional or local significance.

Conclusion. A comprehensive program of identification, evaluation, preservation, protection, and interpretation would help ensure the long-term preservation of important archeological resources throughout the reserve, although some resource of regional or local significance might be lost.

Alternative 3. Under alternative 3 archeological sites would be treated the same as described for alternative 2.

Conclusion. Archeological resources would remain highly susceptible to natural deterioration, inadvertent human damage, and vandalism, and some important resources would be lost.

COLLECTIONS

Alternative 1. The lack of recording of cultural sites and archeological artifacts within the reserve would result in the loss of collections data and the continued deterioration of artifacts.

Alternatives 2 and 3. The recording of cultural sites and the collection of interpretive artifacts would result in the accumulation of data on the history of the reserve area. Systematic management of the museum collection would benefit the curation of individual items and the preservation of archeological and historic resources.

IMPACTS ON THE NATURAL/VISUAL ENVIRONMENT

INTRODUCTION

This section addresses direct, indirect, and cumulative effects on the natural environment of implementing the proposal or any of the alternatives for the comprehensive management plan plus all of the known possible projects or programs administered by others in the region, including county private land use zoning in and near the reserve, management of land by the U.S. Forest Service and Bureau of Land Management, Air Force training flights over the reserve, and the state air quality program regarding redesignation of the reserve as a class I area.

Analysis of impacts was based on the best available information. Information used included the City of Rocks Reserve Geographic Information System (GIS) database created and maintained by the Park Service in Denver, personal communications with those knowledgeable about reserve resources (see "Consultation and Coordination" section), and other documents about reserve resources and use impacts. The GIS database for City of Rocks contains current information on various natural and developed components of the reserve.

Topics Addressed in this Statement

Specific impact topics were selected for discussion focus, and to allow comparison of the environmental impacts of each alternative. The following biological and physical resources and attributes were selected as impact topics because they were identified as important or exceptional during planning.

- natural quiet
- rock formations
- natural biological diversity
- species of special concern (raptors, bats, rare and sensitive plants)
- riparian areas, wetlands, and floodplains
- air resources
- scenic quality

Topics Dismissed from Further Consideration

Several animal species identified as rare or sensitive in the reserve (piñon mouse, cliff chipmunk, and mountain lion) were dismissed from further consideration for the following reasons. Mountain lions would be sensitive to concentrated visitor use in their denning habitat; however, none of the alternatives, including the proposed action, would increase or concentrate uses in areas of the reserve identified as mountain lion denning habitat. The piñon mouse (if they occurred in the reserve) and cliff chipmunk would be sensitive to loss of their habitat. None of the alternatives, including the proposed action, would cause the loss of their preferred habitat and are not in need of any additional protection other than that generally afforded by the state of Idaho and the National Park Service.

NATURAL QUIET

The natural quiet of the reserve is valued by visitors as a quality to be experienced and as a condition that enhances opportunities to hear natural sounds and to view wildlife that may be frightened away by unnatural noises. The natural quiet of the reserve would potentially be adversely affected by any activities in or adjacent to the reserve causing unnecessary or excessive unnatural sounds. These activities include operation of motorized equipment and tools, discharge of firearms, low-elevation aircraft overflights, operation of motorized vehicles and off-road vehicles, and use of sound devices, such as radios.

For purposes of analysis, it was assumed that a decrease in the above activities would reduce unnatural noise levels. It was also assumed that activities causing unnatural noise would be most intrusive on the visitor experience in the preservation/education zone.

Alternative 1. No additional protection of natural quiet would occur under this alternative. The natural quiet of the reserve would increasingly be broken by such sounds as RV generators, discharging firearms, vehicle engines, low-flying aircraft, and radios. These unnatural sounds would interfere with visitors' ability to hear the natural sounds of wildlife or the wind moving through the vegetation, and they might frighten wildlife, reducing visitors' opportunities to view different animals. Increasing levels of visitor use and noise-causing activities would be expected to increase the duration, frequency, and levels of noise and affect larger and larger areas.

> **Conclusion.** Increasing levels of unnatural noise would degrade visitors' opportunities to experience natural quiet and sounds and to view wildlife.

Alternative 2. Natural quiet in most areas of the reserve would be protected by resricting the use of motorized equipment or tools, motor vehicles, or sound devices outside the development zone.

As visitor use increased, the frequency and duration of noise from vehicle traffic would be expected to increase near the road corridors. Enhancing motor touring through the reserve as part of the proposed tour loop would also increase noise levels, particularly along the east-west road through the reserve. However, limiting the use of the north-south road between Register Rock and Twin Sisters to only local landowners would reduce vehicle use along this road.

Restricting the use of firearms to established hunting seasons would eliminate this source of noise for most of the year, although noise from discharging firearms would still occur during established hunting seasons. If the U.S. Air Force was willing to cooperate with reserve managers, noise from low-level aircraft overflights might also be reduced.

Short-term impacts would be caused by noise-generating equipment during construction or demolition of facilities and roads, or by motorized equipment authorized for use by reserve managers.

The cumulative effect of all actions would be reduced noise levels except near the primary road corridors. Thus, visitor opportunities to experience natural quiet and sounds and to view wildlife in this zone would be improved in most of the reserve, except near roads.

> **Conclusion:** Noise-causing activities would be reduced in most of the reserve, resulting in improved opportunities to experience natural quiet and sounds and to view wildlife. However increased vehicle traffic would degrade visitors' opportunities to experience natural quiet and sounds along the primary roads in the reserve.

Alternative 3. Natural quiet in most areas of the reserve would be protected by not allowing the use of motorized equipment or tools, motor vehicles, or sound devices outside the development zone.

As visitor use increased, the frequency and duration of noise from vehicle traffic would be expected to increase near the road corridors. However, this effect would be offset by routing commercial traffic and some local traffic around the reserve on the proposed Almo-Junction Valley road and by limiting use of the north-south road between Register Rock and Twin Sisters to only local landowners.

Restricting the use of firearms to established hunting seasons would eliminate this source of noise for most of the year, although noise from discharging firearms would still occur during established hunting seasons. If the U.S. Air Force was willing to cooperate with reserve managers, noise from low-level aircraft overflights might also be reduced.

Short-term impacts would be caused by noise-generating equipment during construction or demolition of facilities and roads.

The cumulative effect of all actions would be reduced noise levels in the preservation/education and recreation zones. Thus, visitor opportunities to experience natural quiet and sounds and to view wildlife in these zones would be improved.

> **Conclusion.** Noise-causing activities would be reduced in most of the reserve, resulting in improved opportunities to experience natural quiet and sounds and to view wildlife.

ROCK FORMATIONS

Rock formations would be adversely affected if the natural state of the formation was permanently altered or if rock and soil erosion was accelerated.

Rock climbing and scrambling are activities that have the greatest potential for impact on rock formations in the reserve. Most rocks in the reserve appear to be resistant to damage, but some formations are actually very fragile and susceptible to degradation caused by human activities. The slow-growing lichens, mosses, and other vegetation on rock surfaces and in cracks and crevices are also very sensitive to disturbance.

Alternative 1. Under this alternative no additional actions would be taken to protect the nationally significant rock features of the reserve. In the absence of resource inventories and impact monitoring, the effects of climbing on rock formations would remain uncertain and impacts unmitigated.

Repeated climbing on the more than 600 climbing routes in the reserve and the use of various techniques to create new routes would continue to erode rock, soil, and vegetation from rock surfaces to some degree.

The use of certain climbing hardware to protect climbs would continue to cause permanent damage to rock surfaces. Although the hardware used by most climbers today for temporary protection would cause very little rock damage, this would not be the case for the permanently fixed hardware (bolts and rappel anchors) used to protect difficult climbs on

smooth-faced rocks. Such fixed protection has become increasingly popular in the reserve and would be expected to cause considerable damage to rock faces in the future. (Fixed protection is attached by first drilling a hole in the rock using a portable battery-powered drill. A bolt is secured in the hole using either an expansion device or epoxy. The number of bolts on each existing route in the reserve varies anywhere from none to more than 15 bolts.)

Permanently placed hardware, such as expansion bolts, would continue to exist on many established climbing routes. While the addition of new climbing routes is expected to be minimal, repeated ascents of existing climbs could be expected to cause additional abrasion to rock surfaces.

Climbers would also continue to affect rock surfaces through cleaning and chiseling and using gymnastic chalk (calcium carbonate). Cleaning of loose material from hand-holds and rock surfaces is done to improve safety along the climbing route. Cleaning activities such as breaking off loose rock flakes and using brushes to scrub away loose material would cause the rock surfaces along routes to become smoother and freer of lichens, mosses, dirt, and loose rock. In some places, climbers have chiseled the rock to create new hand-holds. White gymnastic chalk contrasts with the natural color of the rock and could cause a pH change that could adversely affect lichens, mosses, and rocks.

Improvement of climbing routes by drilling, chipping, or chiseling would continue to cause permanent damage to rock surfaces. An increasing number of climbers with no limitations on route numbers or improvements would result in increasing areas of disturbance and erosion on rock features and increasing intrusions on the natural scenic landscape.

> **Conclusion:** Climbing activities in the reserve would continue to cause permanent damage to rock surfaces; however, the long-term effects of this damage on significant geologic formations would remain unknown.

Alternative 2. Rock formations and associated vegetation and soils in the reserve would benefit from a climbing management program emphasizing protection of resources. Rock surfaces and habitat would be inventoried, and impacts would be monitored to identify and mitigate adverse effects. Closing the inscription rocks to climbing and scrambling would protect rock surfaces with historic inscriptions from abrasions and would thus help to preserve the historic inscriptions. Temporary closure of restoration areas would be imposed when necessary. Minimal impact climbing techniques would be encouraged, and chipping or gluing of holds or intentional removal of vegetation or sound rock would be prohibited on public land. Also, requiring a permit to use power drills to install climbing bolts probably would slow the development of new climbing routes on other formations in the reserve. The use of gymnastic chalk would be discouraged where necessary to reduce its potential adverse effects.

Some additional disturbance and possibly permanent rock damage might be caused by visitors installing climbing bolts and establishing an unrestricted number of new routes in areas where climbing would be allowed. If monitoring determined that this damage was having a significant effect on the significant rock formations, additional mitigating actions would be implemented to protect natural landmark values. The prohibition of climbing on Twin Sisters would help protect the formation.

The net effect of all actions under this alternative would be an increase in impacts on rock formations, although the effect would not be as great as it otherwise would be if not mitigated by the climbing management program.

> **Conclusion:** The potential for adverse impacts on rock formations would be greatly reduced by monitoring and mitigating climbing impacts and addressing climber education and use practices.

Alternative 3. Impacts would be similar to those described for alternative 2, except about 52% of the rock formations would be closed to climbing and protected from all potential impacts.

> **Conclusion:** The potential for adverse impacts on rock formations would be greatly reduced by closing 52 percent of the formations to climbing and by monitoring and mitigating climbing impacts in other areas.

NATURAL BIOLOGICAL DIVERSITY

Potential adverse effects on the biological diversity of the reserve include invasion of native plant habitats by competitive nonnative species; disturbance and alteration of natural plant communities by domestic livestock grazing, ground-disturbing developments, and human use; development of overly mature plant communities because of suppression of natural fires; and climatic changes resulting from environmental factors.

Existing plant communities have been considerably changed by intensive grazing by domestic livestock and other past events, including dryland farming, droughts, fire suppression, brush control, seeding, development of roads and trails, and camping. This has resulted in a dominance of woody perennials and highly competitive nonnative plants, loss of vegetative cover, and severe soil erosion in many areas of the reserve. For purposes of analysis grazing would be excluded from the research natural area, section 36 and all other federal lands not within a grazing allotment.

Alternative 1. Under this alternative no additional actions would be taken to protect the natural biological diversity. Overgrazing by domestic livestock and fire suppression would continue to have the greatest detrimental effect on vegetative diversity in the reserve. Livestock would continue to graze on approximately 12,913 acres in the reserve. Livestock would continue to select the most palatable and nutritious forage plants, with the result that the most valuable plants (native perennial grasses and forbs) would suffer the greatest damage. When the most palatable plants were gone, others would be eaten until only the least-utilized plants, such as big sagebrush, remained. Once established, both the woody and nonnative plants would be resistant to reestablishment of native perennial herbaceous species. The dominance of woody species and invasion of nonnative plants would further reduce the already substantially reduced amount of available forage for both wildlife and livestock, representing a major long-term loss of productivity.

Lack of natural fire would continue to favor big sagebrush, piñon pine, and juniper, allowing these woody species to spread and become overly mature.

Increasing recreational activities, such as camping, hiking, rockclimbing, biking, and offroad vehicle use, would continue to eliminate vegetation from heavily used areas. Use of offroad vehicles would continue to disturb the vegetation cover, resulting in new trails and roads. Many miles of these scarred corridors have been created in the past and more would be expected to develop in the future. Development of dispersed campsites would continue to eliminate vegetative cover among the rock formations. Increasing rock-climber traffic in the reserve would increase the already large number of steep approach trails following direct lines to the rocks and denuded staging areas at the bases of the rocks. Water runoff from some trails on steep terrain would contribute to the already severe soil erosion, trenching, and loss of vegetation occurring in these areas. Some of the most severe erosion has occurred adjacent to maintained roads on steep grades. The acceleration of soil erosion caused by various land uses would cause a long-term loss in productivity.

An estimated 88 acres of vegetation in the reserve would continue to be displaced by campsites, roads, trails, and facilities. Possible future developments on private property within the reserve could result in additional long-term loss of vegetation.

The cumulative effect would be a major reduction in natural biological diversity in the reserve.

> **Conclusion.** Existing agricultural and fire management practices would continue to favor woody perennials and nonnative species. Possible private development would continue to destroy vegetation and accelerate soil erosion, contributing to an ongoing major reduction in natural biological diversity in the reserve.

Alternative 2. Natural biological diversity would benefit from elimination of grazing on 283 acres of existing public allotments in the upper south fork of Circle Creek basin and riparian habitat identified for closure. Over the long term, if the National Park Service were able to acquire wetland and riparian areas from willing sellers, an additional 260 acres of now private wetland and riparian areas would be protected from the direct impacts of livestock grazing. Grazing may also be eliminated from other lands identified in the resource management plan and grazing management plan. Natural biological diversity would also benefit from a grazing management program directed at protection natural vegetative communities of public lands throughout the reserve and on private lands where landowners choose to pariticpate. Under this program, impacts from grazing would be continually inventoried and monitored to help develop methods of protecting native vegetation and soils, and domestic livestock grazing would be reduced or eliminated from public lands determined to be unsuitable for grazing. In addition, any grazing allotments vacated in the reserve would be reallocated to adjoining permittees, but with no additional AUMs. This would result in fewer cattle being grazed in the reserve and less impacts. Grazing would continue to introduce nonnative plants to the reserve, and elimination or control of nonnative species may be very difficult.

The development of a fire management plan with prescriptions for allowing prescribed fire use and permitting natural fires to burn within the reserve would help ensure a heterogeneous natural landscape with diverse habitats. Natural fire would be excluded as necessary to protect lives, private property, range developments, cultural resources, and visitor facilities.

Approximately 52 acres of currently undisturbed or minimally disturbed land would be directly affected by construction of proposed roads, trails, parking lots, and campgrounds. Impacts would range from complete vegetation removal and light excavation, grading, and surfacing, to selective tree cutting and brush removal for vista improvement and fuel reduction around structures, campgrounds, and other public use areas. At the same time, an estimated 28 acres currently disturbed by campsites, roads, and trails would be rehabilitated. The elimination of dispersed camping and offroad vehicle use, consolidation of the trail system, and rehabilitation of existing disturbed areas would help restore the natural vegetative cover in additional areas. The net effect of the proposal would be an increased disturbance of about 24 acres. The total acreage outside the reserve disturbed by development of the visitor center complex roads, trails, and entrance parking would be about 77 acres.

Implementation of zoning ordinances by Cassia County could limit development on private land in the reserve and thus reduce the potential for additional vegetative disturbance.

The cumulative effect of all actions under this alternative would promote natural biological diversity in the reserve but increase the total area of vegetative disturbance.

> **Conclusion.** Elimination of grazing on up to 543 acres and prescriptions for fire would have a beneficial effect on natural biological diversity. Acquiring private lands with the owner's consent would eventually provide additional long-term protec- tion. Grazing would continue to adversely affect up to 9,895 acres; however, management methods wold be implemented to reduce existing grazing impacts. Proposed development would result in a net loss of approximately 24 acres of vegetation in the reserve and 77 acres outside the reserve.

Alternative 3. Eliminating the adverse effects of grazing and allowing prescribed natural fires to burn would increase natural diversity on at least 11,424 acres of the reserve. Approximately 21 acres of currently undisturbed or minimally disturbed land would be directly affected by new development. About 28 acres of currently disturbed areas would be restored for a net restoration of 7 acres. The kinds of effects would be similar to those described for alternative 2. The total acreage outside the reserve disturbed by development of facilities and roads would be 77 acres.

> **Conclusion.** Elimination of grazing on 11,424 acres, establishment of a more natural fire regime, and a net reduction in disturbed areas under this alternative would have the greatest beneficial effect on natural biological diversity in the reserve. Proposed development would result in a net gain of approximately 7 acres of vegetation in the reserve and net loss of 90 acres outside the reserve.

SPECIES OF SPECIAL CONCERN

Raptors

A wide variety of raptors use the reserve during some part of their annual activities, either for nesting, feeding, roosting, or migration. The concentration of high cliffs at City of Rocks provides excellent nesting habitat that attracts large numbers of raptors, including golden eagles, prairie falcons, red-tailed hawks, American kestrels, and possibly ferruginous hawks, a candidate threatened and endangered species. Raptors are most susceptible to human disturbance during nesting. While some raptors are tolerant of human activities below them, they are most susceptible to the disturbance caused by humans near the nest at the same level or above them. The degree of tolerance varies between species, with the golden eagles and ferruginous hawks being the most susceptible to disturbance. Raptors would be adversely affected if activities caused abandonment of nest sites or increased raptor mortalities.

Alternative 1. The potential for accidental disturbance of nesting raptors by visitors would probably be highest under this alternative, especially in the more popular climbing areas, near dispersed campsites, and along the road through the rock formations. During courtship adults might avoid suitable nest sites where humans were present. Human disturbances could also cause abandonment of a nesting site or result in the death of the chicks. If suddenly disturbed, adults might leave the nest quickly, crushing or puncturing the eggs or injuring or knocking the young out of the nest. Human disturbance could cause adults to stay away from nests for extended periods of time, during which

the eggs and small young would be particularly vulnerable to chilling, overheating, and dehydration, as well as predation. Wind, precipitation, and direct sunlight would greatly aggravate such situations. The times of exposure to adverse conditions would be greatest for timid species, such as golden eagles, which would stay away from the nest for a long time waiting for intruders to leave the area. If nests were disturbed when nestlings were older, but still not of normal fledgling age, the young might attempt flight earlier than normal, resulting in increased injury, loss, or vulnerability to predation.

Vegetative disturbance by grazing cattle, concentrated visitor traffic, or land development could indirectly impact raptor species by reducing nest substrate availability, reducing prey diversity and possibly abundance, and increasing prey vulnerability.

Possible future developments on private property within and adjacent to the reserve, such as cabins, houses, and commercial buildings, could result in long-term loss of nesting or prey habitat. The degree of impact would depend on the location, type, and extent of development. Disturbance of nesting raptors could also result during low-level overflights by the U. S. Air Force.

> **Conclusion**. Increasing visitor use, potential private development, continued grazing, and low-level overflights could result in a decreased number of successfully breeding raptors and possible decreased raptor survival in the reserve compared to existing conditions.

Alternative 2. The elimination of dispersed camping near rock formations would benefit raptors by reducing potential human disturbance to nesting raptors and their prey. Nesting raptors would benefit from a climbing management program directed at protecting raptors from accidental disturbance. Closing occupied nesting areas to visitors during the breeding season would also reduce impacts. In other areas, some raptors would probably avoid nesting on suitable cliff habitat because of the presence of climbers, particularly in the natural and recreational resource zone, where use would be heaviest. In the case of the Twin Sisters, its closure to climbing use would help protect raptors that use this formation.

The grazing and vegetation management program would probably result in increased diversity and abundance of prey as vegetation recovered to more natural conditions over time. Implementation of a zoning ordinance by Cassia County that would limit future development on private lands in the reserve could also benefit raptors. If the U. S. Air Force was willing to cooperate with reserve managers, impacts from low-level overflights could be reduced.

The proposed tent campground would probably cause raptors to move away from the immediate area, which includes the rock outcrop known as Nematode.

> **Conclusion**: The elimination of dispersed camping, seasonal closures of nesting areas to climbing, closure of Twin Sisters to climbing and implementation of a climbing management program would probably increase raptor survival and nesting success within the reserve compared to the existing condition.

Alternative 3. Raptor nesting habitat would be improved by eliminating disruptive human activities (camping, rockclimbing, road traffic) from many habitat areas where they are now occurring. The protected area would be expanded to include 47 percent of the cliff habitat in the reserve. Some raptors would probably avoid nesting on suitable cliff habitat in the recreation zone because of climbers.

The abundance and diversity of raptor prey species would be expected to increase throughout the reserve as a result of livestock grazing being phased out of all but a few scattered parcels of private land.

The combined effects of all actions under this alternative would probably be increased raptor survival and increased raptor nesting success within the reserve compared to the existing condition.

> **Conclusion**: The elimination of dispersed camping, closure of some areas to climbing (protecting 47 percent of cliff habitat), implementation of a climbing management program, and realignment of the road would probably increase raptor survival and nesting success within the reserve compared to the existing condition.

Rocky Mountain Mule Deer

Rocky mountain mule deer would be adversely affected if deer habitat in or near the reserve was reduced. Extensive disturbance of vegetation could reduce deer use of both the disturbed area and adjacent habitat. The abundance and availability of winter browse interspersed with cover is the primary mule deer limiting factor; therefore, the loss of deer winter habitat would be the most severe type of impact.

Alternative 1. No additional actions would be taken to restore natural habitat used by deer. Overgrazing by domestic livestock and fire suppression would continue to favor overly mature stands of woody species and further reduce the amount of preferred forage available to deer. An estimated 88 acres of potential deer habitat in the reserve would continue to be displaced by existing campsites, roads, trails, and facilities. Possible future developments on private property could result in additional long-term loss of deer habitat.

> **Conclusion.** Existing agricultural and fire management practices, current land cover disturbance on 88 acres, and potential private development would adversely affect deer habitat.

Alternative 2. Deer habitat would benefit from the implementation of a fire management plan with prescriptions for allowing prescribed fire use and permitting natural fires to burn within the reserve. Fire would promote growth of a variety of young successional stages of shrubs and forbs which are preferred deer forage. Deer habitat would also benefit from a grazing management program directed at protecting natural vegetative communities.

Potential deer habitat on 52 acres would be adversely affected by development of facilities, roads, trails, and campgrounds within the reserve. At the same time, an estimated 28 acres of exiting disturbance would be rehabilitated to more natural conditions. The net effect of the proposal would be a loss of about 24 acres of potential deer habitat inside the reserve. Outside the reserve, development of the visitor center complex and campground would adversely affect about 77 acres of habitat heavily used by deer during migration between winter and summer ranges. Deer would likely seek alternate routes around the complex. This habitat would also be lost to deer that use the area during mild winters.

> **Conclusion.** Prescriptions for fires, management of grazing to promote natural vegetation, and land cover restoration would benefit deer habitat. Proposed development would result in a net loss of about 24 acres of deer habitat in the reserve and 77 acres outside the reserve.

Alternative 3. Deer habitat would benefit by eliminating the adverse effects of grazing and allowing prescribed fires to burn. New development would eliminate about 21 acres of potential deer habitat. About 28 acres of potential deer habitat would be restored for a net gain of 7 acres inside the reserve. Outside the reserve, development of the visitor center complex and new through-route south of the reserve would adversely affect about 77 acres of deer habitat.

> **Conclusion.** Elimination of grazing, establishment of a more natural fire regime, and a net reduction in disturbed areas would have a beneficial effect on deer habitat. Proposed development would result in a net gain of about 7 acres of potential deer habitat in the reserve and a net loss of 77 acres outside the reserve.

Bats

Most bats are intolerant of direct human disturbance and may abandon a roost if continually disturbed. Townsend's big-eared bats (a candidate threatened and endangered species) are extremely sensitive to close human presence and abandon roost sites after even the slightest disturbance and usually do not return. Other activities that occur in the reserve typically do not adversely affect bats. Bats would be adversely affected if visitor activities caused abandonment of roosting sites or increased bat mortalities.

Alternative 1. The potential for accidental disturbance of roosting bats by increasing numbers of visitors would be highest under this alternative, especially in the more popular climbing areas. No additional actions would be taken to inventory roosting habitat in the reserve or to prevent visitors from disturbing bats. Some bats disturbed by visitors, especially Townsend's big-eared bats, would probably abandon their roosts, which would decrease bat survival rates.

> **Conclusion:** The effects of increasing numbers of visitors climbing on an increasing number of rock formations with potential bat habitat could decrease the number of roosting bats in the reserve and possibly decrease bat survival.

Alternative 2. Throughout their habitat bats would benefit from programs that would inventory and monitor roosting sites and manage all recreational activities to protect bats from accidental disturbance. Identified Townsend's big-eared bat habitat would be strictly protected. Enhanced roosting opportunities would increase bat survival in the reserve.

> **Conclusion:** Greatly reducing the potential for accidental disturbance of roosting bats would result in additional available roosting habitat and increase bat survival over existing conditions.

Alternative 3. About 52 percent of potential bat roosting habitat would be closed to all recreational activities, thus eliminating the potential for accidental disturbance of bats by visitors. Impacts would be similar to the impacts of alternative 2, because most adverse effects could be avoided by management of recreational activities.

> **Conclusion:** Eliminating most of the potential for accidental disturbance of roosting bats would result in additional available roosting habitat and increase bat survival over existing conditions.

RARE AND SENSITIVE PLANTS

Domestic livestock grazing, recreational activities, and development could affect rare and sensitive plant species in the reserve. Rare and sensitive plants would be adversely affected if their habitat or population in the reserve was reduced. Preliminary botanical surveys in the reserve have found three plants considered rare or sensitive in Idaho, including Simpson's hedgehog cactus, narrow-leaved Indian paintbrush, and Kruckeberg's swordfern. Until botanical surveys are completed for the reserve the extent of these populations are uncertain. Other rare or sensitive plants, including threatened or endangered species, could also be found in or near the reserve. The primary threats to Simpson's hedgehog cactus are exploitation from cactus collectors and any ground-disturbing activities. The primary threat to the narrow-leaved Indian paintbrush is any ground-disturbing activity. Both of these species are unpalatable to cattle and generally are not affected by grazing; however, cattle might trample these plants. The primary threat to the Kruckeberg's swordfern is from visitors trampling or removing the plants along climbing routes.

Alternative 1. Under this alternative no additional actions would be taken to protect rare or sensitive plants in the reserve. Simpson's hedgehog cactus and narrow-leaved Indian paintbrush would be protected from trampling by livestock or people in the research natural area but would remain susceptible to these impacts in most of the remainder of the reserve. Possible future ground-disturbing activities, including development of private land or new trails, roads, or campsites, could also result in the long-term loss of these rare and sensitive plants if it occurred in their habitat.

Kruckeberg's swordferns and their habitat could be adversely affected by visitor traffic or removal of plants from climbing routes wherever they occurred in visitor activity areas.

The cumulative effects of visitor use, potential private development, and continued levels of grazing could potentially reduce habitat and populations of rare and sensitive plants in the reserve.

> **Conclusion:** Increasing unrestricted visitor use, potential private development, and continued high levels of grazing could potentially reduce habitat and populations of rare and sensitive plants in the reserve.

Alternative 2. Rare or sensitive plants would benefit from inventories to identify habitat and from programs to educate visitors about rare or sensitive plants in the reserve and how to help protect them. If any threatened or endangered plant was found, its habitat would be strictly protected. Rare and sensitive plant habitats would be avoided wherever possible during planning and construction of the proposed new roads, trails, parking lots, and visitor facilities in the development zone and outside the reserve. Other public and private uses would not be limited specifically to protect rare or sensitive plants, but these species would benefit indirectly from the closure of certain areas to livestock grazing, rockclimbing, camping, and other activities and from the management of grazing and recreation on public lands throughout the reserve. New land use zoning for private land in the reserve could also potentially reduce activities that might disturb rare or sensitive plants. Rehabilitation of existing disturbed areas could possibly restore rare and sensitive plant habitat.

The combined effect of all actions under this alternative would protect most rare and sensitive plants and their habitat and could potentially increase habitat and populations of rare or sensitive plants in the reserve.

> **Conclusion:** Most rare or sensitive plants in the reserve would be protected.

Alternative 3. Impacts would be similar to the impacts described for alternative 2.

> **Conclusion**: Most rare or sensitive plants in the reserve would be protected.

WETLANDS, RIPARIAN AREAS, AND FLOODPLAINS

The Park Service has developed final procedures for implementing Executive Orders 11988, "Floodplain Management," and 11990," Protection of Wetlands" (45 FR 35916 as amended on August, 1982 by 47 FR 36718), and these procedures were followed in this planning effort. Alternatives were developed that would avoid or mitigate the adverse impacts

associated with all new development in floodplains and wetlands on public lands. No floodplains have been mapped along streams in the reserve. Because all of the streams are high- to medium-gradient streams of relatively small size, it was assumed that 100- and 500-year floodplains do not extend far beyond the riparian areas associated with the streams. Most of the wetlands are associated with streams, springs, and seeps.

Mismanagement of certain agricultural uses, including overgrazing of livestock, have had a major adverse impact on riparian vegetation and habitat in the reserve and are considered the major threat to these areas in the future. Riparian areas and wetlands would be adversely affected if any physical or biological modification of the habitat occurred, or water quantity was diminished to levels below the minimum needed to protect dependent lifeforms. (See table 9 for riparian and wetlands affected by domestic livestock grazing.)

TABLE 9: RIPARIAN AND WETLANDS AFFECTED BY DOMESTIC LIVESTOCK GRAZING

Long-Term Impact	Riparian And Wetland Acres Affected (Percent of Total Area)		
	Alternative 1	Alternative 2	Alternative 3
Directly Affected by Livestock Grazing	688 (95%)	244 (34%)	131 (18%)
Protected from Direct Livestock Grazing	36 (5%)	480 (66%)	597 (82%)

Alternative 1. Under this alternative, there would be no changes in current agricultural management practices, and about 688 acres of riparian areas and wetlands in the reserve would continue to be adversely affected by domestic livestock grazing and the agricultural use of water. Cattle would continue to be attracted by the large amount of forage and availability of water in riparian areas and would tend to concentrate in those areas, where they would continue to introduce nonnative plants, overgraze protective vegetation, and reduce soil stability by trampling. Loss of protective riparian vegetation and unstable soils would continue to accelerate soil erosion, elevate stream sediment loads, and change stream flows and morphometry. Diversion of water from streams or springs for irrigation and stock-watering during low water periods could reduce stream flows below the minimums required to support dependent life forms. The consequences of destroying natural riparian vegetation, increasing soil erosion, and diverting water could include reductions in abundance, biomass, species diversity, reproductive success, and survival of dependent wildlife and aquatic life. Eventually, the total area of wetlands and riparian vegetation in the reserve damaged by agricultural uses would likely be reduced.

Existing agricultural water developments and road segments in wetlands would remain and continue to adversely affect wetlands. New developments under this alternative would not adversely affect wetlands or floodplains on public land. Any new development, such as road or trail crossings or construction of facilities on private land could result in additional loss of riparian habitat and wetlands.

Conclusion: Continuing agricultural uses and any development would continue to cause major adverse impacts on about 95 percent of the wetland and riparian habitat in the reserve. Eventually, the total area of existing wetlands in the reserve and their long-term productivity would be reduced. Only about 5 percent of the riparian and wetland habitat in the reserve would continue to be protected from livestock use or developments.

Alternative 2. Under this alternative, domestic livestock grazing and trailing activities on public lands would be excluded from wetlands and riparian areas in the foreground of the California Trail subzone, the Research Natural Area, the General Natural Area, and some damaged wetlands and riparian areas on public lands in any zone. This would result in the protection of 220 acres of riparian and wetland areas within these zones.

Damaged riparian habitat on public lands would be restored, riparian communities would be expected to recover to more natural conditions, and wetland acreages might increase in some areas.

Any riparian and wetland areas on private lands included in the foreground of the California Trail subzone or the wetland/riparian area of Circle Creek basin outside the foreground that are placed in public ownership through a willing seller acquisition would be protected as well. Approximately 260 acres of riparian and wetland areas currently exist on private land within this subzone and the portion of Circle Creek outside the subzone. Based on a wetlands inventory to be done after the completion of the comprehensive management plan, other wetlands and riparian areas land may be pursued for

opportunity purchase and managed for wetland and riparian area preservation. Where wetlands and riparian areas occur on private land, private landowners would be encouraged to protect these areas. Technical assistance would be provided to private landowners upon request. Assuming all private land in the California Trail subzone was acquired with the owner's consent, grazing and agricultural uses of water would directly impact up to 244 acres of wetland and riparian areas in all other areas of the reserve (see table 9). Some impacts are expected to remain. A large amount of forage in riparian areas and the strong preference of livestock for these areas would continue the need for a concerted grazing management program. When the grazing management plan is completed and methods instituted to manage livestock in these areas, conditions in wetland and riparian areas on public land should improve. The grazing management plan would include strategies to develop alternate water sources to move stock water tanks away from wetland areas. In addition, grazing management at City of Rocks would fence out certain wetland and riparian areas to protect resources. Fenced-out areas would include portions of the South Fork of Circle Creek basin, Taylor Springs, and Mahogany Springs.

As grazing allotments changed over time, subsequent revisions to the grazing management plan would identify additional areas where wetland and riparian areas may be protected. Through these actions, the large majority of grazing impacts on publicly owned riparian areas would be mitigated. The grazing management plan would identify areas where grazing is inappropriate and should be discontinued. This could reduce the total area of wetlands and riparian areas directly affected by livestock grazing. In addition, any grazing allotments vacated in the reserve would be reallocated to adjoining permittees but with no additional AUMs. This would result in fewer cattle being grazed in the reserve and less impacts to wetlands and riparian areas.

Some wetland and riparian areas on private lands would probably continue to be adversely affected by grazing and diversion of water from streams for irrigation and stockwatering. The extent of impacts on privately owned wetlands and riparian areas would depend on the level of cooperation between private landowners and reserve managers to use wetland protection methods in the grazing management plan. Acquiring private lands with owners' consent would help protect additional wetland and riparian areas.

Existing structures and facilities now located in potential wetlands includes several road crossings, a segment of road near Emery Canyon, and a few stock watering tanks. The Emery Canyon road segment would be rerouted away from wet areas and rehabilitated to recover approximately 1.7 acres of wetlands. The rerouted road segment would also be easier to maintain and safer for vehicle use during wet periods. New wetlands disturbance caused by the rerouted road segment might be unavoidable, however, a net gain in wetland acres would be expected. The existing location of most wetland road crossings would not change. In addition, damaged wetland and riparian areas on public lands would be actively restored, wherever feasible. Riparian communities would be expected to eventually recover to more natural conditions, and historic wetlands might recover in some areas.

The only new development that could possibly disturb riparian areas includes a few stream crossings for new roads and trails in the development zone.

The only other new development that would occur near wet areas on public land in the reserve would be the primitive campground in the southwest corner of section 36. The campground and access to it would be designed and located to ensure that there would be no modifications in or near wetlands that would cause direct or indirect adverse impacts. No other development on public land that would adversely affect wetlands would be allowed. There are no floodplains or wetlands that would be affected by the proposed visitor center and administrative facility outside the reserve.

New land use zoning for private land in the reserve implemented by Cassia County would reduce the potential for development in riparian areas and wetlands or the need for additional water.

There are no floodplains or wetlands that would be affected by the proposed visitor center and administrative facility site outside the reserve.

The total cumulative impact on wetlands and riparian areas is composed of past impacts, external impacts, and impacts predicted under this alternative. Past land use activities have had a major adverse impact on most wetlands in the reserve (see "Affected Environment" section). The primary external threat is diversion of water from wetlands by water rights owners. The severity of past and external impacts ranged from light grazing to severe

soil erosion, dewatering, and loss of wetland vegetation. The consequences include reductions in abundance, biomass, species diversity, reproductive success, and survival of dependent wildlife and aquatic life. Wetland and riparian impacts on a regional scale are also major and widespread. Because of past and external impacts in the reserve and region, the beneficial impacts of this alternative would have a beneficial cumulative impact on wetlands and riparian areas.

> **Conclusion:** The proposed action would have beneficial effects on wetlands and riparian areas, including a net gain in wetlands over present conditions. Approximately 66% of the riparian and wetland habitat in the reserve would eventually be protected from direct livestock use and gradually recover to more natural conditions. Livestock use would adversely affect the remaining 34% but to a lesser extent than at present. The proposed developments would be mitigated where necessary to protect floodplains and wetlands.

Alternative 3. Grazing and trailing activities would be excluded from all wetland areas on public lands in the reserve. The potential extent of this protection would be much greater under this alternative. Assuming that all lands identified for inclusion in the California Trail subzone and natural area subzone were acquired and placed in public ownership, this would protect about 597 acres riparian areas and wetlands in the reserve from the direct impacts of grazing. Within these areas damaged riparian habitat would be restored, riparian communities would eventually recover to more natural conditions, and wetlands acreages might increase in some areas. The remaining 131 acres of wetlands and riparian areas would be privately owned. The extent of impacts on privately owned wetlands and riparian areas would depend on the level of cooperation between private landowners and reserve managers to protect wetlands.

Impacts associated with new and existing development or potential private development would be the same as described for alternative 2.

> **Conclusion:** This alternative would have the greatest beneficial effects on wetlands and riparian areas, including a net gain in wetlands over present conditions. Approximately 82 percent of the riparian and wetland habitat in the reserve would be protected from agricultural uses and gradually recover to more natural conditions. Livestock grazing and agricultural use of water would adversely affect up to 18 percent of the wetlands and riparian habitat on private land in the reserve. New developments on public lands would be mitigated where necessary to protect floodplains and wetlands.

AIR RESOURCES

Air pollution, even at concentration levels below national ambient standards, can harm vegetation, degrade visual quality, and diminish visitors' enjoyment. Air resources would be adversely affected if emissions increased ambient pollutant concentrations to above any state or federal ambient air quality standards or if there were reductions in the regional visual range.

Alternative 1. If the reserve remained a class II area, a moderate increase in air pollution from outside sources and future industrial sources could occur, possibly increasing visible pollutant levels and reducing the range of visibility. Increases in visitor traffic and continued local traffic would cause slight increases in automobile emissions and dust from unpaved roads in the reserve. Existing agricultural and recreational uses would continue to damage protective vegetation and expose more soil to wind erosion, resulting in increased dust emissions from the reserve. Cattle trailing would also result in temporary increases in airborne dust. Potential development of private lands could cause short-term localized increases in emissions during construction activities.

> **Conclusion:** Slight increases in dust and vehicle emissions and additional pollution from outside sources would adversely impact the reserve's air quality and possibly reduce the range of visibility.

Alternative 2. Possibly redesignating the reserve a class I area would prevent any further impairment of visibility from major emitting outside sources or future industrial sources.

In the reserve the amount of automobile emissions and dust from unpaved roads would be expected to remain about the same. Enhancing motor touring through the reserve as part of the proposed tour loop could increase vehicle emissions and dust, particularly along the east-west road through the reserve. Managing the use of the north-south road between Register Rock and Twin Sisters primarily for local ranch use would reduce vehicle-related air pollution along this road.

Reduction of grazing in some areas, revegetation of disturbed areas, and implementation of the grazing management plan would help protect soils from wind erosion and also reduce dust emissions. Cattle trailing would continue to result in temporary increases in airborne dust.

Short-term emissions would result from construction of proposed facilities within and outside the reserve. Machinery emissions and increased airborne dust from construction activities would decrease air quality in the vicinity of the project sites. Normal conditions would return when construction was completed.

Implementation of zoning ordinances by Cassia County and acquisition of development easements and other land interests by reserve managers would limit development on private land and reduce the potential of emissions related to private land development.

Any prescribed burns and campfires in the reserve would result in temporary decreases in air quality.

The total cumulative impact on air quality is composed of past impacts, external impacts, and impacts predicted under this alternative. At times, air quality would be severely affected by smoke from wildland fires, including prescribed burns, prescribed natural fires, and wildfires that occur in the surrounding areas. Air pollutants originating from urban and point sources in the region could affect visibility and precipitation chemistry. Past land disturbances, particularly roads, have also exposed soils to wind erosion that contributes to airborne dust.

> **Conclusion:** Possible redesignation of the reserve as a class I area and management of other dust- and emission-producing activities would help protect the reserve's good air quality and visibility. However, increases in dust, vehicle, and prescribed fire emissions would adversely affect the reserve's air quality.

Alternative 3. Impacts would be the same as those described for alternative 2, except that eliminating the north-south road in the reserve would reduce vehicle traffic slightly more in the reserve. Possibly redesignating the reserve a class I area would prevent any further impairment of visibility from major emitting outside sources or future industrial sources. Providing a new paved road around the reserve and removing the north-south road would reduce local vehicle traffic in the reserve. In the reserve the amount of automobile emissions and dust from unpaved roads would be expected to remain about the same, although emissions in the region immediately surrounding the reserve might increase slightly.

Elimination of grazing in most areas and revegetation of disturbed areas would help protect soils from wind erosion and also reduce dust emissions. Cattle trailing would continue to result in temporary increases in airborne dust.

Short-term emissions would result from construction of proposed facilities within and outside the reserve. Machinery emissions and increased airborne dust from construction activities would decrease air quality in the vicinity of the project sites. Normal conditions would return when construction was completed.

Implementation of zoning ordinances by Cassia County and acquisition of development easements by reserve managers would limit development on private land and reduce the potential of emissions related to private land development.

Any prescribed burns in the reserve would result in temporary decreases in air quality.

> **Conclusion:** Possible redesignation of the reserve as a class I area and management of other dust- and emission-producing activities would help ensure the protection of the reserve's good air quality and visibility.

SCENIC QUALITY

Protecting and maintaining scenic quality was one of the primary reasons for establishing the reserve. The ad hoc structures, fuel storage tanks, rock scars, vegetation loss, bright-colored slings, shiny bolts or pitons, white chalk, and the presence of climbers and ropes on the rock formations alter the natural appearance of the rock formations and could be considered intrusive to visitors who desire to view the scenic landscape in a natural state. Studies of scenic quality have found that people regard a natural landscape as being more scenic than a human-altered one or one that includes other humans.

Examples of adverse effects on scenic quality are the loss of air quality, the loss of solitude in the viewing experience, and the loss of naturalness in the important viewsheds. Clarity is affected by dust and smoke. Visitors sense of solitude is lost when people are concentrated at limited viewpoints and when

adjacent uses create noise within the viewing area. Naturalness in views is lost when development of any kind is seen in the foreground or incongruent, contemporary land use and development changes the character of the middle ground.

Alternative 1. Vehicular use along the Almo park road would continue without access to the Indian Grove overlook, view 1, the most outstanding and vivid landscape view. (See the Scenic Viewpoints map for location of views.) The access to this bluff would remain in private grazing use, discouraging foot traffic to this point. The road would continue to provide a vivid display of view 2 across Taylor's fields.

Vehicular traffic along the rim and camping sites that monopolize rim overlook areas would continue. In some areas of the current east-west road, use continuing on the alignment would contribute dust and perpetuate noise that would affect nearby rim activities. Camping uses would effectively shut off other visitor uses from the rim at Turtle Rock and Parking Lot Rocks. The noise and dust from vehicles parking at Bath Rock would continue to affect climbers and visitors walking along the overlook. Comfort stations that obstruct views and garbage cans and signs inappropriately placed would continue to adversely affect overlooks along the rim into the Silent City (view 3).

The road alignment in from Emery Canyon would continue to provide a display of two important views, 4 and 5.

Vehicular use across Twin Sisters basin, including the first view of Twin Sisters over the rise, view 7, would continue; however, pedestrians would share the viewpoint with cattle, cars, and commercial traffic. In addition, nebulous zoning on private lands could result in residential development in the foreground of views 6 and 7, which are the strongest views of unaltered trail vistas.

Existing entrances on the east and west sides of the reserve would be developed and would include commercial services. Although these views are not as outstanding scenically as the seven views described in the "Affected Environment" section, they are important and need to be protected.

Conclusion. The most outstanding and vivid landscape view would not be accessible to the public. Scenic quality would progressively degrade along the rim, could be destroyed along the trail, and would maintain existing levels at the Emery entrance. Arrival views could become so cluttered with commercial development that the scenic quality would be greatly diminished at the entrances.

Alternative 2. The proposal would allow for continued pedestrian, visual access by way of a trail and road from Indian Grove to view 1. View 2 across Taylor's field would remain unchanged — view from where? include a new trail from Breadloaves. — to where?

see map. p.118

Design within the vicinity of view 3 would remove car traffic, which would reduce noise and dust. The realignment of the road away from the rim and the removal of campsites would exclude these intrusions from the viewing experience, reclaiming a more natural scene. Climbing management strategies would help distribute this activity away from the rim and allow for less crowding and visitor conflicts.

The proposed road realignment would make view 4 inaccessible by car. It would be available to trail users only. View 5 would remain unchanged.

Under the proposed action, key viewpoints along the trail, views 6 and 7, would be protected as long as park development was sited to avoid intrusion. The reduction of the road corridor crossing Twin Sisters basin to a private use only trail would result in eliminating a large source of traffic and modern intrusions to an otherwise natural scene. Control of private land uses through county zoning and acquisition would keep the two views natural and free of development.

The new east-west road alignment would provide a new ridgetop view overlooking the city and a new hillside view overlooking all of the inscriptions rocks and Circle Creek basin.

Designed trail loops would access new views from an unnamed summit, west of the primitive campground, and vistas to the city from alignments circumnavigating the city.

Arrival corridors — Almo junction into the reserve on the east and from Junction Valley floor and Emery Canyon into the reserve on the west — have been identified as important viewsheds in this proposal.

County zoning, technical assistance, and cooperative management agreements would set up scenic setbacks for development and keep these corridors

free of nonconforming commercial uses. Guidelines would provide image control for new residential uses.

Conclusion. Scenic quality would be enhanced by site design and visitor management along the rim and the California Trail and by county zoning and design guidelines to protect the historic rural setting along arrival corridors.

Alternative 3. Scenic quality would be best under this alternative because of increased naturalness caused by managing the majority of the reserve for the California Trail historic period and for preservation of the natural resources and by removing the north-south road. All of the Circle Creek and Twin Sisters basins, a silence overlook into the Silent City, and all of the California Trail corridor within the reserve would be managed under the California Trail subzone, outstanding features. Another large portion of the reserve, including most of the northern portion and the eastern border of the reserve, would be managed under the natural area subzone, outstanding features. All the private land in these two areas would be acquired in fee title and modern activities and associated development would be removed so that use could be focused exclusively on resource preservation and interpretive (educational) activities.

Emphasis on the California Trail would create the same scenic/interpretive car stops as described under the proposal. Views 1, 2, and 3 would also be enhanced through better road design and access. View 4 would be seen from a pedestrian trail rather than from a road. View 5 would remain the same. Views 6 and 7 would be protected through direct acquisition, guaranteeing the most authentic natural scene possible. This action would enhance the trail.

The absence of camping and trail networks would keep the non-California trail area mostly inaccessible, except for one cross-country route from Nicholson ranch to Indian Grove. Trailhead access at Emigrant Canyon and Graham Creek would allow historic pedestrian views of Twin Sisters and Graham Peak to be seen. Presenting the Twin Sisters view from the stage stop as seen approaching on foot along the Salt Lake Alternate would enhance the pristine and undeveloped viewing opportunity and, in turn, the scenic quality. Additional historic views along the trail corridor and along the Salt Lake Alternate would be made available.

Scenic quality along the rim would be improved. Views 6 and 7 would be protected as much as possible, enhancing the natural quality of the entire California Trail corridor and the reserve.

Conclusion. Scenic quality would be the best under this alternative because of increased naturalness caused by managing the majority of the reserve for the California Trail period and because of preservation of natural resources and removing the north-south road.

VISITORS

Interpretive/ Educational Opportunities

Interpretive and educational opportunities would potentially be adversely affected by

- degradation of resource quality caused by a loss of resources or modern intrusions into the historic viewshed (see the discussion of impacts on cultural resources, above) or degradation of scenic quality
- (see the discussion of impacts on natural resources above)
- barriers to use caused by lack of access or conflicting activities
- inadequate information or interpretation

Alternative 1. The loss of historic features and the introduction of modern intrusions could greatly diminish visitors' experience of the California Trail and the historic rural setting. Rather than seeing the trail as a rutted route through a vast wilderness, visitors would see a graded road with modern vehicles coming and going almost continuously, fencelines, unrestricted recreational use, and private residences. This would make it difficult for anyone to imagine a historic scene and could confuse some people's understanding of historic conditions. Similarly, opportunities to experience the grandeur and awesome quiet of the Silent City of Rocks would be diminished by the sights and sounds of camping and other recreational uses that are concentrated in this area.

In almost all cases visitors would need to create their own opportunities to learn about and experience the resources and how they fit into the area's natural and human history. The public would be able to view major features along the road corridors, including the encampment area, some of the inscription rocks, the California Trail corridor, Pinnacle Pass, and Twin Sisters; however, the only formal opportunities to get out of their cars and explore the landscape on foot would be at viewpoints overlooking the Silent City and at Pinnacle Pass. Campers would continue to preempt prime sites along the rim of the Silent City, making it difficult for day visitors to use that area. Opportunities to walk along portions of the California and Salt Lake Alternate trails (more than 95 percent of which are in private ownership) or to other points of interest would be limited. Visitors would first need to get permission from individual private landowners, which would be difficult because the owners live outside the reserve boundary. In all areas of the reserve, except section 36 and the research natural area, people would encounter numerous fences and cattle.

Conclusion. Visitor understanding and appreciation of the California Trail and the historic continuum would be impaired by a lack of preservation of and public access to many key resources and by competing recreational activities.

Alternative 2. Protecting and providing access to a variety of historic resources would greatly enhance people's understanding and appreciation of the California Trail and the historic continuum. The acquisition and protection of outstanding resource areas, together with road relocation and development easements on private property, would make it possible for visitors to walk along 1- to 2-mile-long sections of the historic trail. They could experience high scenic quality and the foreground free from any development or modern recreational uses in a manner similar to that of the 19th century emigrants. Providing easements for visitors to walk the entire length of the historic trail through the reserve would encourage more people to have a longer, more realistic trail experience. However, they would still find segments where they would encounter fences, cattle, some vehicular traffic, and (if development easements could not be obtained) modern structures. The road realignments included in this alternative would pull modern intrusions away from many of the key resources (while still allowing visitor access) and give visitors better opportunities to experience the resources in a historic setting with a greater degree of naturalness.

The National Park Service would create multiple opportunities for people to learn about and experience the historic trails and the historic continuum. In addition to walking the historic trails, visitors could drive to viewpoints where their attention would be directed to the Nicholson ranch and Circle Creek basin, inscription rocks, the Silent City, the historic trail corridor through the Twin Sisters basin, Pinnacle Pass and Twin Sisters, the junction of the California Trail and Salt Lake Alternate, Granite Pass, and the stage station site.

In some of these locations visitors might encounter other park users (i.e. climbers) which, depending on their expectations, could either add to or interfere with their enjoyment of the resources. Hiking trails would provide access to the interior of the Silent City, Indian Grove, and other prominent viewpoints in the reserve. Information and interpretive services at the visitor center and two kiosks would help visitors find and take advantage of all these opportunities and to understand where the different resources fit into the historic continuum.

The highway 77/27 designated loop tour route would encourage people to visit related natural and historic resources outside the reserve, where they could gain a better understanding of the historic continuum.

Conclusion. Visitors would have a variety of opportunities to understand and appreciate both the California Trail and the area's full historic continuum with minimal distractions from conflicting development or competing activities.

Alternative 3. Acquisition and preservation of the entire viewshed of the California Trail and the surrounding natural environment would allow visitors to follow the historic trails for 9 miles, experiencing a setting much like that experienced by the 19th century emigrants. The landscape would be free of fences, cattle, and all modern intrusions except for low-profile interpretive waysides at key locations.

The National Park Service would create excellent opportunities for people to learn about and experience the California Trail and the Salt Lake Alternate. In addition to walking the historic trails, visitors could drive to viewpoints where their attention would be directed to the Circle Creek basin, inscription rocks, the Silent City, the historic trail corridor through the Twin Sisters basin, Pinnacle Pass and Twin Sisters, and the junction of the California Trail and Salt Lake Alternate. Hiking trails would be developed to provide access to the interior of the Silent City, Indian Grove, and prominent view points in the reserve.

Other aspects of the historic continuum would receive attention only to the extent of providing an interpretive and historical context for understanding the trail era. Significant resources (natural, cultural, and scenic) would be interpreted through wayside exhibits in a context that related directly to the California Trail.

Conclusion. Visitors would have excellent opportunities to understand and appreciate the California Trail without being distracted by conflicting development or competing activities. No opportunities would be available to experience the historic continuum of the region's history.

Recreational Opportunities

Rock Climbing. Rock climbing in some areas of the reserve would potentially be restricted or denied because of resource management decisions.

Alternative 1. Climbers would continue to have access to all of the rocks that are currently in public ownership. (See table 10 for availability and changes in favorite climbing rocks for all alternatives.) These include most of the challenging rock faces within the reserve, including those in section 36 and the portion of Twin Sisters ridge in public ownership. Climbers, like other visitors, would need to obtain owner permission before planning ascents on rocks on private property.

Climber access to the historic inscription rocks would depend on the discretion of private landowners and on peer pressure from other climbers, since the climbing community has published guidelines against climbing on these rocks.

Conclusion. Current climbing activities within the reserve would not be affected.

TABLE 10: ACCESSIBILITY OF POPULAR CLIMBING ROCKS FOR ALTERNATIVES 1-3

Favorite Climbing Rocks*	Alternative 1	Alternative 2	Alternative 3
Parking Lot Rocks	available	available	available
Elephant	available	available	not available
Breadloaves	available	available	available – walk in only
Bath	available	available	available
Dolphin	available	available	available
Window	available	available	available
Twin Sisters	available	not available	not available
Morning Glory	available	available	available

*from mail-in response to visitor information sheet, Newsletter #2

Alternative 2. Climbers would continue to have access to most of the challenging rock faces within the reserve, including all of those in section 36, where climbing activity is concentrated. Parking lots near the popular climbing areas in the natural area subzone, natural and recreational resources area (see Alternative 2 map) would be improved. Of the eight favorite climbing rocks listed by climbers in response to the visitor information survey, climbing on seven of the formations listed would continue, and climbing on one would be discontinued.

Acquisition and protective management of most of the historic inscription rocks would make these rocks inaccessible for climbing. The climbing community supports this restriction through published guidelines against climbing on historic inscriptions rocks.

Restricting climbing and other activities in the viewshed from the California Trail, including Twin Sisters, would make some routes inaccessible to climbers. Of the eight favorite climbing rocks, seven would be available for climbing. Twin Sisters would be closed to climbing for resource protection purposes.

Because the decision was made to emphasize the protection of the cultural resource values of Twin Sisters formation, the preclusion of active recreational uses on and around the Twin Sisters formation, including camping, picnicking, and climbing, would necessitate visitors to engage in these activities in other designated areas of the reserve. In the case of climbing activities, numerous other climbing rocks would remain available within the reserve for recreational use. However, because the Twin Sisters provides the only multipitch climbing experience within the reserve, the some 380 people that annually climb the Twin Sisters formation (based on registration data collected during the 1993 season) would need to seek that experience at other sites within the general region.

In addition, the research natural area (including Steinfels Dome, half of Grey Wall, and half of Road Map Wall) would be closed to recreational use. Use would be by permit only, consistent with research objectives.

All areas in the reserve identified as potential endangered or threatened species habitat would be continually monitored for the presence of these species. If they were present, temporary closures of certain areas to climbing or other recreational activities might be necessary.

This alternative would place more land in public ownership; however, climbers would still need to obtain permission before planning ascents on rocks on private property.

> **Conclusion.** Most of the popular climbing rocks and climbing routes would remain accessible to climbers; however, climbers would find more restrictions than exist now, designed to help prevent potential damage to resources and conflicts with other reserve experiences.

Alternative 3. Climbing would be allowed in the natural area subzone, front country recreation area, which would be reduced under this alternative. Climbing and most other recreational activities would be excluded from both the outstanding feature zones (California Trail and Natural Area subzones).

> **Conclusion.** Most of the popular climbing rocks would remain accessible to climbers; however, climbers would find more restrictions than exist now, designed to help prevent potential damage to resources and conflicts with other reserve experiences.

Camping. Camping would potentially be affected by barriers to use caused by lack of campsites or changes in the character of campsites.

Alternative 1. People could continue to camp along the rim of the Silent City, behind Bath Rock, and on public lands in other front country and backcountry locations where camping currently occurs. As use increased, managers might limit the amount of additional camping opportunities to protect resource values. People would need to get permission from the landowner to camp on private property.

No facilities, such as fire pits, comfort stations, or picnic tables, would be available.

Because grazing would continue throughout much of the reserve, campers might encounter cattle or dung in or near their campsites.

> **Conclusion.** This alternative would have minimal impacts on current camping activities. Conflicts with cattle might continue to reduce the quality of some people's camping experience.

Alternative 2. Visitors would still have the opportunity to tent camp in the reserve. Restricting front country camping to a primitive campground would change the character of the camping experience, in that people would not be able to disperse as much as they might choose. However, the consolidated camping experience would be closer to the way the emigrants and Native Americans camped in this area. Depending on the capacity of the campground (10-50 sites) and the backcountry camping area (up to 10 sites), opportunities for camping within the reserve boundary would be less. Some campers would enjoy the convenience of nearby comfort stations. Because RV camping (100 sites) would be relocated outside the reserve, it would be less likely that tent campers would be disturbed by the noise from RV generators.

Relocating RV camping to a new developed campground outside the reserve might disappoint some RV campers who enjoyed camping on the rim of the Silent City; however, they would have more conveniences in the new campground, including electrical hookups and a sanitary dump station. More sites would be available in the new developed campground, making it easier for people to find a campsite.

Conclusion. Overall, counting the 100-site developed campground outside the reserve, more camping opportunities would be available, although the character of the camping experience would change.

Alternative 3. Camping would not be allowed in the reserve.

Conclusion. Visitors would no longer have an opportunity to camp in the reserve.

PUBLIC SAFETY AND ACCESSIBILITY

Hunting Hazards

Alternative 1. Hunting, hiking, camping, and other visitor use would be allowed to occur simultaneously on all public lands within the reserve except section 36 and the research natural area, where hunting would continue to be prohibited. The conflict between hunting and other recreational uses could place some park users in dangerous situations that would be difficult to manage. Potential safety hazards would be greatest during hunting seasons; however, since some animals may be hunted year-round in Idaho, some hazard would exist at all times. Hunters would need permission from individual landowners to hunt on private lands.

Conclusion. The conflict between hunting and other visitor activities could place some park users in dangerous situations, especially during hunting seasons.

Alternative 2. This alternative would provide greater separation between hunters and other visitors by prohibiting hunting in the California Trail subzone and the front country recreation area of the natural and recreational resource area, as well as in the research natural area. This would eliminate the potential safety hazards to visitors in the most heavily used portions of the reserve. However, a hazard would continue to exist in some portions of the general natural area, on grazing portions of the natural area subzone, and on public lands in the historic rural setting zone. Hunters would need permission from individual landowners to hunt on private lands.

Conclusion. Hunting hazards would be eliminated in the most heavily used portions of the reserve; however, some park users might still be in dangerous situations in the more remote parts of the reserve.

Alternative 3. This alternative would provide the greatest separation between hunters and reserve visitors engaged in other pursuits such as climbing or walking the California Trail. Prohibiting hunting in the California Trail zone (which would be larger in this alternative than in alternative 2) and in the recreation zone would eliminate this hazard from approximately half the reserve. Because no camping would be allowed in the reserve, no campers would be endangered by hunting.

Conclusion. Hunting hazards would be eliminated from approximately half the reserve, and no campers would be at risk because no camping would be allowed.

Accessibility

Alternative 1. The ranger/information station near Almo would be accessible to people with disabilities. This would include the information desk area and the restroom. Harpers Ferry Design Center guidelines for interpretive media would be followed in the production of brochures or other media.

Inside the reserve, picnic areas would be retrofitted to provide accessible sites, including tables and access to the tables from the parking areas. The restroom facilities at Bath Rock would also be accessible. Since no other developments would exist

in the reserve, access to key resources or camping sites would not be provided.

Conclusion. People with disabilities would generally be confined to their vehicles to tour the resources of the reserve, making the quality of their experience minimal at best.

Alternatives 2 and 3. The new visitor center facility would be fully accessible to people with disabilities. All interpretive media would comply with the Harpers Ferry Design Center accessibility guidelines. The building itself and all the developments inside the reserve would be designed in compliance with federal disability guidelines. Thus, visitors with disabilities would have access to pullouts and parking areas, picnic areas, waysides, restrooms, and (in alternative 2 only) the primitive, group, and developed campgrounds.

Conclusion. Access to significant resources would be provided through physical or programmatic design.

PRIVATE LANDOWNERS AND LIVESTOCK GRAZING PERMITTEES

Livestock are grazed on 10 allotments covering 24,094 acres of private and public range on U.S. Forest Service, Bureau of Land Management, state, and reserve land by 10 individual permittees. Currently, there are approximately 1,592 active animal unit months (AUMs) available for the 10 allotments, with an estimated 504 active AUMs available in the reserve. For purposes of analysis, active AUMs in the reserve were estimated by multiplying the percent of the allotment in the reserve times total active AUMs for each allotment; 6,981 acres of the allotments in the reserve cover federal land (see the "Affected Environment" section). Livestock are grazed on an additional 5,234 acres of private land. To avoid double-counting in the impact analysis, all private rangelands in the reserve were treated separate from federal rangeland in the allotments. Impacts on ranchers and grazing permittees are primarily related to changes in the amount of grazing that might occur under each alternative. Adverse impacts could occur if the economic health or viability of an individual or group is threatened because of the loss of grazing opportunities on both private and public lands. (See table 11 for a comparison of changes in allotments, AUMS, and federal and private range under each alternative.) This impact analysis was based on 1994 acreages of public and private land in the reserve. Recent land acquisitions have changed the amount of private and public land available for grazing in the reserve. Therefore, the numbers in the draft EIS are slightly different.

Alternative 1. Grazing allotments would continue to be administered by the U.S. Forest Service and Bureau of Land Management. Grazing would continue on all public and private land except where it is already excluded in the research natural area, section 36, and other federal lands not within a grazing allotment.

Conclusion: The actions in this alternative would not affect grazing permittees or private landowners.

Alternative 2. Grazing would continue in existing allotments on public land determined appropriate for such use in the resource management plan and grazing management plan. The area of public grazing allotments that would be closed to grazing includes 206 acres in the south fork of Circle creek basin, and about 77 acres of riparian habitat near streams and springs. The Research Natural Area, section 36, and other federal lands not within an existing grazing allotment would continue to be closed to grazing. Range improvement investments such as fences and water developments on any rangelands identified for closure would be lost. Permittees that grazed cattle on the remaining avilable rangeland would be required to keep tighter control on the movements of their stock. Areas closed to grazing would be fenced or barricaded to keep domestic stock out. This would place a greater burden on permittees/ranchers to ensure that grazing livestock did not enter these areas. Employment and local expenditures related to livestock grazing could be decreased because of reductions in grazing in the reserve. Outside the reserve, the proposed visitor complex and campground would reduce the amount of rangeland in the Almo Flat allotment by 4%, adversely affecting one permittee.

Total active AUMs available in the reserve could be reduced through land acquisition or by existing permittees vacating grazing allotments. Grazing allotments in the reserve that were vacated would be allocated to remaining or adjoining permittees with no increase in AUMs for those permittees. In these cases, the same number of AUMs would be permitted for larger allotments, and the total number of AUMs available in the reserve would decrease.

Ranchers would continue to be allowed to trail cattle across the reserve along designated stockways.

TABLE 11: ALLOTMENTS, AUMS, AND FEDERAL AND PRIVATE RANGE IN THE RESERVE BY ALTERNATIVE

	Allotment				Alternative 1		Alternative 2		Alternative 3	
	Number of Permittees	Total Acreage	Total Active AUMs	Acres of Federal Range in Reserve	Percent Change for Total Allotment	Percent Change in Reserve[1]	Percent Change for Total Allotment	Percent Change in Reserve[1]	Percent Change for Total Allotment	Percent Change in Reserve[1]
Graham Creek	1	3,186	253	2,665	0	0	*	*	-80	-100
Walters Creek	3	1,715	202	885	0	0	*	*	-52	-100
Circle Creek	1	1,474	23	1,115	0	0	*	*	-70	-100
Trail Canyon	3	2,891	188	873	0	0	*	*	-31	-100
Tracy Lane	1	641	77	366	0	0	*	*	-62	-100
Heath Canyon	1	2,745	21	977	0	0	*	*	-56	-100
Smoky Mountain	1	1,127	54	31	0	0	*	*	-3	-100
Junction Seeding	8	6,520	490	66	0	0	*	*	-1	-100
Moulton	1	654	56	0	0	0	*	*	-23	-100
Sparks Basin	1	3,141	228	0	0	0	*	*	-6	-100
TOTAL	**10**	**24,094**	**1,592**	**6,981[2]**	**0**	**0**	*	*	**-32**	**-100**
Private Land	NA	NA	NA	5,234[2]	NA	0	NA	*	NA	-72
GRAND TOTAL	**NA**	**NA**	**NA**	**12,215**	**NA**	**0**	**NA**	*	**NA**	**-88**

[1]Percent change for each allotment in the reserve was calculated using federal range acreages only. Percent change for private land in the reserve was calculated using total private land acreages in the reserve, including both private range within and outside grazing allotments.
[2]1994 totals: The draft EIS was based on 1988 data
*Percent change will be determined in the grazing management plan.

Conclusion: Closing 283 acres to grazing on public allotments and reducing the total number of AUMs as permittees vacate allotments would have adverse economic impacts on ranchers/permittees. Affected private landowners would be compensated with the fair market value of their property. The local economy would be adversely affected because grazing would be reduced, and related employment and expenditures would be diminished.

Alternative 3. Grazing would be phased out on 11,424 acres of private and public land for an 88 percent reduction in total rangeland currently available for grazing in the reserve. Permittees would not be allowed to graze on 6,981 acres, or 100 percent of the public rangeland, on eight allotments in the reserve. This change would represent a loss of about 504 active AUMs that would affect 10 permittees. Grazing would be phased out on an additional 3,745 acres of private rangeland, assuming that all lands identified for inclusion in the California Trail subzone and natural area subzone were acquired and placed in public ownership in exchange for the fair market value of the property. Range improvement investments such as fences and water developments on closed rangelands would be lost. The property owners that grazed cattle on the remaining available private rangeland would be required to keep tighter control on the movements of stock. Areas closed to grazing would be fenced or barricaded to keep domestic stock out, which would place a greater burden on the rancher to ensure that grazing livestock did not enter these areas. Employment and local expenditures related to livestock grazing would be decreased because of reductions in grazing in the reserve.

Ranchers would continue to be allowed to trail cattle across the reserve along designated stockways.

Conclusion: Closing 10,726 acres, or 88 percent, of the public and private rangeland to grazing in the reserve would have an adverse economic impact on 10 permittees. Affected private landowners would be compensated with the fair market value of their property. The local economy would be adversely affected because grazing would be reduced and related employment and expenditures would be diminished.

LOCAL COMMUNITIES AND ECONOMY

Character of Surrounding Communities

Within East Cassia County, the quality of living in Almo could be degraded by increased traffic, dust, and congestion through town on the north-south main street. Competitive demand for services, incompatible development such as commercial development placed too close to residential areas, additional residences constructed because of employment directly or indirectly related to the reserve, and potential increases in crime, garbage, and pollution could affect the quality of life of Almo residents.

Within 10 years, annual visitation is anticipated to stabilize at about 80,000 visitors under all alternatives. If current traffic patterns continued, about 30,000 visitors (39 percent) would come to the reserve through Almo, another 41.9 percent would arrive from the southeast, and the remaining 20 percent would arrive from the west through Oakley. About 4,300 would visit between April and October, with 500 arriving on a busy weekend. An estimated 200 cars would drive by the Almo intersection at Tracy's store each weekend day, with an average of 35 cars between 9 A.M. and 3 P.M.

In West Cassia County, the quality of living in Oakley could be affected similarly to Almo. Oakley could be affected by increases or decreases in traffic and congestion along the east-west main street through town, by inappropriate character of any new commercial and residential development within the limits of the designated historic district, by competitive demand for services at stores and stations among local residents and visitors, and by an influx of reserve employees or employees of any new businesses that might result from the presence of the reserve.

Using the anticipated annual visitation of 80,000 and 47 percent of visitors using this route to exit the area, visitor traffic could reach 60 cars each hour from 4 to 8 P.M. According to the visitor use survey, almost half the visitors leave through Oakley, and only 10 to 15 percent arrive through Oakley.

The cars exiting the reserve and traveling through Oakley to Burley would enter Oakley from the west, travel along the main street, and turn north, leaving the downtown area. Small businesses and an occasional vacant lot face the street, with a local grocery and service station at the east-west/north-south intersection. There are Oakley stone storage bins stacked in side lots. Parking along this portion of the main street is undefined on both sides of the street, which is completely within the Oakley National Historic District. Visitors would be looking for restrooms, restaurants, and/or lodging facilities. There are no stop signs or lights along this route.

Traffic and parking congestion on the main street would make it more difficult for pedestrians to cross the main street from 4 to 8 P.M. Unlike Almo, grocery store customers would not necessarily increase from this group of visitors, leaving current local shopping patterns uninterrupted. Traffic slowing down at the north-south/east-west intersection might cause a stacking problem during this time.

A few summer seasonal reserve employees might choose to live in Oakley, but because Oakley is not accessible from the reserve during the winter, reserve operations would be concentrated in Almo, limiting new federal/state construction to the east side of the county.

Alternative 1. Traffic under this alternative would continue to increase gradually. Local residents already remark about the heavy congestion on weekends when it is half the potential volume. Most of the 16 ranchers who trail cattle through the city have quit doing so on weekends. It is likely that the remainder would choose to move cattle only during midweek as competition with cars for use of the road corridor increased during weekends in June and October, the prime trailing time.

The paved highway ends 1/4 mile north of the Tracy store in Almo. The store and its parking are on gravel, and increased traffic on this road would cause more dust to become airborne and later settle on surfaces within 25 feet of the road corridor. Pedestrians at the store would be affected the most and may choose to move indoors or undertake their activities farther from the road edge. None of the residences along this route are close enough to the road to be affected.

The store lot is just off the main road with undefined parking for about six vehicles. The lot is also used by recreationists who shop at the equipment store next door. Local residents and a fair number of visitors also use the store. Increasing visitor traffic would contribute to congestion at the store parking lot and might encourage cars to line the side street to the east and possibly across from the store along the main street, increasing conflicts between pedestrians and cars.

The lack of efforts by the National Park Service or Idaho Department of Parks and Recreation to

provide additional overnight accommodations would allow local communities or other private groups to provide such facilities. Without design guidelines or other controls by local entities, new construction could compromise the integrity of the Oakley Historic District.

> **Conclusion**. Increased weekend traffic on the main north-south road would affect cattle trailing, the road corridor, and outside uses around the Almo intersection at Tracy's store. Demand for parking at the store might cause pedestrian/car conflicts. Local communities or private groups could be given the opportunity to provide overnight accommodations. In Oakley, the integrity of the historic district could be compromised.

Alternative 2. Arrival traffic on the north-south route would increase because the visitor center would likely draw people from the region. Although cars would continue to be the predominant means of getting to the reserve, buses with school groups and tour groups would also contribute to traffic congestion. These groups would visit on weekdays during the off-season. Although the traffic would not affect peak loading times on the road, it would affect the typically quiet and low-use days. Prearranged tours and school groups would probably drive directly to the visitor center and bypass the store.

A 100-seat amphitheater (expandable to 200 seats) for summer evening outdoor programs at the developed campground and 70-seat auditorium at the visitor center would draw people from the developed campground, campsites in the reserve, and areas as far away as Burley on weekend nights. This draw would be equally split east and west of the Albion mountains and add 25 to 30 cars driving through Almo within a 30- minute early evening time frame and a later evening departure.

The proposed campground, when full (most weekends and from July through Labor day), would draw up to 300 people (100 vehicles) to an area 2 miles southwest of town. Travel to the store for supplies from this campground would concentrate in the late afternoon and the early evening. Camping uses could add 25 to 50 cars/hour in the peak hours in late afternoon both arriving and traveling to the store. Many RV users bring bicycles. Biking would increase on the road into town and also into the reserve, in the early evening, as a way to haul supplies and as a recreational activity.

In response to the increased visitor concentration at the campground, county enforcement staffing might increase by one patrol person stationed in the Almo area.

A seven-site backcountry campground inside the reserve would decrease traffic from the campground into town because it would replace campsites on the rim with 20 to 50 percent fewer sites. This traffic would continue to occur at less congested times and would be dispersed throughout the day during unsuitable hours for climbing or socializing at camp. Although stay limits would be imposed and fees charged, demand would keep this campground full. This demand would probably continue to come from the climbing community. Times of bicycle use would vary with the weather, the need for a shower, and individual needs for supplies or equipment. The availability of the campground on the east side of the reserve might increase the number of visitors who depart via routes on the east side.

A new trash transfer area has been built to serve the general area. It will assist in addressing the anticipated increase in garbage generated by the campground and visitor traffic. The 5-acre site is along the county road between Almo and Elba out of view from incoming Utah traffic and the campground. A below-grade pit with enclosed fencing would be part of the design. To reduce refuse and the total volume of trash generated within the reserve, management staff would establish a recycling program to reduce solid waste and encourage conservation of resources.

This alternative includes construction that could involve local as well as nonlocal workers over a period of two to five years. Traffic generated from construction commuting would cause dust and conflicts with farm traffic on weekday mornings and evenings.

The impact of tourism on Oakley would be largely contingent on the quality of visitor services and facilities that Oakley chooses to provide. Traffic generated by the marked tour loop and information network might increase traffic arriving through Oakley because more people might choose the historic district as a destination on the loop. Visitors are likely to expect food and lodging at the historic district that gives the image of the historic values, placing a demand on the town for facilities. Design guidelines would determine how to accommodate demand while retaining the contributing character of the district. In addition, the RV campground on the

east side might decrease the demand for overnight camping facilities in Oakley.

Conclusion. Increased weekend traffic around Almo would create similar effects as alternative 1. In addition, bus and tour uses midweek would create traffic-generated problems and diminish pedestrian activities. Bike and car traffic from the RV campground to the store and increased traffic to visitor center programs would increase congestion. Construction traffic could conflict with farm traffic. Mountain bike use would likely decrease in relation to decreased primitive campsites, and car use would continue to disperse.

However, traffic and tourism might increase in Oakley because of increased facilities and information in support of the loop tour.

Alternative 3. The visitor center in Almo would be retained, as described under the proposal. School and tour traffic would again be high in April, May, September, and October. Additional emphasis on the trail interpretive storyline would draw greater numbers of trail history enthusiasts, possibly in tours. Local attendance at weekend evening programs would be the same as in the proposal; however, the size of the facilities might be smaller because of the absence of camping.

Lodging needs would be met in the private sector. Economical styles of accommodations that might fit the demand could include campgrounds, hostels, housekeeping cabins, bed-and-breakfasts, and historic hotels. Camping, hostels, cabins, and bed-and-breakfasts could be provided in Almo by private enterprise as could bed-and-breakfasts and hotels in historic structures in Albion and Oakley. The placement and development of these facilities could greatly influence the length of season, activities, land use, economic benefits, and traffic patterns.

A modest three-bedroom bed-and-breakfast was built in Almo in 1988, but other lodging proposals are unknown. Demand for lodging would probably increase in both Oakley and Almo. As private accommodations developed, winter activities would increase in the reserve, and traffic in town would continue to be drawn to the store. Levels of visitation similar to the proposed action would still cause dusty situations for six months of weekends, and four months of weekdays.

Traffic generated by the tour loop and information network might increase traffic through Oakley because people might choose the historic district as a destination on the loop. Food and lodging demands that give the image of historic values would likely require more facilities. Design guidelines would accommodate the demand while retaining the contributing character of the district.

Conclusion. Levels of dust, congestion, and town traffic could increase in Almo similar to alternative 2. Without information on private sector proposals for lodging, effects of traffic patterns in and around Almo cannot be predicted. As private accommodations developed, traffic would continue in and around the store in Almo.

Lodging needs would probably increase in Oakley, and without Park Service or state support to provide additional facilities, local communities and private groups could provide facilities. The new construction could compromise the integrity of the Oakley Historic District if executed without adherence to design guidelines that describe the key elements of the district. Provision of additional facilities and information about the loop tour might increase visitation to the historic district.

Local Economy

The money generation model prepared by the Office of Social Science, Socioeconomic Studies Division, National Park Service (1990), has been used to estimate the economic benefits associated with reserve visitor expenditures, expenditures by the federal and state government in staffing and operating the reserve, and expenditures by federal and state government for constructing facilities for the reserve. The model provides estimates on how tourism expenditures and federal and state expenditures benefit three important components of the local area economy: new sales as measured by increased purchases of goods and services by nonlocal tourists; increased sales tax and income tax revenues; and number of new jobs created. It estimates the economic benefits to the local economy resulting from monies that come into the local economy from outside sources. It is driven by visitor and park expenditure data and does not consider economic benefits such as enhanced real estate values, improved recreational and cultural opportunities for local residents, or improved community services that derive from the reserve.

The three types of economic benefits that were considered were sales benefits, tax revenue benefits, and job benefits. Sales benefits consist of income to local area businesses or individuals for goods and services that they provide as a result of expenditures by nonlocal park visitors and federal government expenditures. Tax benefits consist of increases in local area tax revenues that result from expenditures by nonlocal park visitors and federal and state government expenditures. Job benefits consist of the new jobs that are created in the local area as a result of expenditures by nonlocal park visitors and federal and state government expenditures.

Current park visitation levels are between 80,000 and 100,000. Based on the assumption that parking cannot be significantly increased because of area available for parking in the reserve and constraints on the placement of parking, visitation is expected to level out at the current level. Therefore, under existing conditions and all the alternatives, estimated economic benefits resulting from park visitor expenditures would remain the same under all alternatives. Using the estimated 80,000 visitors per year, sales benefits from tourism would be $1,169,818, tax revenue would be $87,169, and job benefits would be 47. If visitation were higher, these figures would increase.

Cassia County and the Twin Falls area would benefit from federal and state expenditures for salaries, operating costs, and construction that would enter the local economy through increased sales, increased taxes, and creation of jobs. Where construction contractors and workers have businesses and homes outside the local counties, it is possible that benefits from construction may not all benefit the local economy under each alternative because some money they received might be spent outside the area.

Cassia County would benefit if other parties made park-related expenditures. For example, restaurants, antique shops, or additional bed-and-breakfasts might open, and existing businesses might expand. Such activities would increase sales, tax revenues, and jobs in the county. However, further market analysis would be necessary to determine how many and what kinds of businesses might open.

Alternative 1. There would be long-term benefits from reserve salaries and operating costs. Based on reserve salaries and operating costs of $295,000, total sales benefits would total approximately $590,000 per year, tax revenue benefits would be $77,880 per year, and 24 long-term jobs would be created. There would be short-term benefits from gross construction expenditures. These benefits would occur only during construction. Based on gross construction costs of $2.4 million, total sales benefits would be about $4.8 million, tax revenue benefits would be $636,000, and 192 jobs would be created.

> **Conclusion.** Economic benefits from reserve visitor expenditures would likely remain the same as now. Expenditures by federal and state government to operate the reserve would generate $590,000 in sales benefits each year, $77,800 in tax revenue benefits each year, and 24 additional long-term jobs in the local economy. If all the development proposed for alternative 1 were constructed, over the life of the plan, short-term benefits arising from construction would be total sales of about $4.8 million and tax revenues of about $636,000, and 192 short-term jobs would be created.

Alternative 2. There would be long-term benefits from reserve salaries and operating costs. The reserve would hire 28 additional employees. Based on reserve salaries and operating costs of $900,000, total sales benefits would total approximately $1.8 million per year, tax revenue benefits would be $237,600, and 73 long-term jobs would be created. There would be short-term benefits from gross construction expenditures. These benefits would occur during construction. Based on gross construction costs of $39.1 million, over the life of the plan, if all proposed development was constructed, total sales benefits would be about $78.2 million, tax revenue benefits would be $10.3 million, and 3,128 short-term jobs would be created.

> **Conclusion**. Economic benefits from reserve visitor expenditures would likely remain the same as now. Twenty-eight additional jobs would be added to the local economy through hiring to staff the reserve. Expenditures by federal and state government to operate the reserve would generate about $900,000 per year in sales benefits, $236,799 per year in tax revenue benefits, and 73 additional long-term jobs in the local economy. If all the development proposed for alternative 2 were constructed, over the life of the plan, short-term benefits arising from construction would be total sales benefits of about $78.2 million and tax revenue benefits of about $10.3 million, and about 3,128 short-term jobs would be created.

Alternative 3. There would be long-term benefits from reserve salaries and operating costs. The reserve would hire 16 additional employees. Based on a reserve salaries and operating costs of $615,000, total sales benefits would total approximately $1,230,000, tax revenue benefits of $162,360, and 49 jobs would be created. There would be short-term benefits from gross construction expenditures. These benefits would occur during construction. Based on gross construction costs of $39 million, total sales benefits would be about $78 million, tax revenue benefits would be $10.3 million, and 3,120 short-term jobs would be created.

Conclusion. Economic benefits from reserve expenditures would likely remain the same as now. Sixteen additional long-term jobs would be added to the local economy through hiring to staff the reserve. Expenditures by federal and state government to operate the reserve would generate $1.2 million in sales benefits, $162,360 in tax revenue benefits, and 49 additional long-term jobs in the local economy. If all development proposed for alternative 3 were constructed, over the life of the plan, short-term benefits arising from construction would be sales benefits of $78 million and tax revenue benefits of $10.3 million, and 3,120 short-term jobs would be created.

TABLE 12: SUMMARY OF IMPACTS

	Alternative 1: No Action	Alternative 2: Historic Continuum (Proposal)	Alternative 3: California Trail Emphasis
Cultural Resources	The California Trail remnants and inscription rocks would continue to deteriorate as a result of natural weathering and human activity, and views from the trail would likely be degraded by incompatible development.	The long-term preservation of historic trail remnants and inscription rocks would be ensured. Although natural weathering and some human activity would continue, the foregrounds of the views from the trail would be protected to the maximum extent possible from incompatible intrusions.	The long-term preservation of historic trail remnants and inscription rocks would be ensured. Although natural weathering and some human activity would continue, the entire viewshed visible from the historic trails would be protected from all incompatible intrusions except facilities for visitor access and interpretation.
Historic Rural Setting	The historic rural setting would be degraded by a loss of contributing historic elements and the intrusion of incompatible modern features.	The long-term preservation of significant resources associated with the historic continuum and the protection of views from incompatible commercial or residential development would perpetuate the reserve's historic rural setting.	Historic resources that contribute to the reserve's historic rural setting would eventually be lost.
Archeological Resources	Archeological resources would remain highly susceptible to natural deterioration, inadvertent human damage, and vandalism, and some important resources would be lost.	A comprehensive program of identification, evaluation, preservation, protection, and interpretation would help ensure the long-term preservation of National Register eligible archeological resources throughout the reserve.	Archeological resources would remain highly susceptible to natural deterioration, inadvertent human damage, and vandalism, and some important resources would be lost.
Natural Resources • Natural Quiet	Increasing levels of unnatural noise would increasingly degrade visitors' opportunities to experience natural quiet and sounds and to view wildlife.	Noise-causing activities would be reduced in most of the reserve, resulting in increased opportunities to experience natural quiet and sounds and to view wildlife.	Noise-causing activities would be reduced, resulting in increased opportunities to experience natural quiet and sounds and to view wildlife.
• Rock Formations	Climbing activities in the reserve would continue to cause permanent damage to rock surfaces; however, the long-term effects of this damage on significant formations, would remain unknown.	The potential for adverse impacts on rock formations would be reduced by monitoring and mitigating climbing impacts and addressing climber education and use practices through a climbing management program and discontinuing climbing on Twin Sisters.	The potential for adverse impacts on rock formations would be greatly reduced by closing 52 percent of the formations to climbing and by monitoring and mitigating climbing impacts in other areas.
• Natural Biological Diversity	Agricultural and recreational uses would continue to have a major adverse impact on natural biological diversity in the reserve.	Elimination of grazing on up to 543 acres and prescriptions for fire would have a beneficial effect on natural biological diversity. Acquiring private lands with the owner's consent would eventually provide additional long-term protection. Grazing would continue to adversely affect up to 9,895 acres; however, management methods would be implemented to reduce existing grazing impacts. Proposed development would result in a net loss of approximately 24 acres of vegetation in the reserve and 77 acres outside the reserve.	Elimination of grazing from most of the reserve, implementation of grazing management and fire management plans, new county land use zoning, and rehabilitation of disturbed areas would benefit the natural diversity of vegetative communities in the reserve.
• Species of Special Concern Raptors	Increasing visitor use, potential private development, continued grazing, and low-level overflights could result in a decreased number of successfully breeding raptors and possibly decreased raptor survival in the reserve compared to existing conditions.	The elimination of dispersed camping, closure of nesting areas to climbing, and implementation of a climbing management program would probably increase raptor survival and nesting success within the reserve.	The elimination of all dispersed camping, closure of some areas to climbing, implementation of a climbing management program, and realignment of the road would probably increase raptor survival and nesting success within the reserve compared to the existing conditions.
Deer	Existing agricultural and fire management practices, current land cover disturbance on 88 acres, and potential private development would adversely affect deer habitat.	Prescriptions for fires, management of grazing to promote natural vegetation, and land cover restoration would benefit deer habitat. Proposed development would result in a net loss of about 24 acres of deer habitat in the reserve and 77 acres outside the reserve.	Elimination of grazing, establishment of a more natural fire regime, and a net reduction in disturbed areas would have a beneficial effect on deer habitat. Proposed development would result in a net gain of about 7 acres of potential deer habitat in the reserve and a net loss of 77 acres outside the reserve.

	Alternative 1: No Action	Alternative 2: Historic Continuum (Proposal)	Alternative 3: California Trail Emphasis
Bats	The effects of increasing numbers of visitors climbing on an increasing number of rock formations with potential bat habitat could decrease the number of roosting bats in the reserve and possibly decrease bat survival.	Greatly reducing the potential for accidental disturbance of roosting bats would result in more bats roosting in the reserve and increase bat survival over existing conditions.	Eliminating most of the potential for accidental disturbance of roosting bats would result in more bats roosting in the reserve and increase bat survival over existing conditions.
Rare and Sensitive Plants	Increasing unregulated visitor use, potential private development, and continued high levels of grazing could potentially reduce habitat and populations of rare and sensitive plants in the reserve.	Most rare or sensitive plants in the reserve would be protected.	Most rare or sensitive plants in the reserve would be protected.
• Wetlands, Riparian Areas, and Water Quality	Continuing agricultural uses and any additional development would continue to alter and destabilize riparian communities, degrade water quality, and threaten the survival of depedent wildlife and aquatic species.	The proposed action would have beneficial effects on wetlands and riparian areas, including a net gain in wetlands over present conditions. Approximately 66% of the riparian and wetland habitat in the reserve would eventually be protected from direct livestock use and gradually recover to more natural conditions. Livestock use would adversely affect the remaining 34% but to a lesser extent than at present. The proposed developments would be mitigated where necessary to protect floodplains and wetlands.	Approximately 82 percent of riparian and wetlands habitat would be restored to more natural conditions, ensuring the survivability of dependent wildlife and aquatic species.
• Air Resources	Slight increases in dust and vehicle emissions and additional pollution from outside sources would adversely impact the reserve's air quality and possibly reduce the range of visibility.	Possible redesignation of the reserve as a class 1 area and management of other dust- and emission-producing activities would help protect the reserve's good air quality and visibility.	Possible redesignation of the reserve as a class 1 area and management of other dust- and emission-producing activities would help ensure the protection of the reserve's good air quality and visibility.
• Scenic Quality	The most outstanding and vivid landscape view would not be accessible to the public. Scenic quality would progressively degrade along the rim, could be destroyed along the trail, and would maintain existing levels at the Emery entrance. Arrival views could become so cluttered with commercial development that the scenic quality could be greatly diminished at the entrances.	Scenic quality would be enhanced by site design and visitor management along the rim of the Silent City of Rocks and the California Trail, and by county zoning and design guidelines to protect the historic rural setting along arrival corridors.	Scenic quality would be greatly enhanced under this alternative because of increased naturalness caused by managing the majority of the reserve for the California Trail period and natural resources and by removing the north-south road.
Visitors • Interpretive/ Educational Opportunities	Visitor understanding and appreciation of the California Trail and the historic continuum would be impaired by a lack of preservation of and public access to many key resources and by competing recreational activities.	Visitors would have a variety of opportunities to understand and appreciate both the California Trail and the area's full historic continuum with minimal distraction from conflicting development or competing activities.	Visitors would have excellent opportunities to understand and appreciate the California Trail without being distracted by conflicting development or competing activities; however, no opportunities would be available to experience the historic continuum.
• Recreation Rock Climbing	Current climbing activities within the reserve would not be affected.	Most of the popular climbing rocks and climbing routes would remain accessible to climbers; however, climbers would find more restrictions than exist now, designed to help prevent potential damage to resources and conflicts with other reserve experiences.	Most of the popular climbing rocks would still be accessible to climbers, although fewer than in alternatives 1 and 2. Climbers would find more restrictions than exist now, designed to help prevent potential damages to resources and conflicts with other reserve experiences.
• Camping	This alternative would have minimal impacts on current camping activities. Conflicts with cattle might continue to reduce the quality of some people's camping experience.	Visitors would continue to have opportunities for an overnight experience in the reserve, although the character of the experience would change to consolidated tent camping for all but a few backcountry users.	Visitors would no longer have an opportunity to camp in the reserve.

	Alternative 1: No Action	Alternative 2: Historic Continuum (Proposal)	Alternative 3: California Trail Emphasis
• Public Safety Related to Hunting Hazards	The conflict between hunting and other visitor activities could place some park users in dangerous situations, especially during hunting seasons.	Hunting hazards would be eliminated in the most heavily used portions of the reserve; however, some park users might still be in dangerous situations in the more remote parts of the reserve.	Hunting hazards would be eliminated from approximately half the reserve, and no campers would be at risk because camping would be prohibited.
• Accessibility	People with disabilities would generally be confined to their vehicles to tour the resources of the reserve, minimizing the quality of their experience.	Access to significant resources would be provided through physical or programmatic design of public facilities and select trails.	Same as alternative 2
• Private Landowners and Livestock Grazing Permittees	Private landowners and grazing permittees would not be affected.	Closing 283 acres to grazing on public allotments reducing the total number of AUMs as permittees vacate allotments would have adverse economic impacts on ranchers/permittees. Affected private landowners would be compensated with the fair market value of their property. The local economy would be adversely affected because grazing would be reduced, and related employment and expenditures would be diminished.	Closing 11,424 acres or 88 percent of the public and private rangeland to grazing in the reserve would have an adverse economic impact on 10 permittees. Affected private landowners would be compensated with the fair market value of their property.
Socioeconomic Environment • Character of Surrounding Communities	Increased weekend traffic on the main north-south road would affect cattle trailing, the road corridor, and outside uses around the Almo intersection of Tracy's store. Local communities could be provided the opportunity to provide overnight accommodations. In Oakley, the integrity of the historic district could be compromised.	Increased weekend traffic around Almo would create similar effects as described under alternative 1. In addition, bus and tour use mid-week and pedestrian activities daily would increase dust levels in Almo. The visitor center activities would increase traffic, and the RV campground would cause increased bike travel to the town. The availability of the developed campground outside the reserve could decrease traffic congestion in Oakley. New construction for overnight accommodations could compromise the integrity of the historic district, unless infill development were architecturally sympathetic to the historic character of the community. Information about the loop tour and increased facilities might increase traffic.	Without information on private sector proposals for lodging, effects of traffic paterns in and around Almo cannot be predicted. As private accommodations developed, traffic would increase. Levels of visitation similar to alternative 2 could continue to cause dusty situations caused by increased vehicular traffic. Demand for lodging would probably increase in Oakley, and local communities could have the opportunity to provide overnight accommodations. New construction could compromise the integrity of the historic district, unless infill development were architecturally sympathetic to the historic character of the community. Additional information about the loop tour could increase visitation.
• Economy	Based on continued visitation of about 80,000 visitors per year, sales benefits from tourism would continue to be about $1.2 million, tax revenues about $87,000, and job benefits about 47. Expenditures by federal and state government to operate the reserve would generate $590,000 per year in sales benefits, $77,800 per year in tax revenue benefits, and 24 additional long-term jobs in the local economy. If all development proposed were constructed, over the life of the plan, short-term benefits arising from construction would be total sales benefits of about $4.8 million and tax revenue benefits of about $636,000 million, and 192 short-term jobs would be created.	The local economy would be adversely affected because grazing would be reduced, and related employment and expenditures would be diminished. Based on continued visitation of about 80,000 visitors per year, sales benefits from tourism would continue to be about $1.2 million, tax revenues about $87,000, and job benefits about 47. Twenty-eight additional jobs would be added to the local economy through hiring to staff the reserve. Expenditures by federal and state government to operate the reserve would generate $900,000 per year in sales benefits, $237,600 per year in tax revenue benefits, and 73 additional long-term jobs in the local economy. If all development proposed were constructed, over the life of the plan, short-term benefits arising from construction would be total sales benefits of $78 million and tax revenue benefits of about $10.3 million, and 3,120 short-term jobs would be created.	The local economy would be adversely affected because grazing would be reduced, and related employment and expenditures would be diminished. Based on continued visitation of about 80,000 visitors per year, sales benefits from tourism would continue to be about $1.2 million, tax revenues about $87,000, and job benefits about 47. Sixteen additional jobs would be added to the local economy through hiring to staff the reserve. Expenditures by federal and state government to operate the reserve would generate $1.2 million in sales benefits, $162,360 in tax revenue benefits, and 49 additional long-term construction jobs in the local economy. If all development proposed were constructed, over the life of the plan, short-term benefits arising from construction would be total sales benefits of $78 million and tax revenue benefits of $10.3 million, and 3,120 short-term jobs would be created.

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THE SCOPING PROCESS

Public meetings, planning newsletters, a mail-in public response form, and a workbook of alternatives were included in the scoping process for the comprehensive management plan for City of Rocks National Reserve. Their purpose was to identify all issues and alternatives that should be considered in planning and to keep the public informed throughout plan formulation. In January 1990, a press release announced the intention of the National Park Service to prepare a comprehensive management plan and accompanying environmental documents for the reserve. The announcement described the purposes and strategies to be developed, and it announced five public meetings. In December 1990 a second set of four public meetings were announced. During the spring of 1991, the National Park Service decided that an environmental assessment would not adequately support the City of Rocks comprehensive management plan effort based on scoping results. In response to this decision June 1991, a notice of intent was placed in the Federal Register to prepare an environmental impact statement for this project.

The National Park Service held a series of public involvement meetings to gather information concerning the public's needs, desires, and expectations regarding the future of City of Rocks National Reserve. The meeting schedule was as follows:

January 22, 1990	Almo, Idaho Oakley, Idaho
January 23, 1990	Pocatello, Idaho
January 24, 1990	Twin Falls, Idaho
January 25, 1990	Ogden, Utah
December 12, 1990	Pocatello, Idaho
December 13, 1990	Salt Lake City, Utah
January 9, 1991	Boise, Idaho
January 10, 1991	Sun Valley, Idaho

Comments were recorded at each meeting and later printed in two planning newsletters. Comments from the first five meetings were in the first newsletter and from the second four in the third newsletter. The newsletters were sent to everyone on the City of Rocks mailing list. The second newsletter included preliminary draft planning concepts for City of Rocks and an attached mail-in response form asking for comments on the preliminary draft planning concepts and recreational use at City of Rocks. A third newsletter included a summary of responses to the mail-in form.

In August 1991 an Alternatives Workbook was released to the public, requesting people's opinions about the preliminary alternatives for the City of Rocks comprehensive management plan. Four alternatives plus two tour concepts for outside the reserve boundaries were included in the workbook. Approximately 800 copies of the workbook were mailed, and over 200 responses were received. All responses were due on October 1, 1991, and subsequently analyzed by the planning team. In addition, two public meetings in Idaho were held to provide information and answer questions about the workbook and draft alternatives. The meeting schedule was as follows:

August 28, 1991	Boise, Idaho
August 29, 1991	Burley, Idaho

In January 1992, the National Park Service held a meeting in Burley, Idaho, with owners of private land in the reserve. The purpose of the meeting was to discuss alternatives and possible revisions and how they could affect private landowners if implemented.

MAJOR ISSUES RAISED DURING PUBLIC SCOPING

The major issues raised during scoping and addressed in the CMP/EIS are listed herein.

Historic values
Historic rural setting
Archeological resources
Scenic quality
Natural quiet
Geological resources
Air quality
Water resources
Water rights
Vegetation and natural biological diversity
Soil erosion
Threatened and endangered species

Sensitive wildlife habitat
Rare or sensitive plants
Reintroduction of native species
Fire management
Wildlife and wildlife management
Private land and landowners rights
Development on private land in the reserve
Domestic livestock grazing and grazing rights
Cattle trailing through the reserve
Hunting
Elimination of grazing from the reserve
Rock climbing regulations
Rock climbing equipment use
Visitor use
Vehicle use, including ORVs
Firewood use
Camping and campgrounds
Fees
Reserve development, including roads, trails, parking, picnic areas, signs, visitor center, and utilities and sanitary facilities
Development on private land
Development outside the reserve
Cost of development and administration
No development in the reserve
Interpretation
Impacts on local communities
County and community services
Public access and accessibility
Public involvement
Zoning, including public and private land
Firearm use
Trespassing on private land (visitors and livestock)
Impacts on local economy

CONSULTATION WITH OTHER FEDERAL, STATE, AND COUNTY AGENCIES, INSTITUTIONS, AND LOCAL INTERESTS

The planning team responsible for developing the City of Rocks plan included representatives from the following agencies and communities

Idaho Department of Parks and Recreation
Cassia County Commission
Oakley
Almo
Malta

The CMP/EIS team received literature or information from several agencies and institutions during preparation of this document.

Government

William Boggs, District Recreation Planner, Burley District Office, Bureau of Land Management, Burley, ID

Ken Fuller, Burley District Office, Bureau of Land Management, Burley, ID

Jeffery Bohr, District Conservationist, Soil Conservation Service, Burley, ID

Jim Chard, Range Conservationist, Burley District, U.S. Forest Service, Burley, ID

Zeke Zimmerman, Burley Ranger District, U.S. Forest Service, Burley, ID

Craig Groves, Idaho Natural Heritage Program, Idaho Department of Fish and Game, Boise, ID

George Stephens, Data Manager, Idaho Natural Heritage Program, Idaho Department of Fish and Game, Boise, ID

Charles Lobdell, Field Supervisor, Boise Field Office, U.S. Fish and Wildlife Service, Boise, ID

Randall Smith, Regional Wildlife Biologist, Idaho Dept. of Fish and Game, Jerome, ID

Bob Toll, Park Manager, Eldorado Canyon State Park, Eldorado Spring, CO

Bill Dalton, Appraiser, County Assessors Office, Cassia County Courthouse, Burley, ID

Shirley Povlsen, County Treasurer, County Tax Collector's Office, Cassia County Courthouse, Burley, ID

County Recorder of Deeds, Cassia County Courthouse, Burley, Idaho

Tom Greene, Idaho State Historical Society/State Preservation Office, Boise, ID

Larry Jones, Idaho State Historical Society/State Preservation Office, Boise, ID

Merle Wells, Idaho State Historical Society/State Preservation Office, Boise, ID

Kent Malin, Utah State Historical Society, Salt Lake City, UT

Institutional

Dr. Barry Keller, Professor, Dept. of Biological Science, Idaho State University, Pocatello, ID

Dr. John Laundra, Professor, Dept. of Biological Science, Idaho State University, Pocatello, ID

Dr. Charles Trost, Professor, Dept. of Biological Science, Idaho State University, Pocatello, ID

Dr. Blair Csuti, Adjunct Associate Professor, Idaho University, Coop. Fish and Wildlife Research Unit, Moscow, ID

Charles A. Wellner, Chairman, Idaho Natural Areas Coordinating Committee, Moscow, ID

Lex H. Kunau, President, Cassia County Abstract Company, Burley, ID

Glenn Draper, Cassia County Historical Society and Museum, Burley, ID

Arlene Huber, Cassia County Historical Society and Museum, Burley, ID

Rachel Martindale, Cassia County Historical Society and Museum, Burley, ID

Family History Center (Genealogical Library), Burley, ID

Idaho State Library, Boise, ID

Thomas H. Hunt, National Trails Preservation Officer, Oregon - California Trails Association, Office of National Historic Preservation, Palo Alto, CA

Private

Merlin Stock, Retired USFS District Ranger, Burley, ID

Albert E. Nicholson, Owner of Nicholson ranch, Rupert, ID

LIST OF AGENCIES AND ORGANIZATIONS TO WHOM COPIES OF THE ENVIRONMENTAL IMPACT STATEMENT ARE BEING SENT

Advisory Council on Historic Preservation
Department of Agriculture
- Forest Service
- Burley District
- Intermountain Region

Department of Defense
- Department of the Air Force

Department of the Interior

Federal Agencies

- Bureau of Indian Affairs
- Bureau of Land Management
- Burley District
- Fish and Wildlife Service
- Regional Office
- Boise Field Office

Department of Transportation
- Federal Highway Administration

Environmental Protection Agency

Idaho Congressional Delegation

Senator Dirk Kempthorne
Senator Larry E. Craig
Representative Mike Crapo
Representative Larry LaRocco

State of Idaho

Governor Cecil D. Andrus
Senator Denton Darrington
Senator B. Joyce McRoberts
Senator Laird Noh
Representative Lee Barnes
Representative Celia R. Gould
Representative Douglas R. Jones
Representative Steve Antone
Representative Bruce Newcomb
Department of Parks and Recreation
Department of Fish and Game
Department of Agriculture
Department of Commerce
Department of Transportation
Department of Water Resources
Historic Preservation Officer

County and Local Governments

Mayor Dennis Smith, Oakley, ID
Mayor Doug Vollmer, Twin Falls, ID
Mayor Rolland Zollinger, Bliss, ID
Mayor J. Darrington, Declo, ID
Mayor Gene Heller, Gooding, ID
Mayor Jim Kelly, Albion, ID
Mayor Frank Bauman, Burley, ID
Cassia County, ID
- County Commissioner John Adams
- County Commissioner Weldon Beck
- County Commissioner Norman Dayley

Gooding County, ID
- County Commissioner Rod Hohnhorst
- County Commissioner Robert Tupper

Twin Falls County, ID
- County Commissioner Jim Fraley,
- County Commissioner Robert Thackery
- County Commissioner Norma Blass
- County Commissioner Marvin Hempleman

NATIVE AMERICAN GROUPS

Shoshone-Bannock Tribes

PRIVATE LANDOWNERS AND GRAZING PERMITTEES

Harold Durfee
Curtis Durfee
William D. Jones
Olen H. Ward
Cordell Sheridan
J.E. Tracey, Inc.
R.O. Jones and Sons, Inc.
Glen W. Jones
Lyle D. Woodbury

Gary C. Nelson
Albert E. Nicholson
Wallace Taylor
Quarter Circle K Ranch
Jimmy D. Kempton
Neil R. Durfee
Robert Eck
M. Paul
M. Gibson
Louis A. Eames
Randy Jones
Zon G. LLoyd
Micheal Lance
Jean N. Elwell
Craig S. Haines
Simplot Industries, Inc.

Organizations and Businesses

Idaho Environmental Council
Idaho Conservation League
Idaho Mountain Search and Rescue Unit
Idaho Alpine Club
National Parks and Conservation Association
The Wilderness Society
The Nature Conservancy
Defenders of Wildlife
The Access Fund
Oregon-California Trails Association, Office of National Historic Preservation
Sierra Club, Legal Defense Fund, Inc.
Exum Mountain Guides
Climbing Magazine
Friends of City of Rocks, Inc.
AMC Mountaineering Committee
Black Diamond Equipment, Ltd.
KAID-TV, Boise, ID
KBSU, Boise ID
Landau Associates, Inc.
Minidoka News Journal
Patagonia, Inc.
Sawtooth Mountain Guides
Teton Mountaineering

CONSULTATION SPECIFIC TO CULTURAL RESOURCE CONCERNS

The provisions of the 1990 servicewide programmatic agreement for consultation with the Idaho State Historic Preservation Office (SHPO) and the Advisory Council on Historic Presentation on the City of Rocks Comprehensive Management Plan have been followed throughout the development of the plan. Invitations to both offices have been extended to participate in all significant phases of the planning process. Representatives of the SHPO and the advisory council have provided comments on the initial workbook of alternatives, participated in public planning meetings and workshops, and attended special meetings at the reserve and the Pacific Northwest Regional Office to discuss specific preservation issues. Most recently, the Idaho state historic preservation officer participated in an in-depth review of the plan, held at the Pacific Northwest Regional Office on June 14, 1993, which also involved representatives of the National Park Service and Idaho Department of Parks and Recreation. Comments received from the SHPO and the advisory council have been taken into account in planning for additional resource studies of the reserve, as well as in evaluating the impacts of the proposed alternatives.

Consultation with interested American Indian groups has begun under the direction of the regional anthropologist, who has met with representatives of the Fort Hall Shoshone-Bannock tribes. In addition to establishing a long-term consulting relationship with these tribes, which may have interests in several NPS sites, information is being sought regarding sites of special significance and interest to the tribes within City of Rocks, for which protection and management strategies will have to be developed. It is expected that an ongoing relationship will continue through completion of the planning process and establishment of a management direction for the reserve and its resources.

APPENDIXES/BIBLIOGRAPHY

APPENDIX A: LEGISLATION

PUBLIC LAW 100-696 [S. 2840]; November 18, 1988

ARIZONA-IDAHO CONSERVATION ACT OF 1988

An Act to provide for the designation and conservation of certain lands in the States of Arizona and Idaho, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act be cited as the "Arizona-Idaho Conservation Act of 1988"

TITLE I—SAN PEDRO RIPARIAN NATIONAL CONSERVATION AREA

ESTABLISHMENT OF SAN PEDRO RIPARIAN NATIONAL CONSERVATION AREA

SEC. 101. (a) ESTABLISHMENT.—In order to protect the riparian area and the aquatic, wildlife, archeological, paleontological, scientific, cultural, educational, and recreational resources of the public lands surrounding the San Pedro River in Cochise County, Arizona, there is hereby established the San Pedro Riparian National Conservation Area (hereafter in this title referred to as the "conservation area").

(b) AREA INCLUDED.—The conservation area shall consist of public lands as generally depicted on a map entitled "San Pedro Riparian National Conservation Area—Proposed" numbered AZ-040-OZ, dated January 1988, and consisting of approximately 56,431 acres.

(c) MAP.—As soon as is practicable after enactment of this title, a map and legal description of the conservation area shall be filed by the Secretary of the Interior (hereafter in this title referred to as the "Secretary") with the Committee on Interior and Insular Affairs of the House of Representatives and the Committee on Energy and Natural Resources of the United States Senate. Each such map shall have the same force and effect as if included in this title. Such map shall be on file and available for public inspection in the Office of the Director of the Bureau of Land Management, Department of the Interior, and in the Bureau of Land Management offices of the State Director for Arizona, and the district office responsible for the management of the conservation area.

MANAGEMENT OF CONSERVATION AREA

SEC. 102. (a) GENERAL AUTHORITIES.—The Secretary shall manage the conservation area in a manner that conserves, protects, and enhances the riparian area and the aquatic, wildlife, archeological, paleontological, scientific, cultural, educational, and recreational resources of the conservation area. Such management shall be guided by this title and, where not inconsistent with this title, by the provisions of the Federal Land Policy and Management Act of 1976 (hereinafter in this title referred to as "FLPMA").

(b) USES.—The Secretary shall only allow such uses of the conservation area as he finds will further the primary purposes for

preparation and implementation of the comprehensive, long-range plan required pursuant to section 103 of this title.

(b) REPRESENTATION.—There shall be 7 members of the Committee, who shall be appointed by the Secretary. Members of the Committee shall be appointed for terms of three years, except that of the members first appointed 2 shall be appointed for terms of 1 year and 3 shall be appointed for terms of 2 years. The Secretary shall appoint one member from nominations supplied by the Governor of the State of Arizona, and one member from nominations supplied by the Supervisors of Cochise County, Arizona. The other members shall be persons with recognized backgrounds in wildlife conservation, riparian ecology, archeology, paleontology, or other disciplines directly related to the primary purposes for which the conservation area was created.

LAND ACQUISITION

SEC. 105. The Secretary may acquire lands or interests in lands within the boundaries of the conservation area by exchange, purchase, or donation, except that any lands or interests therein owned by the State or local government may be acquired by donation or exchange only. Any purchase or exchange of lands to be added to the conservation area shall require the consent of the owner of those lands or rights.

REPORT TO CONGRESS

SEC. 106. No later than five years after the enactment of this title, and every ten years thereafter, the Secretary shall report to the Committee on Interior and Insular Affairs of the House of Representatives and the Committee on Energy and Natural Resources of the United States Senate, on the implementation of this title. Such report shall include a detailed statement on the condition of the resources within the conservation area and of the progress of the Bureau of Land Management in achieving the purposes of this title.

AUTHORIZATION

SEC. 107. There are hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of this title.

TITLE II—CITY OF ROCKS NATIONAL RESERVE

ESTABLISHMENT OF CITY OF ROCKS NATIONAL RESERVE

SEC. 201. (a) There is hereby established the City of Rocks National Reserve (hereinafter referred to as the "reserve"), in order to preserve and protect the significant historical and cultural resources; to manage recreational use; to protect and maintain scenic quality; and to interpret the nationally significant values of the reserve.

(b) The reserve shall include approximately fourteen thousand three hundred and twenty acres as depicted on the map entitled "Boundary Map, City of Rocks National Reserve, Idaho" numbered P30-80,005 and dated October 1987. The map shall be on file in the offices of the National Park Service, Department of the Interior and the Offices of the Governor, State of Idaho.

(c) Within six months after the enactment of this title, the Secretary of the Interior (hereinafter in this title referred to as the

"Secretary") shall file a legal description of the reserve designated under this section with the Committee on Interior and Insular Affairs of the United States House of Representatives and with the Committee on Energy and Natural Resources of the United States Senate. Such legal description shall have the same force and effect as if included in this title, except that the Secretary may correct clerical and typographical errors in such legal description and in the map referred to in subsection (b). The legal description shall be on file and available for public inspection in the offices of the National Park Service, Department of the Interior and the offices of the Governor of the State of Idaho.

PLAN AND MANAGEMENT OF RESERVE

SEC. 202. (a) To achieve the purpose of this title, the Secretary, acting through the National Park Service, in cooperation with appropriate State and Federal agencies, local units of government and local residents shall formulate a comprehensive plan for the protection, preservation, and interpretation of the reserve. The plan shall identify those areas or zones within the reserve which would most appropriately be devoted to—

(1) public use and development;

(2) historic and natural preservation; and

(3) private use subject to appropriate local ordinances designed to protect the historic rural setting.

(b) Within eighteen months following the date of enactment of this section, the Secretary shall transmit the plan to the President of the Senate and the Speaker of the House of Representatives and to the Governor of the State of Idaho.

(c) At such time as the State or appropriate units of local government having jurisdiction over land use within the reserve have enacted ordinances or established regulations which in the judgment of the Secretary will protect and preserve the historic and natural features of the area in accordance with the comprehensive plan, the Secretary shall, pursuant to cooperative agreement—

(1) transfer management and administration over all or any part of the property acquired under subsection (d) of this section to the State or appropriate units of local government;

(2) provide technical assistance to such State or units of local government in the management, protection, and interpretation of the reserve; and

(3) make periodic grants, which shall be supplemental to any other funds to which the grantee may be entitled under any other provision of law, to such State or local unit of government to carry out the purposes of this title.

∴ can acquire interests other than fee simple w/o owner's consent

(d)(1) The Secretary is authorized to acquire such lands and interests as he determines are necessary to accomplish the purposes of this title by donation, purchase with donated funds, or appropriated funds, or exchange, except that the Secretary may not acquire the fee simple title to any land without the consent of the owner. The Secretary shall, in addition, give prompt and careful consideration to any offer made by an individual owning property within the reserve to sell such property, if such individual notifies the Secretary that the continued ownership of such property is causing, or would result in, undue hardship.

(2) Lands and waters, and interests therein, within the boundaries of the reserve which were administered by the Forest Service,

United States Department of Agriculture or the Bureau of Land Management, Department of the Interior prior to the date of enactment of this title are hereby transferred to the administrative jurisdiction of the Secretary to be administered by the National Park Service in accordance with this title.

(3) Lands and interest therein so acquired shall, so long as responsibility for management and administration remains with the United States, be administered by the Secretary subject to the provisions of the Act of August 25, 1916 (39 Stat. 535), as amended and supplemented, and in a manner consistent with the purpose of this title.

(e) If, after the transfer of management and administration of any lands pursuant to subsection (c) of this section, the Secretary determines that the reserve is not being managed in a manner consistent with the purposes of this title, he shall so notify the appropriate officers of the State or local unit of government to which such transfer was made and provide for a one hundred and eighty-day period in which the transferee may make such modifications in applicable laws, ordinances, rules, and procedures as will be consistent with such purposes. If, upon the expiration of such one hundred and eighty-day period, the Secretary determines that such modifications have not been made or are inadequate, he shall withdraw the management and administration from the transferee and he shall manage such lands in accordance with the provisions of this title.

(f) Congress finds that there are unique circumstances with respect to the water and water related resources within the Reserve designated by this title. The Congress recognizes that the management of this area may be transferred to the State of Idaho, that the State has committed to providing the water necessary to fulfill the purposes of this title, and that there is little or no water or water-related resources that require the protection of a Federal reserved water right. Nothing in this title, nor any action taken pursuant thereto, shall constitute either an express or implied reservation of water or water right for any purpose: *Provided*, That the United States shall retain that reserved water right which is associated with the initial establishment and withdrawal of the national forest lands which will be transferred to the Reserve under this title.

(g) Subject to valid existing rights, Federal lands and interests therein, within the reserve, are hereby withdrawn from disposition under the public land laws and from entry or appropriation under the mining laws of the United States, from the operation of the mineral leasing laws of the United States, and from operation of the Geothermal Steam Act of 1970, as amended.

(h) There is hereby authorized to be appropriated not to exceed $2,000,000 to carry out the provisions of this title.

TITLE III—HAGERMAN FOSSIL BEDS NATIONAL MONUMENT

ESTABLISHMENT OF HAGERMAN FOSSIL BEDS NATIONAL MONUMENT

SEC. 301. (a) In order to preserve for the benefit and enjoyment of present and future generations the outstanding paleontological sites known as the Hagerman Valley fossil sites, to provide a center for continuing paleontological research, and to provide for the display and interpretation of the scientific specimens uncovered at such sites, there is hereby established the Hagerman Fossil Beds

ADMINISTRATIVE PROVISIONS

Appropriations for the National Park Service shall be available for the purchase of not to exceed 1 new rotary-wing aircraft for replacement only and 468 passenger motor vehicles, of which 324 shall be for replacement only, including not to exceed 355 for police-type use, 12 buses, and 7 ambulances; to provide, notwithstanding any other provision of law, at a cost not exceeding $100,000, transportation for children in nearby communities to and from any unit of the National Park System used in connection with organized recreation and interpretive programs of the National Park Service; options for the purchase of land at not to exceed $1 for each option; and for the procurement and delivery of medical services within the jurisdiction of units of the National Park System: *Provided,* That any funds available to the National Park Service may be used, with the approval of the Secretary, to maintain law and order in emergency and other unforeseen law enforcement situations and conduct emergency search and rescue operations in the National Park System: *Provided further,* That none of the funds appropriated to the National Park Service may be used to process any grant or contract documents which do not include the text of 18 U.S.C. 1913: *Provided further,* That the National Park Service may use helicopters and motorized equipment at Death Valley National Monument for removal of feral burros and horses: *Provided further,* That notwithstanding any other provision of law, the National Park Service may recover all costs of providing necessary services associated with special use permits, such reimbursements to be credited to the appropriation current at that time: *Provided further,* That none of the funds appropriated to the National Park Service may be used to implement an agreement for the redevelopment of the southern end of Ellis Island until such agreement has been submitted to the Congress and shall not be implemented prior to the expiration of 30 calendar days (not including any day in which either House of Congress is not in session because of adjournment of more than three calendar days to a day certain) from the receipt by the Speaker of the House of Representatives and the President of the Senate of a full and comprehensive report on the development of the southern end of Ellis Island, including the facts and circumstances relied upon in support of the proposed project: *Provided further,* That hereafter the Cedar Pass Visitor Center at Badlands National Park, South Dakota, shall be known as the Ben Reifel Visitor Center: *Provided further,* That Federal funds available to the National Park Service may be used for improvements to the National Park Service rail excursion line between Milepost 132.7 and 100.5 located in Northeastern, Pennsylvania: *Provided further,* That with respect to lands and waters under the jurisdiction of the Secretary of the Interior within the City of Rocks National Reserve established by title II of Public Law 100-696, the Secretary shall hereafter permit hunting in accordance with the otherwise applicable laws of the United States and the State of Idaho, except that he may designate zones where and periods when no hunting may be permitted for reasons of public safety, administration, floral and faunal protection and management, or public use and enjoyment: *Provided further,* That except in emergencies, any regulation prescribing such restrictions shall be put into effect only after consultation with the appropriate State agency having jurisdiction over hunting activities: *Provided further,* That with respect to lands and waters under the jurisdiction of the Secretary within the Hagerman Fossil Beds National Monument, established by title III of Public Law 100-696, the Secretary shall hereafter permit hunting and fishing as well as maintenance of structures necessary to undertake such activities, including but not limited to duck and goose blinds on those lands within an area fifty feet in elevation above the high water level of the Snake River in accordance with otherwise applicable laws of the United States and the State of Idaho.

Reports.

Federal buildings and facilities.
16 USC 441 note.

16 USC 460yy-1 note.

Regulations.
Effective date.

16 USC 431 note.

United States Department of the Interior

FISH AND WILDLIFE SERVICE

BOISE FIELD OFFICE
4696 Overland Road, Room 576
Boise, Idaho 83705

April 3, 1990

Steven R. Culver
Natural Resource Specialist
National Park Service
P.O. Box 25287
Denver, Colorado 80225-0287

Re: FWS 1-4-90-SP-192 (City of Rocks National Reserve)
(SE File: 6003.1040)
(ES File: 1035.0401)

Dear Mr. Culver:

As requested by your letter dated March 14, and received by this office on March 19, we have attached a list (Attachment A) of endangered and threatened, proposed, and/or candidate species that may be present in the proposed project area in Cassia County, Idaho. The list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under Section 7(c) of the Endangered Species Act of 1973, as amended (the Act). The requirements for Federal agency compliance under the Act are outlined in Attachment B. Please reference the species list number on Attachment A in all subsequent correspondence, reports, environmental assessments, environmental impact statements, biological assessments (evaluations), Coordination Act reports, etc. If a construction project is not commenced within 180 days of this response, a subsequent species list request is required by regulations.

If a listed species appears on Attachment A, a biological assessment (evaluation) is required. Should your biological assessment (evaluation) determine that a listed species is likely to be affected adversely by the project, the National Park Service should request formal Section 7 consultation through this office. If a proposed species is likely to be jeopardized by a Federal action, regulations require a conference between the Federal agency and the Service.

Candidate species that appear on Attachment A have no protection under the Act, but are included for early planning consideration. Proposed species could be formally listed and candidate species could be formally proposed and listed during project planning, thereby falling within the scope of Section 7 of the Endangered Species Act. Therefore, if they appear on Attachment A, we recommend that additional surveys be made for proposed and/or candidate species that are likely to be in your project area. If the project is likely to adversely impact a candidate species, informal consultation with this office is recommended.

If you have any questions regarding Federal consultation responsibilities under the Act, please contact Jeri Williams of this office at FTS 554-1931 or 208-334-1931.

Thank you for your continued interest in the Endangered Species Program.

Sincerely,

Charles H. Lobdell
Field Supervisor

Enclosures

cc: IDFG, Hdqtrs., Boise
IDFG, Region 4, Jerome

AS REQUESTED
LISTED AND PROPOSED ENDANGERED
AND THREATENED SPECIES, AND CANDIDATE
SPECIES, THAT OCCUR WITHIN THE CITY OF ROCKS NATIONAL RESERVE

LISTED SPECIES	COMMENTS
None	
PROPOSED SPECIES	
None	
CANDIDATE SPECIES	
Ferruginous Hawk (C2) (*Buteo regalis*)	Nesting Area
Townsend's Big-eared Bat (C2) (*Plecotus townsendii*)	
OTHER SPECIES	
Narrow-leaved Indian Paintbrush (*Castilleja angustifolia* var. *flavescens*)	INPS Category 2
Simpson's Hedgehog Catcus (*Pediocactus simpsonii* var. *robustior*)	BLM Sensitive Species
Cliff Chipmunk (*Tamias dorsalis*)	Protected Nongame Wildlife
Pallid Bat (*Antrozous pallidus*)	Presently No Status
Pinon Mouse (*Peromyuscus truei*)	Presently No Status

APPENDIX C: RARE OR SENSITIVE SPECIES IN OR NEAR CITY OF ROCKS NATIONAL RESERVE

Species	Status				
Animals	**USFWS**	**Idaho Fish and Game**	**Idaho Natural Heritage Program**	**Idaho Native Plant Society**	**Habitat/Probable Location**
Ferruginous Hawk *Buteo regalis*	Category 2	Species of Special Concern	GS/S3		Observed in the reserve and known to nest within a few miles of the reserve. Very adaptable when selecting nest sites. Potential nesting habitat provided in most of the reserve.
Townsend's big-eared bat *Plecotus townsendii townsendii*	Category 2	Species of Special Concern	G4/S2		Known to occur in the area. Roosts in caves, large crevices, and abandoned mines. Status of roosting habitat in the reserve unknown.
Cliff chipmunk *Tamias dorsalis*		Species of Special Concern	G?/S1		Found in rock outcrop areas and piñon-juniper habitat.
Plants					
Narrow-leaved Indian paintbrush *Castilleja angustifolia* var. *flavescens*			G5TU/SU	State Priority 2	Occurs in rocky shallow soils along the ridge west of Indian Grove to Finger Rock.
Simpson's hedgehog cactus *Pediocactus simpsonii* var. *robustior*			G4T4/S3	Sensitive	Occurs in rocky or sandy soils among low sage along the Graham Peak ridgeline. May also occur on other wind-swept slopes.
Kruckeberg's swordfern *Polystichum kruckebergii*	Category 3c		G5/S1	Sensitive	Occurs in the cool moist micro-habitats in crevices of the rock formations.

Explanation of status codes used in table

U.S. Fish and Wildlife Service (USFWS)

Category 2. Category 2 candidate species. Listing as endangered or threatened is possibly appropriate, but USFWS lacks sufficient data to support such action.

Category 3c. Former candidate taxa. Taxon is more widespread or abundant than previously believed or is not subject to identifiable threats.

Idaho Department of Fish and Game

Species of Special Concern. A species listed by the Idaho Department of Fish and Game as meriting attention because of its present or potential future status. This classification alerts professionals and the general public to the vulnerability of these species.

Heritage Program. Codes indicating classifications used by the Idaho Fish and Game Natural Heritage Program are as follows.

G = Global rank indicator. Denotes rank based on rangewide status.
T = Trinomial rank indicator. Denotes rangewide status of subsepcific taxa.
S = State rank indicator. Denotes rank based on status in Idaho.

Numbers, letters, or other symbols following G, T, S indicate the following:

1. Critically imperiled because of extreme rarity or because some factor of its biology makes it especially vulnerable to extinction.
2. Imperiled because of rarity or because of other factors making it vulnerable to extinction.
3. Either very rare and local throughout its range or found locally in a restricted range, or made vulnerable to extinction by other factors.
4. Apparently secure, though it may be rare in parts of its range, especially at the periphery.
5. Demonstrably secure, though it may be quite rare in parts of its range, especially at the periphery.
U. Unknown
?. Indicates reservations about assigned rank.

Idaho Native Plant Society

State Priority 1. A taxon in danger of becoming extinct or extirpated from Idaho in the foreseeable future if identifiable factors contributing to its decline continue to operate; these are taxa whose populations are present only at critically low levels or whose habitats have been degraded or depleted to a significant degree.
State Priority 2. A taxon likely to be classified as Priority 1 within the foreseeable future in Idaho, if factors contributing to its population decline of habitat degradation or loss continue.
Sensitive. A taxon with small populations or localized distributions within Idaho that presently does not meet the criteria for classification as Priority 1 or 2, but whose populations and habitats may be jeopardized if current land use practices continue.

APPENDIX D: SITE DESIGN CONSIDERATIONS

New development in the reserve would include roads, trails, backcountry and front country camping sites, and parking areas. Other facilities such as restrooms, entrance stations, kiosks, trash receptacles, and bulletin/information/backcountry registration boards would also be installed.

The character of existing structures, details, and spatial relationships has reflected ranching influences. Although much of the function of new construction would be to support recreational uses, every attempt should be made to use design that is as uncomplicated and as unassuming as the present character. Specific design guidelines will need to be defined prior to or as a part of the design development process. The architectural theme for City of Rocks would adhere to a style expressed by the southern Idaho/northern Utah nomenclature, making liberal use of unmilled lumber, rough-cut rock, dirt, and gravel surfaces (with the associated dust) in open, uncluttered landscapes.

ROADS AND TRAILS

The relocation of the main east-west route would be necessary to protect the inscription rocks area from further bisection and damage. The relocation of the road away from the Silent City rim would be desirable for most visitors because they would be able to enjoy the silence and mystery of the rim without intrusions from traffic noise and congestion from competing uses. Besides enhancing the visitor experience, realignment of the road would eliminate the erosion problems on the east side of Breadloaves and the channeling of springs on the west side of Emery Pass.

Beginning at the Nicholson ranch to the present T junction, the new alignment needs to be moved south, across the drainageway, and placed low enough on the opposite hillside to avoid breaking over the rise into Twin Sisters basin. Traffic should not be visible from the Pinnacle Pass viewpoint looking north. The proposed alignment would meet grade at the south side of Bath Rock after traveling behind Elephant Rock and between the present road and low-lying horizontal formation 1/4 mile to the west of the road. The alignment would meander purposefully to capture the excellent views of the Silent City from southwest angles and to maintain a slow and enjoyable drive. From the T intersection to Elephant Rock, the alignment would stay to the south of the drainage that runs parallel to the existing road in this location and remain below the crest of the ridge that breaks into Twin Sisters plain. Traffic would not be visible from Twin Sisters plain. From the top of Emery Canyon, the proposed alignment would parallel the west face of Breadloaves above, up on the ridge between Go West Rock and Breadloaves and find a saddle to the southwest that allows the alignment to continue to the west and traverse down to the west boundary, avoiding prevalent wet meadows and springs.

Once the road is relocated, the rim would become a pedestrian zone that would reduce car and visitor conflicts and would allow the visitor on foot to find privacy, solitude, and opportunities to capture the magnificence of the scenery without the noise and congestion of the parking areas and campsites. The proposed rim trail, connecting Parking Lot Rocks to Turtle Rock, would be a hardened surface that would allow for visitors that are mobility impaired. The trail would follow the rim, varying in vertical aspect to take advantage of overlook possibilities. Because the rim at Silent City is a combination of rugged, descending topography and steep drops from large boulder ridges, overlooks worked into openings along this edge would vary in vertical aspect according to site opportunities. Perched at various elevations, visitors would have excellent chances of experiencing the full mood and scenic quality of the city. Trail markers that indicate those overlooks would be used to guide foot traffic. The remainder of the loop trail in and around the city would not be a hardened surface.

To maintain the rural character of the reserve, roads would be sealed and hardened to reduce dust but remain unpaved. NPS park road standards and Idaho state park standards would support a 25 mph speed limit. A sinuous alignment and top narrowed surface would discourage speeds greater than this. A slower speed is particularly significant at City of Rocks because of the need to control dust and the additional use of unfenced right-of-ways for trailing cattle.

The primary visitor experience along the east-west route would be a leisurely tour route with seven to eight waysides within the 4-mile crossing. The road would remain gravel and would have a sinuous alignment and narrow top surface to discourage speeds greater than 25 mph. NPS park road

standards and Idaho state park standards would support a slow speed to keep the visitor experience both enjoyable and safe.

The road into Twin Sisters from Junction Valley road would also have a 25 mph speed limit. This would keep the existing route from overlapping the California Trail and remove it as a visual intrusion on the historic scene. The proposed route would be feathered into the juniper edge of the hillside starting at the boundary and proceeding east approximately 1 mile, where it would turn north, still in coniferous cover, and join the existing alignment at the edge of sections 13 and 24.

Secondary roads would use existing alignments, and speed limits would not exceed 10 mph. The road into the tent campsites in section 36 would not be designed to handle RVs.

CAMPSITES I

2 miles is not a walk-in!

Backcountry camping, staged from Breadloaves, would require a 2-mile walk in, suggesting a slight inconvenience. The beginning of the zone, which includes Indian Grove and the surrounding forested hillsides, would begin approximately 1 mile from the parking lot. The experience would be more of a car camping, carry-in one, where users can arrive late in the day and make camp within an hour. Sites located in Indian Grove have the difficulty of being around an open meadow, a natural gathering space for groups. Selecting locations for campsites must anticipate social trailing between sites and should adjust locations to discourage this. A second route into the backcountry camping area would be from the parking area along the Almo Park Road to the northwest of Indian Grove. This would require about a 1-mile hike.

a seasonally wet area w/ aspens

sensitive soils & veg @ Indian Grove Overlook ridge line - microbiotic soils & northern-most extent of a barrel cactus

how is this any different from 2-mile "walk in" from Breadloaves!?

Access from Nicholson's ranch would be more traditional. Two or more miles need to be traversed before entering the camping area, which would require more typical backpacking gear. Locations of sites serving these accesses can be more remote and individual.

The concept of a primitive tent campground experience would be unique to City of Rocks. The campground would contain all the features of a developed campsite, but access to sites would be by foot. This concept is an attempt to preserve as much of the overstory vegetation as possible for campsite uses while not losing rare, shaded land to road loops. Also, the small scale and tight topography suggest carefully placed sites where larger road and spur clearing would be too destructive.

fire pits? Where would firewood come from? Users will not carry it in! Encourage fire by providing a fire pit will encourage firewood gathering & hacking of trees in an area zoned as general natural area.

II **ASPEN GROVE / Primitive Camping / walk-in**

The proposed location is in the southwest corner of section 36 where dense aspen provide shade and spatial separation. The campground would serve as a hub for climbing activities on the rim to the northeast. In addition, nearby rock areas like Nematode, Elephant, Private Idaho, and Twin Sisters ridge would attract uses from the campground that would cause radiating trails. Existing roads and clearly marked trails would assist campers in getting to their day-use destinations.

Different area = Aspen grove

v. contradictory confusing

walking or driving? how does this relate to removal of section of rim road?

Amenities at the campsites would include tent pads, picnic tables, and fire rings. Sites would be located along a pedestrian spine — a widened trail that facilitates movement of people and gear from perimeter parking lots to their sites. Trash collection would be centralized at the parking lot.

this is not primitive camping

Site design would

- avoid impacts and discourage visitors from adversely affecting wetlands
- minimize the loss of overstory within the sites
- provide a natural, yet accessible circulation system within the campground
- provide for logical paths to outlying rocks and destinations
- place parking nodes/lots as inconspicuously as possible, keeping them out of view of the main east-west route
- determine restroom locations
- coordinate two trailhead locations
- allow for functional trash collection and firewood pick-up
- define a location for information to be posted that is neither unsightly, nor too remote

★ Aspen groves are seasonally wet areas. Encouraging high use & impacting activities will trample understory, open shoots & compact soil → threatening & reducing regeneration & stand health.

★ not possible - this area sits on a slope that is visible from TS Basin & Circle Creek Overlook, & areas along the rim.

★ ignores hydrology & slope constraints of the aspen area

III Developed camping patterned after that provided in Idaho state parks would be available outside the reserve in an area of mature juniper and pine woods. This campground would accommodate RV use and additional tents in the traditional style of vehicle spur camping off a main loop road. The site would be near the administrative site, community services in Almo, and it would have the capacity to handle intense camping use.

Site design would

- minimize the loss of trees
- maximize privacy in a separate loop tent area and livability in the RV loop area
- separate tent and RV uses and respond to different criteria for site configuration
- locate an information board
- connect to a functional, aesthetic amphitheater

PARKING AREAS

This is confusing language. Destination is not the same as point-of-origin, or staging/parking area.

Four types of parking areas would be designed. Type A: a quick entrance orientation; Type B: a minor interpretive stop; Type C: destination multipurpose that accommodates horses; Type D: destination multipurpose without horses. The following areas would fit under the described categories.

N.F. Circle Creek Overlook

Type A
Moulton Entrance
Emery Canyon

Type B
Inscriptions Rôcks
Twin Sisters rise
Trails Junction
Nicholson corrals
Granite Pass overlook

Recommend changing to "Snake Pit" and eliminating the others

Type C
Pinnacle Pass horse staging at TS?!
Breadloaves v. close to trail ride destination
Indian Grove Overlook horse staging at the destination for trail rides?!

parking is to be kept at a minimum at Indian Grove Overlook (3 cars; p. [illegible]) no horsetrailers)

Type D
Turtle Rock
Bath Rock
Parking Lot Rocks

Specialized parking design would accompany the visitor center site design and the primitive camping area within the reserve.

Location and construction of parking areas would use the approach that would cause the least damage to the landscape and minimize visual intrusion. Each lot would be designed to fit the landscape character of the site. Along the rim in the north part of the reserve, numerous rock edges and groupings would allow for easier use of vertical elements to define areas. On the rolling sagebrush plain, designing unobtrusive parking would be more challenging. Most camping areas would combine an interpretive opportunity with recreational facilities, but structures and signs would not dominate the sites. Messages, restrooms, and parking would be placed so that the scenery would remain the experience, not the modern artifacts.

contradiction

Along the rim, parking areas at Turtle Rock and Parking Lot Rocks would use existing disturbed areas. At Turtle Rock, parking would have to be brought back from the slot to the overlook and placed in the open sage disturbed area. Care should be taken to take advantage of rock and pine edges to hide the parking from the main east-west road and to design an experience that does not have a parking lot image. At Parking Lot Rocks, the existing disturbance is a steep, descending cul-de-sac with room for approximately six vehicles. This is one of the main access points for climbers to descend and hike into the Inner City. In addition, climbing is popular on the high faces encircling the cul-de-sac. New design should pull parking back from this lower overlook area to keep it out of the way of climbing staging areas and trail uses. The Bath Rock area would be relocated to the north side of the rock, outside of the viewing angle from the top of the rock. This area may recess into the hillside and require retaining walls. Present sanitation facilities would be relocated to this lot. The current lot would be obliterated and reclaimed, except for a spur trail connection from the parking area to the rim trail and overlook. This action would result in creating an entire rim experience that is not intruded upon by cars, and that keeps all the significant viewpoints natural. This action would also enhance the safety of climbing on the sheer east face of Bath, where activity on the road currently interferes with climbs on the rock.

Organized design of a group camping area at Breadloaves should use the existing disturbed site on the west side of the rocks. This site has access to the well, is pleasantly separated from other users, and allows good trail access to day use areas. The site is at the top of Emery Canyon, rather exposed and wind-swept. Care should be given to separating the camping use from the west rock faces to keep high demand climbing routes accessible and unimpeded.

Other parking areas would be determined by interpretive focus and would need to respond to the message at the site. Each site would be located to allow visitors meaningful access to portions of the trail where key interpretive themes can be shared, like the junction of two trails, the first view of the Twin Sisters landmark, and at Pinnacle Pass. These pulloffs need to be sited out of the eight significant

viewsheds. The inscription rocks location should be to the north of the realigned east-west road with easy access to Register Rock. The pulloff approaching the Twin Sisters basin should lie below the crest of the rise, and allow only pedestrian access over into the plain. The pulloff to the current ranching interpretation should be located to take advantage of an existing corral site. Traffic and parking should not cross the drainage to the north, should be out of view of the campground, and below the crest of the Twin Sisters basin. The pulloff at the trails junction should be downhill (towards the trails) along the newly aligned deadend road into Twin Sisters. Effort should be made to keep the wayside within the pine/juniper cover to minimize its impact on the trail viewshed and to visitors walking on this section. The Pinnacle Pass trailhead settles to the southwest side of Twin Sisters at the foot of the ridge. This site is unsheltered, exposed to harsh summer sun and wind. This parking area needs to be designed to lay easily into the sagebrush basin, well away from activity facing the lot. It includes trailheads north to the campground, east to the pass, and south to the stage stop. In addition, restroooms would be provided because this is a stop where visitors may spend a considerable time.

STRUCTURES

The few buildings inside the reserve are historic wood and stone structures. The log buildings have a low-slung appearance and are wider than they are tall.

New restrooms and entrance stations need to reflect the individually handcrafted look of the older existing style, as much as possible. Scale, form, line, color, texture, and materials need to blend with the character of the site, whether it is the muted wash of sagebrush landscape or the vivid contrast of Silent City rock and pine. Structures would follow the horizontal nature of the open sage basins and recede where strong vertical rock character dominates. All buildings would be hidden from the eight major viewpoints and from the California Trail and road corridors. They would take advantage of passive solar site amenities and be accessible but remain as obscure as possible without intruding on open basins.

Planting to revegetate disturbed areas and to cover construction disturbance would include only indigenous materials. Erosion caused from new construction would be alleviated by controlling runoff and catching sediments.

Structures for administration, visitor orientation, interpretation, staff housing, and maintenance facilities outside the reserve would be located in and around Almo. The administration and visitor orientation/interpretation facilities would be located on a flat, sagebrush flank approaching the east entrance at a crossroads. Two routes converge here, facilitating 85 percent of the arrival traffic. This site is extremely open and exposed. Structures would not be hidden, but they would respond to the long, horizontal sense of the site and maintain a low profile. Adjacent uses would be a mix of BLM grazing allotments and ranchsteads. Design would draw on the spacious, agricultural image to determine appropriate architectural and landscape architectural treatments.

Housing for 12 permanent and/or 12 seasonal employees would be constructed on a location south of the existing town. Design for both permanent and seasonal structures at Almo Junction would be recommended to fit into the brick and wood textures of the Almo area. Units need to be placed in the landscape to capture as much passive solar benefit as possible, have snow-free entrances and drives, create privacy between residences, and take advantage of views into the reserve where possible.

Restrooms vary in need from backcountry group facilities, to heavily used front country day use sites. Opportunities to use composting toilets should be maximized, particularly in the backcountry. Where this is not feasible, vault systems would suffice. All front country systems and campground facilities would be handicap accessible.

Placement of interpretive signs would not intrude on approach and arrival views. They would be located so that the visitor looks up from reading and sees the message.

SIGNS

Existing signs in and around the reserve are

type I – 1960s metal-style BLM trapezoid markers with standard brown background, white lettering, and the agency logo in the upper left corner

type II – wooden signs, brown with white lettering, some Manning (roofed) types ornamental/handcrafted wooden signs

type III – prison-industry standard metal signs

type IV – specialty-interpretive-florescent iron I-beams.

The reserve would use a uniform sign plan to reduce visual clutter; create a positive, singular image for the reserve; and to curb unnecessary signs. This would be achieved through reducing the number of signs by consolidating and combining messages; using international graphic symbols instead of text; using designed logos to indicate public versus private lands; and using one construction technique to unify all the images.

Exact locations, messages, sizes, and style have not been determined, but signs need to acknowledge the joint partnership of the reserve and give the visitor an immediate sense of the resource value for which the area is named or set aside. This is particularly important in a custom-designed entrance located at the Almo visitor center site. Even simple messages, such as location information, should be tailored to a format and construction technique that suggests the unique handcrafted and cared-for rural sense of the reserve.

FENCING

Fencing would be the single, most dominant visual impression carried away in the visitor's mind. The design would blend with informal, unpretentious, existing examples.

Existing fencing within the reserve marks many miles of property lines, grazing allotment boundaries, and previously farmed fields. A complete inventory would be made to establish the historic significance of these lines. Many occur on original properties noted on 1920 plats and are made of materials that are 50 or more years old.

The existing fencing is also informal and at ease. Posts lean unintentionally, are not of consistent diameters or heights, and are weathered, unpeeled, locally gathered juniper. The barbed wire strands vary in the number used and type. Together the wire and posts create a light, transparent image.

Proposed fencing would total approximately 26 miles and be most visible around the trail preservation zones. The functions of proposed fencing would be to separate grazing cattle and pedestrians and to separate cattle and historic resources. No fencing is needed between trailing areas and the roads. Decorative fencing for edge control and circulation direction would be removed. Other systems of establishing boundaries between use areas would be explored, reducing as much as possible the negative message of "Keep Out" that fencing creates. Where pertinent, new lines would run parallel to viewing angles and avoid crossing significant views close to the visitor. Cattle guards may be appropriate as a substitute for fencing in smaller areas requiring enclosures. At-grade guards would significantly lessen the visual impacts of fencing.

APPENDIX E: PROPOSED DEVELOPMENT AND ESTIMATED OPERATING COSTS

These costs are based on FY 1993 dollars and will need to be adjusted for inflation to the time the project is implemented.

ESTIMATED DEVELOPMENT COSTS
ALTERNATIVE 1: NO ACTION

Development Item/Phase	Gross Construction Cost	Advance and Project Planning Cost	Total Project Cost
INSIDE RESERVE			
Circle Creek Basin: Define parking at Nicholson ranch			
Rim/Silent City			
Replace 4 miles of fencing around section 36	$334,773	$63,888	$398,661
Construct 1 two-compartment vault toilet	76,600	15,000	93,600
Obliterate/revegetate 1.5 miles of 4WD road	559,043	106,668	665,730
Twin Sisters Basin Overlook			
Construct parking for 5 cars	37,204	7,100	44,304
Construct interpretive sign (Type IV)	5,044	963	6,007
OUTSIDE RESERVE			
Construct fully accessible 400 sq. ft. comfort station	187,330	35,750	223,080
Construct 20-car ongoing parking facility, 3 RVs/buses, 7 service spaces	235,132	44,872	280,004
Maintenance: construct 1-bay, 100 sq. ft. covered maintenance warehouse	165,715	31,625	197,340
Housing: 2 permanent quarters, including attached garage	464,002	88,550	552,552
4 seasonal houses (800 sq. ft.)	345,840	66,000	411,840
TOTAL	**$2,410,683**	**$460,416**	**$2,873,118**

Estimated Development Costs
Alternative 2: Historic Continuum (Proposal)

Development Item/Phase	Gross Construction Cost	Advance and Project Planning Cost	Total Project Cost
INSIDE RESERVE			
CIRCLE CREEK			
Circle Creek Basin Overlook			
Construct 1 mile of 20-foot gravel road from east-west road to overlook	$812,098	$154,981	$967,079
Construct gravel day-use parking area for 20 cars	148,800	28,397	177,197
Construct 1/4-mile accessible hardened trail to overlook	46,218	8,820	55,038
Construct 1.4-mile foot trail w/trailhead	97,000	18,500	115,500
Construct 3.5-mile gravel trail north around RNA to Indian Grove	160,475	30,625	191,000
Construct 1 interpretive sign (Type IV)	5,044	963	6,007
Construct 5.0 miles of gravel trail from overlook to Pinnacle Pass (not hardened)	230,000	44,000	274,000
Garbage receptacle (preconstructed)	0	0	1,100
Circle Creek Basin			
Obliterate/revegetate 3.5 miles of 20' gravel road from Nicholson Ranch to reserve boundary	1,121,819	214,088	1,335,907
Rip back 1.5 miles 10' hardened 4WD road across Circle Creek basin to a 3' natural surface trail corridor Revegetate remaining 7 foot width	508,385	97,020	605,405
Construct 4 miles of 20' gravel road from the Nicholson house across reserve to west boundary	878,457	167,644	1,046,101
Nicholson Ranch			
Construct day-use parking area for 5-10 vehicles, 2 RV spaces (2 horse spaces) this has been added	129,258	24,667	153,925
1 two-compartment vault toilet	78,600	15,000	93,600
1 orientation/interpretive sign (Type IV)	5,044	963	6,007
1 orientation/backcountry sign	432	83	515
Garbage receptacle	0	0	1,100
Inscription Rocks			
Parking for 5-10 vehicles	74,408	14,200	88,608
2 interpretive signs (Type IV)	10,087	1,925	12,012
Construct 4.8 miles of gravel trail from just south of Treasure Rock, past Bath Rock and Emery Canyon Spring, west of the private parcel to Finger Rock, east past Taylor Spring and north to Indian Grove	220,000	42,000	262,000
Twin Sisters Rise (fully accessible, interpretive wayside, overlook)			
Interpretive wayside, parking for 5-10 cars	74,408	14,200	88,608
3-5 picnic sites/tables	13,100	2,500	15,600
1 2-compartment vault toilet	78,600	15,000	93,600
1 interpretive sign (Type IV)	5,044	963	6,007
Corrals/Historic Rural Setting (fully accessible, interpetive wayside) where along the proposed E-W road realignment is this place?			
Construct parking for 5-10 vehicles, 2 horse trailers	104,171	19,880	124,051
Construct unloading chute for horses/cattle	12,288	2,345	14,633
Corrals for horses/cattle	51,325	9,795	61,120
1 interpretive sign (Type IV)	5,044	963	6,007
Seating for activity area	16,391	3,128	19,519

no trailhead

Development Item/Phase	Gross Construction Cost	Advance and Project Planning Cost	Total Project Cost
Rim/Silent City			
Obliterate and revegetate 3 miles of social trails 6' wide (2.2A)	$653,166	$124,650	$777,816
Obliterate and revegetate 5 miles of social roads 16' wide along rim (9.7A)	2,813,880	537,000	3,350,880
Restore and revegetate 15 areas (16,000 sq. ft.) of random parking along the rim	1,635,000	312,000	1,947,000
Improve 2.5 miles of existing hiking trails within Silent City	73,491	14,025	87,516
Construct 1 mile fully accessible trail from Turtle Rock to Parking lot Rocks	319,214	60,919	380,133
Construct 1.6 miles of gravel trail from Circle Creek Basin, along Center Creek to just south of the Emery Canyon Road	73,400	14,000	87,400
Turtle Rock			
Construct fully accessible parking for 20 cars and 2 service vehicles	157,200	30,000	187,200
Construct 3-5 picnic sites/tables	5,764	1,100	6,864
Construct 1-2 compartment vault toilet	78,600	15,000	93,600
1 information/orientation sign for rim access and climbing	0	0	5,050
Interpretive sign (Type IV)	5,044	963	6,007
Garbage receptacle	0	0	1,100
Bath Rock			
Construct fully accessible parking for 25 cars and 2 service vehicles	137,943	26,325	164,268
5-8 picnic sites/tables	9,222	1,760	10,982
Interpretive sign (Type III)	2,162	413	2,575
1-2 compartment vault toilet relocated from existing lot	78,600	15,000	93,600
1 information/orientation sign	5,044	963	6,007
Garbage receptacle	0	0	1,100
Parking Lot Rocks			
Construct day-use area parking for 10 vehicles and 3 service vehicles	89,304	17,043	106,347
3-5 picnic sites/tables	5,764	1,100	6,864
1-2 compartment vault toilet	78,600	15,000	93,600
3 orientation signs for climbing, rim trail access, Silent City	1,297	248	1,545
Garbage receptacle	0	0	1,100
Breadloaves			
Day-use parking for 20 cars, service vehicles, and horse trailers	171,244	32,680	203,924
Parking for 3 group camping 3 car/site	66,967	12,780	79,747
3 group camping sites w/tables	38,907	7,425	46,332
2 two-compartment vault toilets	149,200	28,473	177,673
1 information/orientation sign for climbing and rim trail access	0	0	5,050
1 backcountry registration/trail information sign	0	0	5,050
Garbage receptacle	0	0	1,100
Interpretive sign (Type IV)	5,044	963	6,007
Primitive campground/trailhead			
Construct 0.5 mile of 18' gravel access road	155,890	29,750	185,640
Construct 5.6 miles of hiking trail (1 segment to high point, 1 segment to Twin Sisters)	333,000	63,550	396,550
Construct 2.2 miles of gravel trail from primitive campground along Trail Creek to reserve boundary	101,000	25,250	126,250

Development Item/Phase	Gross Construction Cost	Advance and Project Planning Cost	Total Project Cost
Construct 50 walk-in sites w/tables, tent pads, and fire rings	$209,600	$40,000	$249,600
Construct 2 miles (25 x 420) 6' hardened walking surface from parking area to sites (edged aggregate base (4")	61,622	11,760	73,382
Construct 2 two-compartment vault toilets	149,622	28,473	177,673
Construct centralized parking for 50 vehicles	253,649	48,406	302,055
Construct 1 mile of trail to rim climbing area	60,260	11,500	71,760
Garbage receptacle — one large centralized facility	0	0	1,100
Construct 2 trailheads w/information signs (Type III)	4,323	825	5,148
Place interpretive sign (Type IV) (standard anodized)	0	0	0
Indian Grove			
Designate up to 7 unimproved backcountry campsites	29,344	5,600	34,944
Construct 3 backcountry composting type toilets	78,600	15,000	93,600
Construct 3 car parking and overlook	53,000	10,000	63,000
Interpretive sign (Type III)	2,162	413	2,575
Garbage	0	0	1,100
Obliterate/revegetate 1.5 mile of existing 4WD road from Emery Canyon Pass to Indian Grove	559,043	106,668	665,730
Backcountry			
Remove 1.5 miles of road from NE boundary at Graham Creek to Indian Grove and convert to trail use	50,723	9,680	60,403
Improve and modify 7 miles of hiking and horseback riding trail from Breadloaves to Indian Grove	465,212	88,781	553,993
Twin Sisters Basin			
Rip back and revegetate 2 miles of 16' gravel road to an unmarked road for local use	108,208	20,650	128,858
Trails Junction			
Construct fully accessible interpretive wayside/trailhead	30,261	5,775	36,036
Construct parking for 7 cars	35,763	6,825	42,588
2 interpretive signs (Type IV)	10,087	1,925	12,012
1 orientation sign for Twin Sisters loop trail (Type III)	2,162	413	2,575
Twin Sisters			
Parking for 7 cars and 2 service vehicles	66,967	12,780	79,747
1 two-compartment vault toilet	78,600	15,000	93,600
1 orientation sign for Twin Sisters loop trail (Type III)	2,162	413	2,575
2 interpretive signs (type IV at Twin Sisters and Pinnacle Pass)	10,087	1,925	12,012
Garbage receptacle	0	0	1,100
Remove 2 vault toilets, picnic tables, and parking at Twin Sisters	72,650	13,865	86,515
Construct 4 miles of loop hiking trail between Twin Sisters and Stage Station	265,838	50,732	316,570
Outside Reserve			
Visitor center (9,500 sq ft)	2,800,000	535,000	3,335,000
Furnishings for visitor center	867,000	165,000	1,032,000
Interpretive media for visitor center	944,000	180,153	1,124,153
Parking for 45 cars, 8 RVs/2 buses, 15 service spaces	658,370	125,643	784,013
1 specialty type III sign of wood/brick or stone matching	46,112	8,800	54,912
1 well (85 lf)	25,938	4,950	30,888
Construct 2.4 miles paved road within DCP area	2,452,000	468,000	2,920,000

Development Item/Phase	Gross Construction Cost	Advance and Project Planning Cost	Total Project Cost
Construct 1/2 mile drainage structure on DCP road	$3,275	$625	$3,900
Water distribution system for DCP area; VC, maint., house, dump station, CG, and storage tank	1,173,800	224,000	1,397,800
Electrical service and distribution for DCP area — direct buried cable and lighting	800,000	152,700	952,700
Septic system for visitor center	72,050	13,750	85,800
Provide landscaping and irrigation system (8,000 sq. ft.)	36,680	7,000	43,680
Construct 500' of 6' walks 7.20/sq. ft.	4,716	900	5,616
Site grading and drainage .10/sq. ft. (9,000 sq. ft.)	11,790	2,250	14,040
Obliterate and revegetate 1/4 mile x 24' vacated road	19,650	3,750	23,400
Provide low level pedestrian outdoor lighting (10 fixtures)	19,650	3,750	23,400
Revegetate 8A disturbed site (3,000 x A)	31,440	6,000	37,440
Construct 75 x 30' entrance plaza with 6 benches	45,195	8,625	53,820
Construct outdoor interpretive display with sign	19,650	3,750	23,400
Provide sign lighting (2 fixtures)	5,240	1,000	6,240
Construct 200' x 40' road widening	172,920	33,000	205,920
Trailer dump station, 2-station facility	172,920	33,000	205,920
Septic tank and drainfield for dump station	131,000	25,000	156,000
Maintenance facilities			
10,000 sq. ft. of covered storage			
(3) warehouses @ 7,500 sq. ft. total	343,875	65,625	409,500
(1) shops/bays/sak/water treatment @ 2,500 sq. ft.	442,125	84,375	526,500
1400 lf of privacy & security fencing	53,186	10,150	63,336
1400 x 20 of screening vegetation (28,000 sq. ft.)	73,360	14,000	87,360
Housing			
Construct 12 permanent and/or seasonal quarters with attached garage	2,784,000	531,300	3,315,300
Landscaping for each residence (1090 x 6) (17,710)	277,700	53,000	330,700
Septic system shared w/maintenance	283,000	54,000	337,000
Site work & landscaping for seasonal residences (1090 x 12)	103,752	19,800	123,552
Developed Campground			
Develop campground – 80-100 sites w/hookups	4,714,221	899,660	5,613,882
2-mile 18' gravel access road (existing 4WD alignment)	1,126,600	215,000	1,341,600
100-seat amphitheater	158,510	30,250	188,760
20-car parking lot at the amphitheater	102,180	19,500	121,680
Construct 1 mile interpretive trail from amphitheater			
Construct 2.7 mile gravel hiking/bicycle trail westward into the reserve	248,000	62,000	310,000
Well	8,574	1,636	10,210
Comfort Station – two compartment flush toilets w/showers	458,500	87,500	546,000
Septic system	285,580	54,500	340,000
1 registration sign	432	83	515
Site identification posts	28,165	5,375	33,540
Orientation signs (Type III)	51,876	9,900	61,776
Lighting for amphitheater (10 fixtures)	19,650	3,750	23,400
Construct 1-mile 18' gravel road to water storage tank	311,780	59,500	371,280

Development Item/Phase	Gross Construction Cost	Advance and Project Planning Cost	Total Project Cost
Almo Entrance			
Construct entrance station staffed (fee collection) and 10 car, 3 RV pulloff	$205,632	$39,243	$244,875
Construct unstaffed entrance kiosk	57,640	11,000	68,640
Emery Canyon Entrance			
Construct parking area for 10 cars, 3 RVs	107,382	20,493	127,875
Construct staffed entrance station	98,250	18,750	117,000
Construct 1 two-compartment vault toilet	78,600	15,000	93,600
1 orientation sign (Type III) kiosk panel	8,407	1,604	10,011
Garbage receptacle	0	0	1,100
Junction (Moulton) Entrance			
Construct parking for 5 cars, 3 RVs	73,825	14,089	87,914
Construct unstaffed entrance kiosk	57,640	11,000	68,640
1 interpretive sign (Type IV)	5,044	963	6,007
Garbage receptacle	0	0	1,100
Signs – metal unicor road signs	6,052	1,155	7,207
Metal unicor custom signs for posted regulations at fee station	432	83	515
2 entrance signs	92,224	17,600	109,824
1 modified entrance signs	8,646	1,650	10,296
1 visitor sign	46,112	8,800	54,912
2 kiosk panels	4,323	825	5,148
Anodized aluminum sign	1,441	275	1,716
Granite Pass View			
Construct parking (5 cars) w/interpretive sign	32,160	6,137	38,298
Utilities/Roads			
Bury 9 miles electric service across unit	1,074,200	205,000	1,279,200
TOTAL	**$39,136,860**	**$7,489,656**	**$47,495,585**

Estimated Development Costs
Alternative 3: California Trail Emphasis

Development Item/Phase	Gross Construction Cost	Advance and Project Planning Cost	Total Project Cost
Inside Reserve – Circle Creek Basin			
Obliterate and revegetate 3.5 miles of 18' gravel road	$1,009,637	$192,679	$1,202,316
Obliterate and revegetate 1.5 miles of 10' hardened ranch road across Circle Creek	559,043	106,688	665,731
Construct 4 miles of 18' gravel road from the Nicholson house	790,611	150,880	941,491
Nicholson Ranch			
Parking for 5-10 vehicles, 2 RV spaces	129,258	24,667	153,925
1-2 compartment vault toilets	78.600	15,000	93,600
1 orientation/interpretive sign (Type IV)	5,044	963	6,007
Garbage receptacle	0	0	1,100
Inscription Rocks			
Parking for 10 vehicles	74,408	14,200	88,608
2 interpretive signs (Type IV)	10,088	1,926	12,014
Twin Sisters Rise			
Interpretive/wayside parking 10 vehicles	74,408	14,200	88,608
1 interpretive sign (Type IV)	5,044	963	6,007
Corrals/historic rural setting			
Parking for 10 vehicles and 2 horse trailers	74,408	14,200	88,608
Unloading area for horses	23,056	4,400	27,456
1 interpretive sign	5,044	963	6,007
Seating for activity area	16,391	3,128	19,519
Rim/Silent City			
Obliterate and revegetate 3 miles of social trails, 6' wide (2.2 A)	653,166	124,650	777,816
Obliterate and revegetate 5 miles of social roads, 16' wide along rim (9.7A)	2,813,880	537,000	3,350,880
Restore and revegetate 15 areas (6,000 sq. ft.) of random parking along the rim	613,080	117,000	730,080
Improve 2.5 miles existing hiking trails within Silent City	73,491	14,025	87,516
Construct 1 mile fully accessible trail from Turtle Rock to Parking Lot Rocks	319,214	60,919	380,133
Parking Lot Rocks			
Construct day-use area parking for 10 vehicles and 3 service vehicles	96,730	18,460	115,190
3-5 picnic sites/tables	5,764	1,100	6,864
1-2 compartment vault toilet	76,600	15,000	93,600
3 orientation signs	1,297	248	1,545
Garbage receptacle	0	0	1,100
Bath Rock			
Construct fully accessible parking for 25 cars and 2 service vehicles	137,943	26,325	164,268
5-8 picnic sites/tables	9,222	1,760	10,982
1-2 compartment vault toilet relocated from existing lot	78,600	15,000	93,600
1 information/orientation sign	5,044	963	6,007
Garbage receptacle	0	0	1,100

Development Item/Phase	Gross Construction Cost	Advance and Project Planning Cost	Total Project Cost
Turtle Rock			
Construct fully accessible parking for 10 cars and 2 service vehicles	$89,290	$17,040	$106,330
3-5 picnic tables	5,764	1,100	6,864
1-2 compartment toilet	78,600	15,000	93,600
1 information/orientation sign	0	0	5,050
Garbage receptacle	0	0	1,100
Indian Grove			
Parking 20 vehicles	178,580	34,080	212,660
2 RVs	17,292	3,300	20,592
Horse unloading area chute/hitching post	7,565	1,444	9,009
Hitching post	360	69	429
1-2 compartment vault toilet	78,600	15,000	93,600
Garbage receptacle	0	0	1,100
Twin Sisters Basin			
Rip back and revegetate 2 miles of 16' gravel road	108,208	20,650	128,858
Construct day use area parking for 10 vehicles	74,408	14,200	88,608
2 interpretive signs (Type IV)	10,087	1,925	12,012
1 mile fully accessible trail	128,249	24,475	152,724
Twin Sisters			
Fully accessible parking for 25 vehicles and 2 RVs	137,943	26,325	164,268
A half-mile fully accessible trail to Pinnacle Pass	32,062	6,119	38,181
1 two-compartment vault toilet	78,600	15,000	93,600
2 interpretive signs (Type IV)	10,087	1,925	12,012
Garbage receptacle	0	0	1,100
Remove 2 pit toilets	52,400	10,000	62,400
Backcountry			
Obliterate 1.5 miles existing 4WD road	91,302	17,424	108,726
Outside Reserve			
Construct 7,500 sq. ft. of visitor center	2,210,625	421,875	2,632,500
Furnishings for visitor center at 20% of construction cost	684,763	130,680	815,443
Interpretive media for visitor center	944,000	180,153	1,124,153
Parking lot for 45 cars, 5 RVs/buses, 15 service spaces	470,264	89,745	560,009
1 specialty type III sign of wood/brick or matching stone	46,112	8,800	54,912
Well (85 lf)	25,938	4,950	30,888
Water distribution system for DCP area; VC, maintenance, housing, dump station, CG and storage	1,087,300	207,500	1,294,800
Electrical service and distribution for DCP area — direct buried cable and lighting	765,040	146,000	911,040
Septic system for visitor center	72,050	13,750	85,800
Provide landscaping and irrigation system (8,000 sq. ft.)	36,680	7,000	43,680
Construct 500' of 6" walks 7.20/sq. ft.	4,716	900	5,616
Site grading and dainage .10/sf (9,000 sq. ft.)	11,790	2,250	14,040
Obliterate and revegetate 1/4 mile x 24' vacated road	19,650	3,750	23,400

Development Item/Phase	Gross Construction Cost	Advance and Project Planning Cost	Total Project Cost
Provide low-level pedestrian outdoor lighting (10 fixtures)	$19,650	$3,750	$23,400
Revegetate 8A disturbed site (3,000 x A)	31,440	6,000	37,440
Construct 75' x 30' entrance plaza with 6 benches	45,195	8,625	53,820
Construct outdoor interpretive display with sign	19,650	3,750	23,400
Provide sign lighting (2 fixtures)	5,240	1,000	6,240
Maintenance Facilities			
10,000 sq. ft. of covered storage			
(3) warehouses @ 7,500 sq. ft. total	343,875	65,625	409,500
(1) shops/bays/sak/water treatment @ 2,500 sq. ft.	442,125	84,375	526,500
1,400 lf of privacy and security fencing	53,186	10,150	63,336
1,400 x 20 of screening vegetation (28,000 sq. ft.)	73,360	14,000	87,360
Housing			
Construct 6 permanent quarters with attached garage	1,392,006	265,650	1,657,656
12 season quarters	1,037,520	198,000	1,235,520
Landscaping for each residence (1,090 x 6) (17,710)	139,200	26,565	165,765
Septic system shared w/maintenance	141,480	27,000	168,480
Site work and landscaping for seasonal residence (1,090 x 12)	103,752	19,800	123,552
Emery Entrance			
Construct entrance station, manned kiosk w/storage (fee collection)	30,261	14,089	87,914
Construct parking area for 5 cars, 3 RVs	73,825	15,000	93,600
Construct 1 two-compartment vault toilet	78,600	1,604	10,011
1 orientation sign (Type III) kiosk panel	8,407	0	1,100
Garbage receptacle	0		
Moulton Entrance			
Construct parking for 5 cars, 3 RVs	73,825	14,089	87,914
1 orientation sign (Type III) kiosk panel	8,407	1,604	10,011
Garbage receptacle	0	0	1,100
Granite Pass View			
Parking for 5 vehicles, interpretive sign	32,160	6,137	38,298
Signs			
Metal unicor road sign	6,052	1,155	7,207
Metal unicor custom signs for posted regulations at fee station	432	82	514
Type III – 2 entrance signs 4' x 8" wood/stone	17,292	3,300	20,592
2 entrance signs	92,224	17,600	109,824
1 modified entrance sign	8,646	1,650	10,296
1 visitor center sign wood/brick/stone	46,112	8,800	54,912
2 kiosk panels 3' x 5' anodized aluminum	4,323	825	5,148
Type IV — anodized aluminum 2' x 3' on 4' posts	5,044	963	6,007
Utilities/Roads			
Construct 1 mile of 18' gravel service road to water storage tank	311,780	59,500	371,280
Construct 2 miles paved road within DCP area	1,690,031	322,525	2,012,556
Buy 9 miles electric service across unit	1,074,200	205,000	1,279,200

Development Item/Phase	Gross Construction Cost	Advance and Project Planning Cost	Total Project Cost
Construct 1/2 mile drainage structure on DCP road	$3,275	$625	$3,900
Construct 10 miles of paved county/state highway/w/	16,524,340	3,153,500	19,677,840
1/2 mile erosion control	8,993	1,716	10,709
10 mile stripping	13,100	2,500	15,600
10 mile shoulder revegetate/reseed	2,766	528	3,294
2 mile silt fence	96,835	18,480	115,315
Bypass Road Subtotal			**$23,489,694**
TOTAL	**$39,001,759**	**$7,520,461**	**$46,889,793**

STAFFING AND OPERATING COSTS

Alternative 1: No Action

The reserve operating budget for fiscal year 1991 was approximately $295,000. Of that amount, $195,000 was provided by the National Park Service and $100,000 by the state of Idaho.

The following is a list of staff at the reserve in fiscal year 91:

Administration
- National Park Service
- Superintendent (1/2 time City of Rocks, 1/2 time Haggerman)
- Administrative Assistant (1/2 time City of Rocks, 1/2 time Haggerman)
- Clerk-Typist (1/2 time City of Rocks, 1/2 time Haggerman)

Idaho Department of Parks and Recreation
- Park Manager
- Clerk-typist

Visitor Protection and Resource Management
- National Park Service
  - Ranger (full time City of Rocks)
- Idaho Department of Parks and Recreation
  - Park Ranger
  - 2 park aids (part time)

Interpretation and Visitor Services
- Idaho Department of Parks and Recreation
  - Interpretive specialist

Maintenance
- Idaho Department of Parks and Recreation
- State Job Program trainee
  - 1 park aid (part time)

Note: Please see the "Staffing and Operating Costs" section of the draft plan for budget and staffing estimates for alternative 2.

STAFFING AND OPERATING COSTS

Alternative 3: California Trail Emphasis

The reserve's operating budget for fiscal year 1991 was approximately $295,000. Of that amount, $195,000 was provided by the National Park Service and $100,000 by the state of Idaho.

The following staff would be needed to implement alternative 3:

	FTE
Administration	
Superintendent (GS-12)	1.0
Administrative Officer (GS-7)	1.0
Clerk-Typist (GS-4)	1.0
Visitor Protection and Resource Management	
Chief Ranger (GS-11)	1.0
Park Ranger, Visitor Protection (GS-7)	1.0
Park Ranger, Visitor Protection (GS-5)	0.9
Resource Management Specialist (GS-9)	1.0
Park Ranger, Resource Management Specialist (GS-5)	1.0
2 Park Rangers, (GS-4)	0.7
Clerk-Typist (GS-4)	0.7
Park Ranger, Fee Collection (GS-5)	1.0
4 Park Rangers, Fee Collection (GS-3)	3.0
Interpretation and Visitor Services	
Chief of Interpretation (GS-9)	1.0
Historian, (GS-7)	1.0
2 Park Rangers (GS-4)	1.8
Maintenance	
Chief of Maintenance (WS-10)	1.0
Maintenance Worker (WG-6)	0.9
2 Laborers (WG-5)	3.1

Note: The annual cost of the above combined salaries based on step 1 of all pay grades would be $410,000. An additional $205,000 would be required for operating expenses. The total annual estimated operating costs would be $615,000 in 1993 dollars.

APPENDIX F: ACTION PLANS AND RESOURCE STUDIES CALLED FOR IN COMPREHENSIVE MANAGEMENT PLAN

Architectural Themes and Guidelines Study

Operations Plan for State administration of the area. (this is the same as (1) Evaluation Plan for State and (2) Implementation Plan for . . .")

Resource Management Plan for Natural and Cultural Resources

- Natural Resources Management Plan
- Wildlife/Hunting Management Plan
- Grazing Management Plan
- Fire Management Plan
- Climbing Management Plan
- Trails Plan

Cultural Resources Management Plan. Please note that the 1990 Programmatic Agreement allows for the postponement of consultation to a later date for both plans and specific actions.

- Collections Management Plan
- Comprehensive Research and In-depth Documentation of Cultural Landscapes
- Historic Resource Study
- Historic Landscape Study
- Scope of Collections Statement
- Documentation of Ethnographics Resources
- Mitigation Plan for Cultural Resources

Interpretive Prospectus

- Wayside Exhibit Plan

Sign Plan

Visual Resource Management Plan for the entire reserve, including, but not limited to the California Trail viewshed

APPENDIX G: CASSIA COUNTY ZONING PERTAINING TO RESERVE

In harmony with section 202(c) of PL 100-696, an interim ordinance for the regulation of private land uses within City of Rocks National Preserve follows. This interim ordinance expires on December 31, 1994. Cassia County is in the process of finalizing these ordinances, but a final version could not be included in this document due to time constraints.

1-3 Declaration

In establishing the zones, the boundaries thereof, and the regulations applying within each of the zones, due and careful consideration was given among other things to the suitability of land for particular uses with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout the county. The location and boundaries of cities, villages, reserves, and other areas not subject to zoning regulations by the Board of County Commissioners of Cassia County, together with the regulations applying within each city, village, or reserves were also considered in the preparation of this ordinance.

6-1 COUNTY DIVIDED INTO ZONES In order to accomplish more fully the objectives and purpose of this Ordinance, Cassia County, Idaho is hereby divided into zones which shall be known by symbols and/or names as follows:

Short Title	Zone
RA-1	Residential Agricultural Zone
AR-2	Agricultural Residential Zone
AP	Prime Agricultural Zone
MU	Multiple Use Zone
HP	Interim Historical Preservation Zone
IC	Industrial Commercial Zone
B1	Albion City Buffer Zone
B2	Burley City Buffer Zone
B3	Declo City Buffer Zone
B4	Malta City Buffer Zone
B5	Oakley City Buffer Zone
OR	Outdoor Recreational Zone

6-2 MAP The location boundaries of each of the zones are shown on the Cassia County Zoning Map, and all boundaries, notations and other data shown thereon are as much a part of this Ordinance as if fully described herein.

The Zoning map shall be identified by the signature of the Chairman of the Board of County Commissioners, attested by the clerk, and shall bear the following words:

"I hereby certify that this is the official Cassia County Zoning Map which war

7-5 INTERIM HISTORICAL PRESERVATION ZONE HP.

The purpose of the Interim Historical Preservation Zone is to designate the City of Rocks National Reserve as well as such other areas as are designated by the Planning Commission, as areas of great historical significance that should be preserved and protected for the benefit and education of future generations. A comprehensive planning process is underway at the present time involving Federal, State, Local and private interests regarding the long range use and development of these historically significant areas. The intent of the Interim Historical Preservation Zone is to preserve and protect the geologic features, the rocks and remnants associated with the California and other trails, the historic sites and current ranching activities that contribute to an historic western rural setting and the scenery, mystery, and silence of the landscape, as well as to manage recreation in these areas to ensure preservation and protection of resource values, while the planning process continues.

The restrictions and regulations contained in this zone shall not be valid after December 31, 1994, unless reenacted or amended prior to that time by Commissioners action.

Inclusions in the HP Zone of lands outside the formal boundaries of the City of Rocks Natural Reserve is not intended nor is it to be construed as an attempt to link such lands with the Reserve in any way.

Development in these areas should be limited to those uses made of the areas during the period from 1850 to 1988. Construction and development that is permitted in these areas should be required to conform to and maintain the purpose of the reserve.

Publicly maintained facilities for education, sight-seeing and appropriately restricted recreational uses are permitted. Residential uses are limited to one residence for each private land owner existing as of the date of passage of this ordinance. Architectural design of said residences and all other developments should be subject to review and approval by the Planning Commission to assure its conformity to the purposes for which the Reserve was established.

All development within the HP Zones during the period of this interim zone shall be required to meet the above criteria and shall require a development permit issued in accordance with the provisions of Chapter 11 of this ordinance.

8-2 SCHEDULE OF ZONING REGULATIONS, ADOPTED Zoning regulations shall be as set forth in the following schedules of zoning regulations and in the performance standards contained within Chapter Nine hereof. The schedules of zoning regulations divided into four land use groups consisting of agriculture, residential, commercial, and industrial. To determine in which zone a specific use is allowed, it is necessary to find the use in one of the groups and read across the schedule until either the letter "P" or the letter "S" appears in one of the columns. If the letter "P" appears, the use is a permitted use. If the letter "S" appears, the use is only allowed upon issuance of a special or conditional use permit. If no letter appears, the use is prohibited in

that zone. The Zoning Administrator shall interpret the appropriate zone for land uses not specifically mentioned by determining a zone in which similar uses are permitted. When several combined land uses exist, or are proposed, the most intensive land use shall be considered as the primary activity.

11-1 HISTORICAL PRESERVATION ZONE DEVELOPMENTS

DEVELOPMENT PERMIT: The Planning Commission may issue a Development permit for construction, demolition, or development of facilities of any type within the Historical Preservation Zone in accordance with the procedures and standards that follow.

11-1-1 Purpose: The Development permit process is intended to be the mechanism by which the purposes of establishing the Historical Preservation Zone are fulfilled. It is the process by which the Planning Commission is authorized to review plans for work on structures within the Historical Preservation Zone to assure that the work complies with protective standards created to preserve the special qualities of the Historical Preservation Zones. The preservation work permit is intended to authorize review of exterior work only.

11-1-2 Permit Required: A person shall not perform or cause to be performed any construction, alteration or demolition of any improvement of real property located within an Historical Preservation Zone without having first obtained a Development permit for such work.

11-1-3 Improvement: "An Improvement of Real Property" means any addition to a piece of real property as illustrated by, but not limited to: any building; structure; wall; house; gate; fence; corral; or barn.

11-1-4 Demolition: "Demolition" of any improvement means a partial or total removal, destruction, wreckage or tearing down of an improvement as illustrated by but not limited to:

(a) The tearing down of a building
(b) The tearing down of a corral
(c) The tearing down of an exterior wall
(d) The total removal of an improvement by tearing it down to its foundation.

11-1-5 Application: A person may initiate proceedings for obtaining a development permit by sending a permit application to the Zoning Administrator.

11-1-6 Application Information: The Zoning Administrator may specify the information required in a permit application and may from time to time change the content of that information, but at all times the Zoning Administrator shall require the following information:

(a) The applicant's name and address
(b) The owner's name and address if the owner is not the applicant.
(c) The owner's signed consent to the making of the application, if the owner is not the applicant.
(d) The location and legal description of the property
(e) Photographs of the current condition of the property
(f) The plans for the work to be done including any surveys, drawings, and blue prints for the work.
(g) A statement of the reasons for the work to be done
(h) A copy of any permit or variance required in connection with the work to be done.

11-1-7 Application: Delivery to the Planning Commission. The Zoning Administrator shall deliver a completed application for a development work permit to the Planning Commission.

11-1-8 Planning Commission Resolution: The Planning Commission shall review an application for a development work permit and adopt a resolution either granting or refusing the permit. The Board shall take this action within 20 days after the day on which the application was received from the Zoning Administrator.

11-2 PLANNING COMMISSION REVIEWS; SUBJECT MATTER

The Planning Commission shall base a review of an application for a development work permit upon the following:

(a) The purpose of development work permits.
(b) The purposes of the Historical Preservation Zone Designation
(c) The standards for granting a permit in Section 11-3 below

11-2-2 Notification of Grant or Refusal: Within 5 days after the date on which a resolution is adopted by the Planning Commission, the Zoning Administrator shall mail a copy of the resolution to the applicant.

11-2-3 Issuance of Permit: If the resolution of the Planning Commission grants the permit, the Administrator shall immediately send the development work permit to the Applicant including it with the notification required above.

11-3 STANDARDS FOR GRANTING A PERMIT

11-3-1 The Planning Commission shall not grant a development work permit unless it finds that standards of visual compatibility consistent with the purpose of the Historical Preservation Zone will be present upon completion of the work. Reference shall be had to the Cassia County Historical preservation area development standards guide for examples of acceptable designs and architecture when it is developed.

11-3-2 All improvements should conform to the intent and purpose for which the reserve was established.

11-3-3 Permit Limitation. A development work permit is limited to an authorization of the work shown on plans required by this article.

11-3-4 Permit Term. A development work permit expires two years after the date on which the Resolution granting it was adopted.

11-3-5 Repeat Application. A person may make a repeat application for a development work permit as often as desired. The procedure for a repeat application is the same as the procedure for an initial application.

APPENDIX H: SECTION 106 COMPLIANCE REQUIREMENTS

Actions that will cause site disturbance

The actions listed below would be either programmatic exclusions under the programmatic agreement among the National Conference of State Historic Preservation Officers (SHPO), the Advisory Council on Historic Preservation, and the National Park Service (NPS) or would be subject to further consultation with the state historic preservation officer and the advisory council. Note that the 1990 Programmatic Agreement allows for the postponement of consultation to a later date for both plans and specific actions. Should the NPS and the SHPO so decide, other actions not meeting the programmatic exclusion definition may be determined to need no further review under section 106 of the National Historic Preservation Act. Any such agreement, however, must be determined mutually and must be fully documented.

Archeological clearances are indicated for a number of projects. The archeological clearance data would be gathered by the Park Service and provided to the state historic preservation officer. If any sites are within the area of project impacts, consultation with the state historic preservation officer would be required. Depending upon the effect, consultation may be needed with the advisory council.

Actions that could cause visual impacts on the historic scene

To soften the impact of placing man-made elements into the cultural landscape, visual compatibility standards would be developed by the regional staff which would provide direction for incorporation of these elements.

Please see appendix F for a list of plans that will be prepared after the comprehensive management plan is complete.

LOCATION	ACTION	COMPLIANCE REQUIREMENT
Reservewide	Visitor/recreation use outside foreground viewshed of California Trail prism (approximately 1/4 mile on each side of prism) in California Trail subzone. Foreground includes Twin Sisters and Salt Lake Alternate foreground	To be addressed in climbing and trails management plans
Reservewide	Grazing use outside areas described in Statement of Findings for Wetlands (Appendix J) in California Trail subzone	To be addressed in grazing management plan
Reservewide	Climbing use outside foreground viewshed of California Trail prism (approximately 1/4 mile on each side of prism) in California Trail subzone, including Twin Sisters	To be addressed in climbing management plan
Reservewide Utilities	Bury 9 miles of electric service across reserve, remove unused lines, and construct 1/2 mile drainage structure	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.
Circle Creek Basin – General	Convert 3.5-mile gravel road and 1.5-mile 4WD road to trails and construct 4-mile gravel road	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.
Circle Creek Basin – Overlook	Construct 1-mile gravel road, day-use parking area, 1/4-mile hardened trail, 1.4-mile foot trail, 5-mile gravel trail to Pinnacle Pass, interpretive sign, garbage receptacle	Requires archeological clearance
Circle Creek Basin – Nicholson Ranch	Construct day-use parking area, vault toilet, orientation/interpretive and orientation/backcountry signs, garbage receptacle	Requires archeological clearance
Circle Creek Basin – Inscription Rocks	Construct parking area, two interpretive signs, and 4.8 miles of gravel trail	Requires archeological clearance
Circle Creek Basin – Twin Sisters Rise Overlook	Construct interpretive wayside, parking area, picnic tables, vault toilet, and interpretive sign	Requires archeological clearance

LOCATION	ACTION	COMPLIANCE REQUIREMENT
Circle Creek Basin – Corrals/Historic Rural Setting	Construct parking area, unloading chute, corrals, interpretive sign, seating for activity area	Requires archeological clearance
Rim/Silent City – General	Obliterate/revegetate 3 miles of social trails and 5 miles of social roads, restore/revegetate 16,000 sq. ft. random parking areas, improve 2.5 miles of existing hiking trails, construct 1-mile trail, construct 1.6 miles of gravel trail	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.
Rim/Silent City – Parking Lot Rocks	Construct day-use parking area, picnic sites/tables, vault toilet, 3 orientation signs, garbage receptacle	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.
Rim/Silent City – Bath Rock	Construct parking area, picnic sites/tables, interpretive and information/orientation signs, garbage receptacle, and relocate vault toilet	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.
Rim/Silent City – Turtle Rock	Construct parking area, picnic sites/tables, vault toilet(s), information/orientation and interpretive signs	Requires archeological clearance
Rim/Silent City – Breadloaves	Construct parking area, 3 group campsites with parking, vault toilets, information/orientation, backcountry registration/information interpretive signs, garbage receptacle	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.
Primitive Campground/Trailhead	Construct 1/2-mile gravel road, 5.6-mile hiking trail, 50 walk-in sites, 2-mile hardened trail, vault toilets, parking area, garbage receptacle, 2 trailheads with information and interpretive signs	Requires archeological clearance
Indian Grove – General	Construct overlook parking area, day-use trail, interpretive wayside and sign, garbage receptacle, 7 unimproved campsites, 3 backcountry composting toilets	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.
Indian Grove – Backcountry	Obliterate/revegetate 1.5-mile existing road and improve/modify 7-mile trail from Breadloaves to Indian Grove	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.
Twin Sisters – General	Rip back/revegetate 2-mile gravel road to minimally discerible route	Programmatic exclusion (b)
Twin Sisters Basin – Trails Junction	Construct interpretive wayside/trailhead, parking area, 2 interpretive signs, 1 orientation sign	Requires archeological clearance
Twin Sisters Basin – Twin Sisters	Construct parking area, vault toilet, 1 orientation sign, 2 interpretive signs, garbage receptacle, 4-mile loop trail between Twin Sisters and Stage Station, and remove 2 vault toilets and picnic tables on north side of existing parking area	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.
Headquarters – Almo Entrance	Construct visitor center, entrance station, kiosk, administrative offices, trailer dump station, support facilities, and utilities infrastructure	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.
Maintenance Facilities	Construct maintenance warehouses/shops and fencing, and plant screening vegetation	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.
Housing	Construct NPS housing with associated utilities infrastructure	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.
Developed Campground	Construct 80-100 site campground, amphitheater, parking area, well, comfort station, signs, lighting, 2-mile road, 2.7 mile trail, and 1-mile road to water tank	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.
Emery Canyon Entrance	Construct entrance station, parking area, vault toilet, 1 orientation/information kiosk and sign, garbage receptacle	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.
Junction (Moulton) Entrance	Construct orientation/information kiosk, parking area, garbage receptacle	Programmatic exclusion (g) if within disturbed area. If action involves disturbing ground outside previously disturbed areas, archeological clearance would be required.

APPENDIX I:
CHANGES IN THE PROPOSAL (ALTERNATIVE 2) SINCE THE DRAFT COMPREHENSIVE MANAGEMENT PLAN / DEVELOPMENT CONCEPT PLAN / ENVIRONMENTAL IMPACT STATEMENT

Part One: Final Comprehensive Management Plan

The editorial changes and changes made in direct response to comments made in letters received are not included.

PURPOSE AND NEED FOR THE PLAN

Major Planning Considerations

Text has been changed to "City of Rocks has a long tradition of recreational use by local residents and is now receiving attention as an outstanding rock-climbing area."

Management Objectives

Three objectives have been added:

- Pending historic documentation, stabilize stage station site
- Interpret historic landscape at the stage station site reflective of the scene in 1869-82
- Provide for an appropriate level of recreational opportunities

One management objective has been deleted: Restore general historic landscape to approximate conditions of the stage station site reflective of the scene in 1869-82, pending the location of documentary evidence.

Several management objectives have been changed as follows:

> Provide opportunities for people to learn about the natural vegetation, with an emphasis on piñon pine, and about the **wildlife, with an emphasis on special species such as mountain lions and birds of prey** has been changed to **wildlife within the reserve.**
>
> Manage recreational activities so **they do not detract from the experiences of other visitors** has been changed to **as to minimize the potential for conflicts among different users.**

MANAGEMENT AUTHORITIES AND RESPONSIBILITIES

The land protection plan would be prepared in consultation with area landowners.

The reserve would be turned over to the state **before** principal visitor and administrative facilities are cooperatively developed.

Identification of Traditional and Contemporary Public and Private Uses

The description of where recreation use is concentrated has changed.

The plan now calls for a visual resource management plan.

The landownership pattern on the maps has been changed because private land has been obtained since the draft.

MANAGEMENT ZONES

The names, descriptions, and uses of some management zones has changed as shown on the following page.

The road from Emery Canyon to Indian Grove and north past Graham Peak is now shown as a four-wheel-drive road rather than a gravel road comparable to other main roads in the reserve.

Public Use and Development Zones

Tent campsites are now called primitive campsites.

Appropriate recreation would be . . . camping in **campgrounds** has been changed to **designated sites**.

The "Land Protection" section, column 1 from page 18 in the draft has been moved to follow the "Management Zoning" section of the plan.

The map **Areas of Special Concern Outside the Reserve Boundary** has been changed as follows:

> Under resource values in the legend, middleground of the California Trail has been deleted.

The proposed addition to the national historic landmark has been changed to a potential addition and only the foreground shown. The middleground has been eliminated.

The area of special concern just south of the reserve boundary is now suggested for potential addition to the national historic landmark, subject to landowner consent.

RESOURCE MANAGEMENT

Cultural Resources

The scope of the proposed plan would focus on **the reserve's history from prehistoric times to present day ranching** has been changed to **ranching practices present at the time the reserve was established**.

It has been reiterated that actions proposed on private land would require permission of the landowner or a willing seller acquisition of the interest necessary to provide for the intended public use.

California Trail/ Salt Lake Alternate

The proposal that **no recreational activities, grazing, or commercial or residential development would be permitted in these protected areas** has been deleted.

Historic Rural Setting

The definition of the historic rural setting has been changed from **ending in modern-day ranching** to **through the establishment of the reserve in 1988**.

Roads should remain **in their existing unpaved condition** has been changed to **remain unpaved but improved sufficiently to ensure safe use and maintenance**.

Additional Planning Requirements

A historic landscape study that was proposed in the draft is now underway.

A comprehensive reservewide survey, inventory, and assessment of archeological resources will evaluate their contextual significance and interpretive value has been added.

The Idaho state historic preservation officer will be asked to comment on these ongoing studies as well as the studies described in appendix F.

RESOURCE MANAGEMENT

Natural Resources

Reserve managers would seek technical assistance from the U.S. Fish and Wildlife Service in restoring wetlands and riparian areas and in completing a comprehensive inventory of natural resources within the reserve, especially for rare and sensitive species.

A Statement of Findings for Wetlands has been added in appendix J. It details how wetlands would be managed under the proposal.

Wildlife Management

Many rocks in the reserve **used by rockclimbers also** provide essential habitat to many species that are sensitive to human activity has been changed to **many rocks in the reserve provide essential habitat to some species that are sensitive to human activity.**

Any outcrops with occupied [breeding raptor] nests would be closed to climbing for the duration of the **breeding season**. Outcrops **in sight of** golden eagle and ferruginous hawk nest sites also would be closed has been changed to **breeding season for sensitive species** and Outcrops **within 300 meters and in sight of**

MANAGEMENT OF NATURAL RESOURCE USES

Domestic Livestock Grazing

Any grazing allotments in the reserve that were vacated for any reason by the recognized permittee of record would be **reallocated** consistent with sound range management principles or would be permanently withdrawn from domestic livestock grazing if it was in the best interest of resource protection and visitor use has been changed to **allocated to remaining or adjoining permittees with no increase in AUMs for those permittees. In these cases, the same number of AUMs would be permitted for larger allotments, and the total number of AUMs available in the reserve would decrease.**

Prior to any water development on public land a detailed on-site evaluation of wetlands in the reserve would be completed has been changed to prior to any **new** water development **that would affect wetlands** on public land

The following statement has been added: trailing corridors would remain for all other historic trailing routes. Trailing would be prohibited in the research natural area and where California Trail ruts are best preserved.

The [climbing management] plan will **provide strategies for protecting sensitive resources from climbing impacts** has been changed to **protecting cultural and natural resources from significant climbing impacts.**

VISITOR USE

Interpretation

Interpretive Themes

Two interpretive themes have been added: Vegetative Diversity and Stage Route.

Visitor Center Interpretive Programs

An interpretive trail has been added to the amphitheater and parking lot development.

East-West Road

Twin Sisters basin would be **returned as closely as possible** to an open expanse with **no** signs of modern development has been changed to **Twin Sisters basin would be managed to retain an open expanse with little or no signs or modern development**

Interpretive Trails

Historic Continuum Trails. Visitors would now be encouraged to visit a homestead and mining site. In addition to a trail from the primitive campground to a high point, a trail would be added from the primitive campground all the way to Twin Sisters.

Silent City Trail. The trail from Turtle Rock to Parking Lot Rocks would not be accessible to all visitors under the final proposal.

RECREATION

Camping

The statement that no RVs would be permitted at the primitive campground has been deleted.

Vehicle parking [primitive campground] would be centralized in one area from which campers would walk to campsites has been changed to **vehicle parking would be clustered in multiple areas to provide walk-in access to campsites.**

A group campground would be developed in the area behind Breadloaves has been changed to **A group campground for large groups**

Climbing

The extensive rockclimbing activity within the reserve would be supported within the front country recreation area of the natural area subzone, which would encompass all of section 36 and portions of adjacent sections 25 and 31 that offer prime climbing opportunities. **Most of the climbing activity within the reserve would occur within this area** has been changed to **the majority of rockclimbing activity within the reserve would continue to occur in the natural and recreational resource area, which encompasses all of section 36 and portions of adjacent sections 25 and 31. These areas offer prime climbing opportunities.**

Two of three paragraphs of this section have been deleted and replaced with a new discussion (see the "Recreation, Climbing" section).

Hiking and Horseback Riding

The following sentence has been deleted:

Backcountry recreational use in the portion of the natural area subzone west of the research natural area would be by registration only. This area would have no convenient access, and use would be expected to be limited has been changed to **A trail plan will be developed to identify the locations of designated trails within the reserve. Note** that the final proposal map shows a new trail from the first overlook just inside the reserve connecting to the Silent City trail to Indian Grove, and a trail from the primitive campground to Twin Sisters, most of which is new.

Mountain bikes . . . would be permitted only on existing roads that are open to all motorized vehicles has been changed to **mountian bikes would be limited to designated secondary roads or bicycle trails.**

GENERAL DEVELOPMENT

Facilities Inside the Reserve

Roads

A statement has been added — Gravel, sand, and materials would not be taken from within the reserve for road maintenance or construction. These materials would come from a nearby source and be petrologically and mineralogically compatible with the native rock of the reserve. Rock material used for road maintenance or construction would reflect the integrity of the lithologic units of the reserve.

Trails

A spur trail connecting the primitive campground with Twin Sisters has been added.

Two existing trail segments would be removed and their traces obliterated has been changed to **two existing road segments would be removed and converted to trail use**

1.5 miles of ranch road/trail from Emery Canyon Pass up to Indian Grove

Approximately 1.5 miles of ranch road/trail from the northeast boundary at Graham Creek to Indian Grove

Table 1: Day Use Activity Areas Accessible by Car

Inside the reserve

Circle Creek Basin Overlook
draft — 5-20 cars, no trailhead or other
final — 20 cars, trailhead for ridge access, sign, garbage eliminate ?

Circle Creek Basin — Nicholson Ranch
draft — trail to backcountry
final — interpretive trail

Twin Sisters View
draft — 5-10 car parking, no picnicking
final — 5-12 car parking, 3-5 picnic sites/tables, 1 two compartment vault toilet

Indian Grove Overlook has been added
5-7 car parking, interpretive wayside, sign, garbage

Breadloaves Group Camping Area Trailhead

Words in bold type have been deleted.

Design of a group camping area at Breadloaves would use shaded areas to the **north and to the** west of the existing **disturbed** site on the west side of the rocks.

Parking...would use the disturbed area with a **100-foot** setback from the western rock faces.

Indian Grove Backcountry Camping Area

The following sentences have been deleted: Of the potential seven sites, up to two may be designated for group camping. Fire rings for those two sites and a vault toilet might be provided.

FACILITIES OUTSIDE THE RESERVE

Headquarters Site

The size of the visitor center/administrative offices has been increased from 7,500 square feet to 9,500. A museum and 25- to 30-seat multipurpose room would be part of this addition.

Emery Canyon and Moulton Entrance

Roads

The proposal to build a bypass road around the southern end of the reserve has been deleted.

Utilities for Headquarters Site

Septic systems would service most of the junction site. A holding tank would be used at the trailer dump station. has been changed to

A sewage system would service most of the Almo junction site. The sewage system would be designed to meet state codes.

Developed Campground

RV Campground has been changed to **Developed Campground**.

The final includes a proposal to phase development by building 50 units initially and adding 50 units later as needed.

The proposal that the developed campground would have a separate well from the visitor center has been deleted.

Statements have been added:

Domestic water and sewage facilities would be designed to meet Environmental Quality and Clean Water Act requirements.

The 100-seat amphitheater would be expandable to 200 seats.

The existing four-wheel-drive road would continue past the developed campground and provide access to other public lands.

A hiking/bicycle trail would be built from the developed campground westward into the reserve to encourage nonmotorized use.

Statements have been deleted:

Half of this [road to the developed campground] would follow an existing four-wheel-drive road, and the rest would be new alignment.

Signs

The following statements have been added.

Orientation/information signs would be used outside the reserve on interstate and state highways. Requests to state highways to install signs would be made at the following locations:

Type I signs would be on I-84 south at Sublette exit (2)

DRAFT PLAN — PRESERVATION AND PUBLIC EDUCATION ZONE

California Trail Subzone: *Outstanding features (major landmarks, trail remnants, inscription rocks, encampment area): Emphasis on preserving outstanding features and interpreting them to the public.*

- Walking; nature viewing; photography • Picnicking allowed at Twin Sisters pending research • No grazing • No commercial or residential development

Public Access (entire trail corridor, encampment area): Emphasis on allowing visitors to walk along the trail and to wander freely through the encampment area.

- Walking; informal picnicking; nature viewing; photography; incidental, equipment-free scrambling on rocks • Grazing on public/private lands •no commercial or resident development

Impact Monitoring (northern end of encampment area): Emphasis on allowing same activities as in public access zone plus low-impact recreation, including minimum-impact climbing

Natural Area Subzone: *Outstanding features (research natural area): Emphasis on preserving outstanding features and interpreting them to the public. (Entire area currently in public ownership).*

- Nonmanipulative research by permit, walking, photography, nature viewing • No grazing • No commercial or residential development

General Natural Area: Emphasis on protecting important resource values.

- Hiking, informal picnicking, photography, nature viewing, minimum-impact climbing • No grazing • no commercial or residential development

Backcountry recreation : Emphasis on backcountry recreation use, with management attention to protect natural resources; grazing would be managed to protect natural resources and the backcountry visitor experience on this public land.

- Backcountry camping by permit only (walk-in), hiking, minimum-impact climbing • Grazing continued

Front country recreation: Emphasis on recreational use with management attention to protect natural resources.

- Climbing, camping, hiking, picnicking, photography, sightseeing • No grazing; no commercial or residental development

Historic Rural Setting Subzone: Emphasis on preserving the historic rural setting that existed at the time the reserve was established.

Public Land

- Cross-country hiking, informal picnicking, photography, nature viewing, minimum-impact climbing • Grazing continued • No commercial or residential development • Management request to limit recreation to same uses as for public land

Private Land

- Recreation by permission of landowner only • Grazing continued; no commercial or residental development • Management request to limit recreation to same uses as for public land

Impact Monitoring: Emphasis on more intense natural resource monitoring and management to ensure sensitive habitats are not degraded; no commercial or residential development.

DEVELOPMENT ZONE: Emphasis on providing facilities needed to support visitor use and reserve operations.

- Driving, bicycling, picnicking, camping, visitor education facilities • No grazing • No commercial or residential development

NOTE: Private land overlaps zoning. Remains in private use under county zoning unless government acquires sufficient interest on an opportunity basis.

FINAL PLAN — HISTORIC AND NATURAL PRESERVATION ZONE

California Trail Subzone: Emphasis on preserving outstanding features (major landmarks, trail remnants, inscription rocks, encampment area, California Trail corridor) and interpreting them to the public.

Foreground of California Trail

Emphasis on preserving the California Trail corridor and interpreting it to the public. Recreation uses not directly associated with the access or the enjoyment and interpretation of the California Trail would generally be precluded. Precluded activities would be the siting of recreation facilities such as campgrounds and picnic areas and recreation uses such as bicycling, climbing, or scrambling on the Inscription Rocks, Twin Sisters formation, Pinnacle Pass, and other physical features that have cultural significance. Grazing would be discontinued on areas shown in appendix J.

General Use

Emphasis on preserving outstanding features outside the foreground of the California Trail corridor.

Recreation uses not directly associated with access, enjoyment, and interpretation of the California Trail would generally be precluded. Climbing use would be determined based on the climbing management plan. Grazing would be discontinued on areas shown in appendix J. Grazing use in other parts of this area would be determined by the natural resource management plan and grazing management plan.

Natural Area Subzone: Emphasis on preserving exceptional natural resource values and providing recreational opportunities where appropriate.

Research Natural Area

Emphasis on protecting natural processes and conducting nonmanipulative research. Use by permit only. Grazing would not occur.

General Natural Area

Emphasis on protecting important natural resource values and providing for a level of public and private use that does not degrade the natural qualities of the area. Registration required. Grazing would be discontinued on areas shown in appendix J. Grazing in other areas would be determined by the natural resource management plan and grazing management plan.

Natural and Recreational Resource Area

Emphasis on providing prime resource-based recreational opportunities managed in balance with the protection of natural resources. No grazing.

HISTORIC RURAL SETTING ZONE

Emphasis on preserving the historic rural setting that existed at the time the reserve was established. Climbing and grazing use would be determined by the resource climbing and grazing management plans.

PUBLIC USE AND DEVELOPMENT ZONE

Emphasis on providing facilities needed to support visitor use and reserve opportunities.

NOTE: Private land overlaps zoning. Remains in private use under county zoning unless government acquires sufficient interest on an opportunity basis.

Housing	**The draft plan stated that:** A housing fund would be established for acquiring property as it becomes available in Almo. Money in the housing fund should not be used for anything else. Design and construct housing in small increments; possibly on permanent and three seasonal units (1/4 of need) evenly spaced over a 10- to 15-year period. Housing should not all look alike. It should fit into the local character. This incremental building would allow for housing to increase as the staff, development, and programs of the reserve grew. Participants: Provision of housing is expected to be the responsibility of the Idaho Department of Parks and Recreation. The department proposes to lease land for the visitor center/administrative facility, the RV campground, maintenance area, and the employee housing from the Bureau of Land Management. **The final plan has been changed to:** Employee housing is expected to be part of the reserve's administrative complex at Almo Junction on land owned by the Bureau of Land Management. Participants: The provision for employee housing is expected to be the responsibility of the Idaho Department of Parks and Recreation. The National Park Service would be expected to cost-share housing design and utility development for the housing area as part of a total development package. It is recognized that some permanent and seasonal staff might elect to reside in Almo or other nearby communities and thus reduce the need for additional housing at Almo Junction.	Participants: It is expected that this project would be funded **by the National Park Service** has been changed to **cooperatively**.	**PHASING OF DEVELOPMENT** **Backcountry Camping in Indian Grove Area**
		The discussion has been expanded and moved to follow the discussion of the developed campground. Construction has been added to the short-term phase.	**Primitive Campground**
		The following statement has been deleted: Staffing would be phased, with the majority expected to be provided by the Idaho Department of Parks and Recreation. **The final proposal** states that **funding for** some specialized positions may be augmented by other entities, including the National Park Service, cooperating associations, volunteers, and others.	**STAFFING AND OPERATING COSTS**
		The proposal to continue use of the existing site near Almo on leased land has been deleted as a long term use. The Almo site would be replaced by the new administration and maintenance facilities.	**ADMINISTRATION AND MAINTENANCE**

DEVELOPMENT PHASING SCHEDULE — DRAFT PLAN

Short-term Phase	Medium-term Phase 1998-2000	Long-term Phase 2001-2004
Construct RV campground, potable water, trailer dump station	Plan, design, and construct visitor center/museum/ administrative offices	Plan, design, and construct maintenance support facility
Stabilize existing interior roads; build entrance stations and first overlook on east	Plan, design, and construct new realigned interior roads	
Prepare California Trail wayside exhibits	Construct remaining wayside exhibits and day use recreation areas	Develop backcountry camping in Indian Grove area
Initiate coalition to assist planning the road around the south end of the reserve	Design road around south end of reserve no longer planned	
Construct primitive campground area	Construct employee housing in phase 1 (1 permanent and 4 seasonal quarters)	Construct employee housing in phase 2 (1 permanent and 4 seasonal quarters)

DEVELOPMENT PHASING SCHEDULE — FINAL PLAN

Areas	Short-Term Phase	Medium-Term Phase	Long-Term Phase
Inside Reserve			
Circle Creek Basin Overlook	X		
Circle Creek Wayside Basin-Nicholson Ranch	X		
Inscription Rocks Wayside	X		
Twin Sisters View Wayside	X		
Corrals/HRS		X	
Turtle Rock		X	
Bath Rock		X	
Parking Lot Rocks		X	
West Breadloaves		X	
Trails Junction Wayside	X		
Twin Sisters Wayside	X		
Primitive Campground	X		
Indian Grove Overlook		X	
Indian Grove backcountry camping	X		
Stabilize interior roads	X		
Realign interior roads		X	
Outside Reserve			
Almo Entrance	X		
Emery Canyon Entrance	X		
Junction (Moulton) Entrance	X		
Granite Pass View	X		
Visitor Center		X	
Trailer Dump Station	X		
Maintenance Facility			X
Employee Housing			
Phase 1		X	
Phase 2			X
Developed Campground	X		

CHANGES IN THE PROPOSAL (ALTERNATIVE 2) SINCE THE DRAFT COMPREHENSIVE MANAGEMENT PLAN / DEVELOPMENT CONCEPT PLAN / ENVIRONMENTAL IMPACT STATEMENT

Part Two: Environmental Impact Statement

Table 2: Summary Comparison of Development, Alternatives 1-3

Alternative 2 has been revised as follows:

Parking Lot Rocks
Changed construct **5-10 car** parking lot to **15-20-car**

Primitive Campground/Trailhead
Add **5.6** mile of hiking trail from the primitive campground to a ridge overlook **and another segment from the primitive campground to Twin Sisters**

Indian Grove
Delete "Obliterate 1.5 mi. of existing 4WD road up Graham Creek."
Change 3 backcountry type **vault** toilets **near campsites** to **composting**

Twin Sisters Basin
Change Rip back 2 mi. of 16' gravel road to create a minimally discernible ranch **route** through the Twin Sisters basin to **road for local use**
Delete "Realign 1 mile of the road"

RV Campground changed to **Developed Campground**
Change **2 two-compartment vault toilets** to **flush toilet facilities**

Reserve Headquarters/Operations/Employee Housing
Changed 8,000 sq. ft. **covered warehousing** to **covered shop space and warehousing**.

ENVIRONMENTAL CONSEQUENCES	Closure of Twin Sisters to climbing would result in added protection to that rock formation.	
Impacts on the Natural Biological Diversity	Because of changes to the proposal reflected in the Statement of Findings for Wetlands (Appendix J), grazing would continue to adversely impact up to 9,895 acres in the reserve over the long term compared to 10,721 acres in the draft.	A section has been added on Rocky Mountain mule deer. **Species of Special Concern** A Statement of Findings for Wetlands, Appendix J, details how wetlands would be managed under the proposal. The percentage of riparian and wetland areas directly affected by livestock grazing changed from 74% in the draft to 34% in the final. The percentage protected from direct livestock grazing increased from 26% in the draft to 66% in the final. This would result in fewer impacts to wetland and riparian areas. **Wetlands, Riparian Areas, and Floodplain**
IMPACTS ON THE SOCIOECONOMIC ENVIRONMENT		The draft proposal included a moratorium on climbing Twin Sisters, pending the outcome of a resource impact study.
Recreational Opportunities		The current proposal would emphasize resource protection of the foreground of the California Trail, including Twin Sisters. There would be a permanent ban on climbing and other recreational opportunities in the foreground of the California Trail, including Twin Sisters. These restrictions on climbing and other activities in the viewshed from the California Trail would make some routes inaccessible to climbers. Of the eight favorite climbing rocks, seven would be available for climbing.
PRIVATE LANDOWNERS AND LIVESTOCK GRAZING PERMITTEES		Under the draft proposal, closing 2,192 acres of 17% of the public and private rangeland to grazing in the reserve would have an adverse economic impact on four permittees. Under the current proposal closing 283 acres of public land to grazing would have adverse economic impacts on ranchers/permittees.
Local Economy		If all the development proposed in the draft plan were constructed, over the life of the plan, short-term benefits from construction would be total sales benefits of about $98.2 million and tax revenue benefits of about $13 million, and about 3,928 short-term jobs would be created.

Under the current proposal if all the development proposed in the draft plan were constructed, over the life of the plan, short-term benefits from construction would be total sales benefits of about $78 million and tax revenue benefits of about $10.3 million, and about 3,120 short-term jobs would be created.

APPENDIX D: SITE DESIGN CONSIDERATIONS

ROADS AND TRAILS

The road into Twin Sisters from Junction Valley road would not be repositioned to the north of the present alignment under the final proposal.

CAMPSITES

Added: A second route into the backcountry camping area would be from the parking area along the Almo Park Road to the northwest of Indian Grove. This would require about a 1-mile hike in.

STRUCTURES

Housing for six permanent employees **and up to 12 seasonals** would be constructed on a location south of the existing town.

Deleted: Housing for up to 12 seasonals would be built or leased on sites located in and around Almo. If newly constructed, choice locations would include areas where

septic and water systems are most suited

structures would not be viewed by visitors

traffic from residences would not load onto the main north-south route through town, nor the east-west arrival route south of town presence of mature trees would alleviate harsh weather conditionsneighboring uses are not negatively impacted and vice versa

APPENDIX E: PROPOSED DEVELOPMENT AND ESTIMATED OPERATING COSTS

Circle Creek Basin Overlook

Add construction of

trail(s) between Circle Creek Basin overlook and Inner City and Indian Grove

5.0 miles of gravel trail from overlook to Pinnacle Pass (not hardened)

Circle Creek Basin

Obliterate and revegetate 1.5 miles of hardened 4WD road across Circle Creek Basin has been changed to: Ripback 1.5 miles of 10' hardened road across Circle Creek basin to a 3' natural surface trail corridor. Revegetate remaining 7' width

Inscription Rocks

Change 10-car parking to 20-car.

Twin Sisters Rise

Add construction of

3-5 picnic sites/tables

1 2-compartment vault toilet

Change parking from 10 to 12 cars

Rim/Silent City

Add construction of

1.6 miles of gravel trail from Circle Creek Basin, along Center Creek to just south of the Emery Canyon Road

Change rehabilitate 5 miles of social trails to rehabilitate 5 miles of social roads

Primitive campground/trailhead

Change construct 1.5 miles of hiking trail to construct 5.6 miles of hiking trail; one segment to high point, one segment to Twin Sisters

Construct 25 walk-in sites has been changed to 50.

Added Construct 1 mile of trail to rim climbing area.

Add construction of 2.2 miles of gravel trail from primitive campground along Trail Creek to reserve boundary

Twin Sisters

Remove 2 vault toilets on north side of Twin Sisters has been changed to: Remove 2 vault toilets, picnic tables and parking at Twin Sisters..

Indian Grove

Add construction of 3 car parking and overlook

Place interpretive sign (Type III)

Place garbage receptacle

Add obliterate/revegetate 1.5 mile of existing 4/WD road from Emery Canyon Pass to Indian Grove

Backcountry

Add "Improve and modify 7 miles of hiking and horseback riding trail from Breadloaves to Indian Grove."

Twin Sisters Basin

Change "Rip back and revegetate 2 miles of 16' gravel road to an unmarked, **minimally discernible route** to **road for local use**

Outside Reserve

Increase size of visitor center from 7,500 to 9,500 sq ft

Change construct parking for 45 cars, 5 RVs/buses, 15 service spaces to construct parking for 45 cars, 8 RVs, 2 buses, 15 service spaces

Change **holding tank** for trailer dump station to **septic tank and drainfield**

Housing

Change construct **6** permanent quarters with attached garage to construct **12**

Change RV campground to Developed Campground

Add construction of 2.7-mile gravel hiking/bicycle trail westward from campground to the reserve

Developed Campground

Add 2-mile 18' gravel access road (existing 4WD alignment)

Change construct 1/2-mile road to water storage tank to 1-mile road.

Almo Entrance

Add 10 car/3 RV pulloff to staffed entrance station.

Add unstaffed entrance kiosk.

Emery Canyon Entrance

Change construct parking area for 5 cars/3 RVs to 10 cars/3RVs. Add construct staffed entrance station

Junction (Moulton Entrance)

Add construct unstaffed entrance kiosk

This appendix has been added since the draft.

APPENDIX H SECTION 106 COMPLIANCE REQUIREMENTS

This appendix has been added since the draft.

APPENDIX J STATEMENT OF FINDINGS FOR WETLANDS

APPENDIX J: STATEMENT OF FINDINGS FOR WETLANDS

STATEMENT OF FINDINGS

INTRODUCTION

The Proposed Action

The City of Rocks Comprehensive Management Plan proposed action would have an overall beneficial effect on wetlands compared to existing conditions reflected in the no action alternative. Actions that would have beneficial impacts include restoring disturbed areas, closing some roads and trails, relocating some facilities and roads, acquiring interests in private lands, limiting livestock access, cooperative management with private landowners and other agencies, and carrying out erosion control measures.

The proposed roads, trails, campground, and other facilities will be placed outside wetlands and floodplains unless design analysis and compliance demonstrates that there are no practicable alternatives. The NPS will reroute a segment of road near Emery Canyon out of a wet area and rehabilitate about 1.7 acres of wetland. The proposed primitive campground near the southwest corner of section 36 will also be located near wet areas. The campground and access to it will be designed and located to ensure that there will be no modification in or near wetlands that would cause adverse impacts. Additional mitigation and environmental compliance, including a statement of findings, will likely be required when the exact location of the proposed roads, primitive campground, and other facilities are decided.

Continued grazing is the only other action under the proposal that will be located in or near wetlands and is not excepted under NPS wetland guidelines. Grazing in the reserve will be managed under a grazing management plan now being developed that includes livestock control strategies to protect wetlands, riparian areas, and water quality. Grazing and agricultural uses of water would directly affect about 244 acres of wetlands and riparian areas in the reserve. The no action alternative would directly affect 688 acres, or 444 more acres than the proposed action. When the grazing management plan is completed and methods are instituted to limit livestock access in these areas, conditions in wetlands and riparian areas on public land should improve. The extent of impacts on privately owned wetlands and riparian areas would depend on the level of cooperation between private landowners and reserve managers to use wetland protection methods in the grazing management plan. The grazing management plan will need to be reviewed by National Park Service, Washington Office, Water Resources Division for consistency with this statement of findings and additional mitigation and environmental compliance including a statement of findings may be required.

Site Description

In the arid and semiarid west, wetlands and riparian areas cover only a very small percentage of land and much has been lost or severely degraded because of overuse. These wetlands have ecological importance far beyond their relatively small acreage, providing high productivity, critical habitats, water quality and quantity enhancements, and other important functions. They also have a greater quantity and diversity of vegetation than adjoining uplands.

Wetlands and associated riparian vegetation are limited to a small portion of the reserve next to stream courses and springs, covering about 724 acres. Of this total, 458 acres are on private land, and 266 acres are on public land. Like other parts of the interior west, severe degradation of wetlands and riparian areas has occurred in the reserve. Past land use activities have accelerated soil erosion,

reduced water flows, and eliminated native wetland plant species in many areas of the reserve. Where riparian areas are in good condition plants may include aspen, willow, Rocky Mountain maple, box-elder, thinleaf alder, chokecherry, rushes, sedges, and bluegrasses. Reserve riparian habitat also supports a variety of wildlife including prey for golden eagle, ferruginous hawks and other raptors. The ferruginous hawk has been designated as a candidate species for listing under the Endangered Species Act.

Detailed on-site evaluations of condition, ecological functions, and location of wetlands have not been conducted for most areas of the reserve. The U.S. Fish and Wildlife Service, however, has prepared draft National Wetlands Inventory (NWI) maps for the reserve and adjacent areas. The NPS also mapped riparian and wet areas independent of the FWS. To ensure that most of the wetlands were considered during planning the two maps were combined in the Geographic Information System vegetation map (see map). Although some mapped riparian areas may not be true wetlands, these areas buffer wetlands and support an important and sensitive community needing additional protection.

JUSTIFICATION FOR USE OF WETLANDS

Why the Proposed Action Must be Located in Wetlands

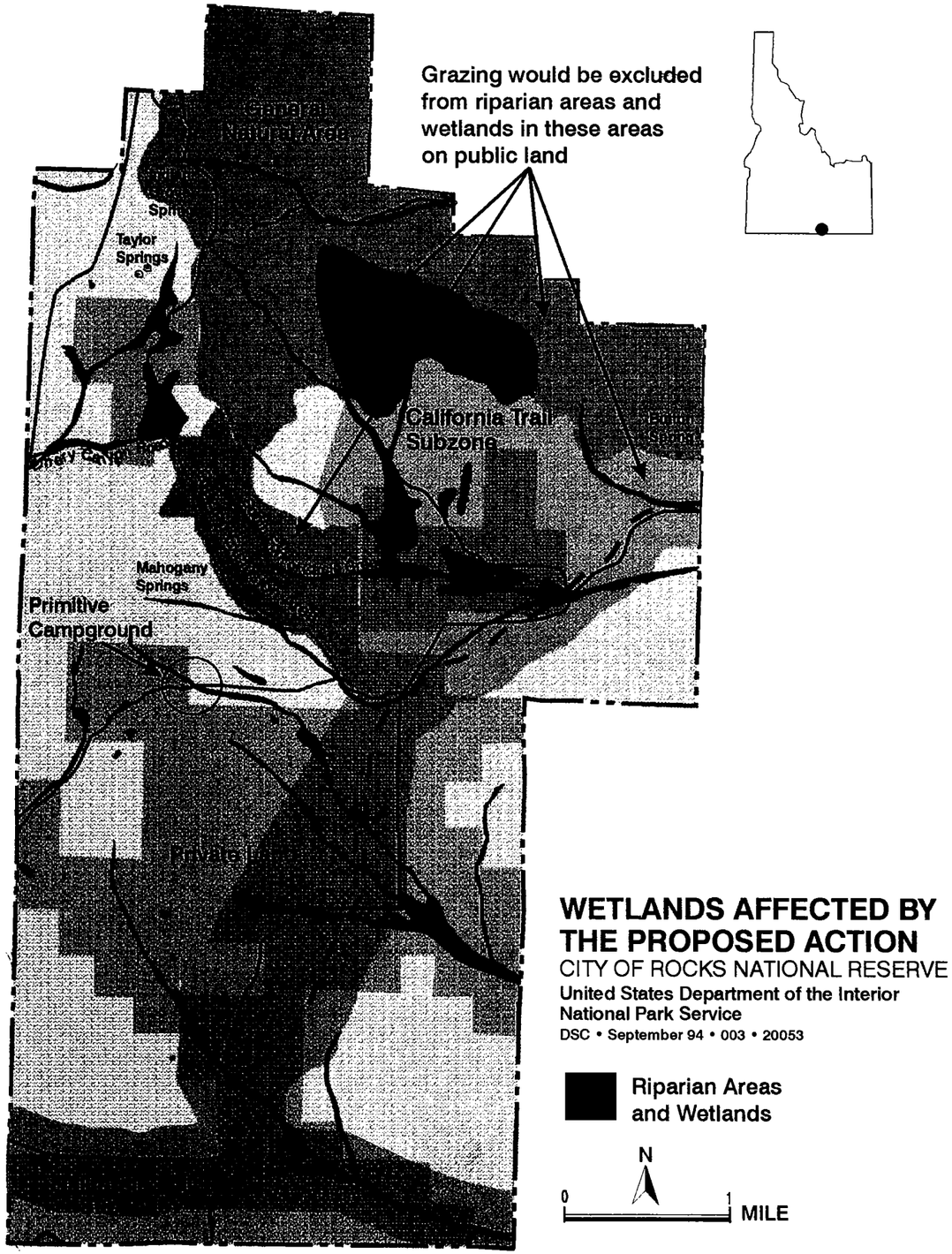
The legislation establishing the reserve directed that the Comprehensive Management Plan (CMP) identify those areas or zones within the reserve which would most appropriately be devoted to 1) public use and development, 2) historic and natural preservation; 3) private use subject to appropriate ordinances designed to protect the historic rural setting. The CMP identified riparian zones and wetlands as natural preservation areas to be protected. Where private grazing use on public land occurs to maintain the historic rural setting livestock will be managed to protect wetlands and riparian areas.

Investigation of Alternatives

In addition to the proposed action described on the preceding page, three alternatives for City of Rocks National Reserve were considered. One alternative would be to phase out grazing on all public land in the reserve and restore wetlands to natural conditions. Although this alternative offered the greatest beneficial impact on wetlands it was rejected because it would have an adverse economic impact on ten permittees and the local economy.

A second alternative would be to protect wetlands by phasing out grazing on part of the reserve and limiting livestock access to other wetlands on public lands. This would have protected at least 183 acres of wetlands and riparian areas from the direct impacts of cattle grazing, while allowing livestock grazing to continue on most of the public land on the reserve. This alternative was rejected because it would have an adverse economic impact on four permittees and the local economy.

The no action alternative would continue managing livestock grazing under the BLM and USFS without limiting livestock access to wetlands. This alternative was not considered suitable because there would be no mitigation to prevent wetland impacts or to restore wetlands damaged by past land uses. Therefore, this alternative would not meet the objectives of Executive Order 11990 for protection of wetlands.



WETLANDS AFFECTED BY THE PROPOSED ACTION

CITY OF ROCKS NATIONAL RESERVE

United States Department of the Interior
National Park Service
DSC • September 94 • 003 • 20053

Riparian Areas and Wetlands

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MODIFICATIONS TO MINIMIZE HARM

Under this alternative, domestic livestock grazing and trailing activities on public lands will be excluded from wetlands and riparian areas in the California Trail subzone (includes the foreground of the California Trail, Circle Creek Basin, and stage station site), the General Natural Area, the Research Natural Area, portions of the South Fork of Circle Creek Basin, Taylor Springs, Mahogany Springs, and some damaged wetlands and riparian areas on public lands in any zone. This would result in the protection of about 220 acres of public wetlands and riparian areas. This will protect 30 percent of the total wetland and riparian acreage within the reserve, which is 83 percent of the publicly owned wetland and riparian areas. The NPS would also give a high priority to acquiring private land within the California Trail subzone from willing sellers. If willing sellers and land acquisition funds were available, this would eventually protect an additional 260 acres (36 percent) of wetlands and riparian areas from the direct impacts of livestock grazing. A total of 480 acres (66 percent) of wetlands and riparian areas in the reserve would eventually be protected from the direct affects of livestock grazing.

The protection of all wetland and riparian areas within the reserve will be addressed through the following planning actions:

1. Under the new Resource Management Plan a wetland inventory, monitoring, and protection program will be developed. The program will include a detailed on-site evaluation of all wetlands in the reserve. The study would determine the location, condition, threats to, and ecological function of all wetlands. Baseline water quality and quantity data would also be gathered from all streams and springs in the reserve. Measurements would include biotic and abiotic elements. The data would be used to monitor and mitigate impacts, including those caused by grazing. Strategies to restore damaged wetlands will be developed to reestablish their natural ecological functions. Methods such as limiting livestock access and structural improvements to abate soil erosion may be required to improve wetland conditions in some areas. If additional water was needed to protect or restore wetlands, water rights would be obtained where possible according to state law.

2. A Grazing Management Plan now being developed will incorporate wetland protection and restoration strategies developed under the Resource Management Plan. This plan would include livestock management techniques to limit access to wetlands. Techniques will vary depending on the condition and sensitivity of wetlands in a particular area. In some cases, fences or other restrictive barriers would be built to keep livestock out of wetlands, either permanently or until wetland vegetation has recovered and soils have stabilized. In other wetland areas, livestock would continue, but be more limited. For example, grazing rotation and deferred seasons might be used to protect riparian areas during periods when they are most vulnerable to damage. Direct water pollution by livestock grazing under commercial grazing permits will also be prevented by eliminating existing corrals and watering sites near all streams and springs that originate in the reserve. The grazing management plan would include strategies to develop alternate water sources to move stockwater tanks and livestock away from wetlands on public lands. Only water sources that did not directly modify wetlands or change the timing, distribution, or amount of water supplying wetlands on public lands would be developed. The reserve will work cooperatively with private water rights owners that divert water from wetlands on public land to encourage them to mitigate any damage they may cause to wetlands. In some cases, livestock grazing permits may be modified to ensure the protection of wetlands. Additional environmental compliance, including a statement of findings, may be required to address the impacts caused by specific actions under the grazing management plan.

3. All applicable state and federal environmental permits would be obtained before any construction that affected wetlands, including any new water diversion systems. Additional mitigation may be required by the Army Corps of Engineers and the State of Idaho to ensure that wetland manipulation activities in the reserve comply with the federal Clean Water Act.

SUMMARY

The CMP proposed action would generally improve the degraded conditions of reserve wetlands. Actions that would have beneficial impacts include restoring damaged areas, closing some roads and trails, relocating some facilities and roads, acquiring interests in private land, and cooperative management with private landowners and other agencies. In addition, excluding grazing from approximately 220 acres of riparian habitat on public land and limiting livestock access to riparian areas in other public portions of the reserve would improve wetland conditions. Acquiring land within the California subzone from willing sellers would eventually protect an additional 260 acres of riparian habitat from the direct affects of livestock grazing. Proposed new developments and road improvements will be placed outside wetlands and floodplains unless there were no practicable alternatives. But, if the final site of new facilities would still cause impacts, additional compliance, including a Statement of Finding will be necessary.

Recommended: Keith B. Dunlap 9/16/94
Pacific Northwest Region, Compliance Chief — Date

Approved: Dave R. Kimball 9-16-94
Washington Office, Water Resources Division Chief — Date

C. H. Meyrand 9/26/94
Pacific Northwest Region, Regional Director — Date

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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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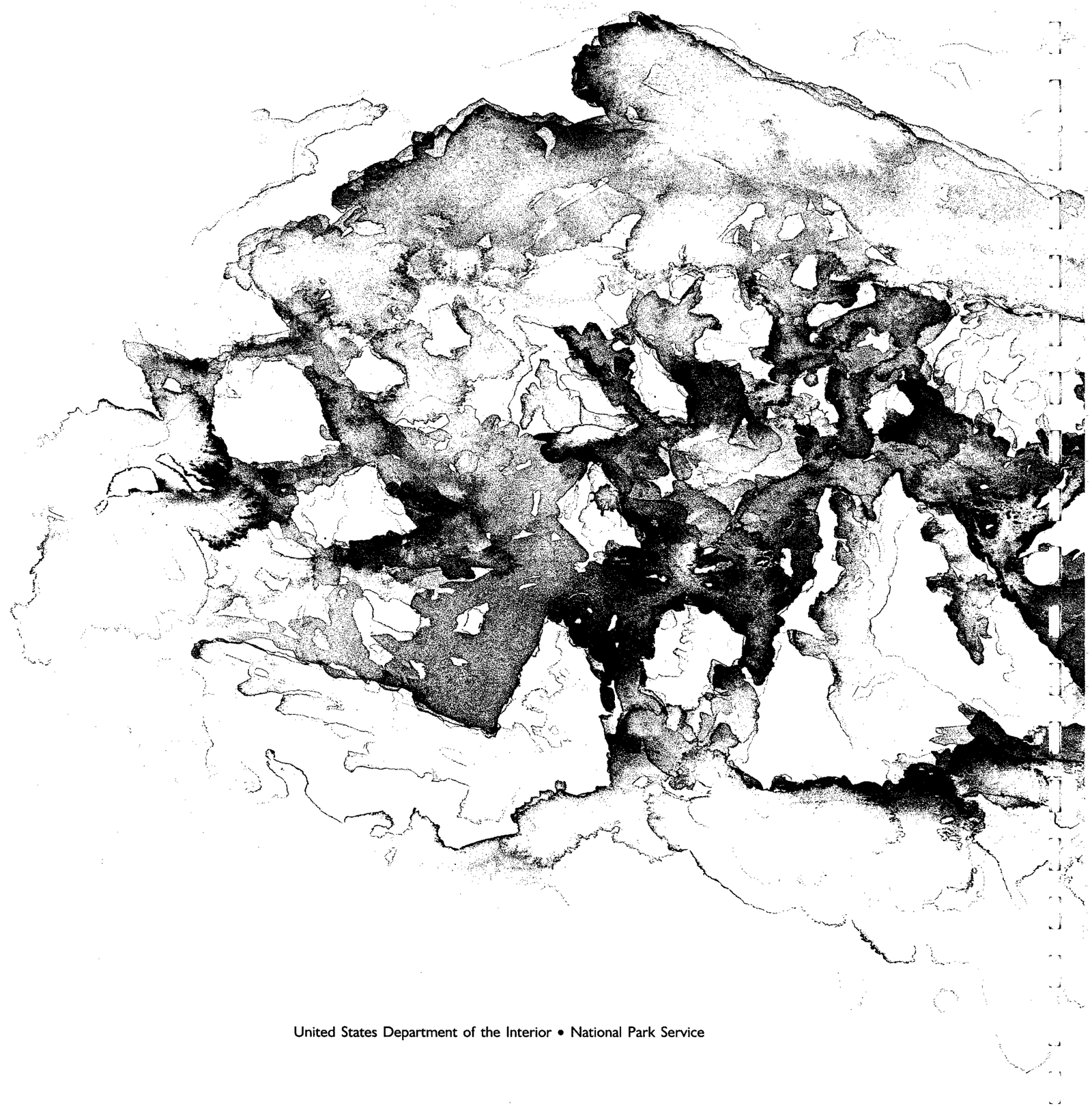

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