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Scofield Reservoir

Scofield Reservoir

Resource Management Plan

April 2001

U.S. Department of the Interior
Bureau of Reclamation
Upper Colorado Region
Provo, Utah

Prepared By
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This Resource Management Plan was prepared by the Bear West Consulting Team in cooperation with and for the Department of the Interior, Bureau of Reclamation, Upper Colorado Region, under Contract No. 1425-2-CA-40-12580, entitled *Resource Management Planning* and under Delivery Order No. 1425-2-PD-40-12580-004, entitled *Preparation of Resource Management Plan for Scofield Reservoir.*

PRO-FONSI-01-001

FINDING OF NO SIGNIFICANT IMPACT

Scofield Reservoir Resource Management Plan
Scofield Project

United States Department of the Interior
Bureau of Reclamation
Upper Colorado Region
Provo Area Office
Provo, Utah

Recommended by:

Kerry Schwartz _____ April 5, 2001

Kerry Schwartz
Chief, Environmental Group

Date

Approved by:

_____ April 6, 2001

for Bruce C. Barrett
Area Manager, Provo Area Office

Date

FINDING

The Bureau of Reclamation (Reclamation) has determined that implementing the Proposed Action Alternative of the Resource Management Plan (RMP) for Scofield Reservoir will not have a significant impact on the quality of the human environment in the plan area and that an environmental impact statement is not required. This decision was based on a thorough review of public comments received during the public review process and the environmental impacts as described in the Scofield Reservoir Draft Environmental Assessment (EA). This decision is in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, and the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 CFR parts 1500-1508).

DECISION

Reclamation has decided to implement Alternative C, which is the Proposed Action as described in the draft EA. Alternative C prescribes a management plan for Scofield Reservoir that will provide year-round recreation opportunities with an angling emphasis, while protecting the water quality of the reservoir, cultural resources, wetlands, and wildlife habitat present in the project area. Visitor facilities may be renovated and constructed to provide quality recreation without adversely impacting other resources in the project.

Refinements to the draft EA, as they relate to Management Direction, are reiterated here with added words italicized:

1. Prohibit vehicles from parking below the ordinary high-water line on Reclamation-controlled lands, ***except for maintenance and emergency vehicles, and designated areas authorized by Reclamation.***

2. The following direction: "Allow visitor parking in designated paved parking areas only." will read: Allow visitor parking only in designated ***improved*** parking areas.

3. Reclamation encourages intensified management of livestock grazing on ***Reclamation-controlled lands, according to existing or future Reclamation approved license agreements.***

4. ***Reclamation will ensure that*** mineral development, including ***the development of*** salable, leasable, and locatable minerals, is compatible with project and planned purposes.

5. The term ***flood*** easements replaces *"flow"* easements throughout the document.

6. The following direction: "Reclamation-controlled boundary will be surveyed and

fenced." will read: Reclamation-controlled boundary will be surveyed and ***marked.***

REASONS FOR THE DECISION

A finding of no significant impact is based on the following:

1. Alternative C will have no adverse effect on such unique characteristics as cultural resources, wilderness areas, wetlands, and riparian areas.

2. The environmental effects of alternative C are neither controversial nor do they involve unique or unknown risks.

3. Alternative C will have no adverse effect on species either currently listed or proposed for listing as endangered or threatened species, and no effect on designated critical habitat for these species.

4. Alternative C does not threaten to violate a Federal, State or local law or requirements imposed for protection of the environment.

Reclamation has analyzed the environmental effects, public comments, and the alternatives that were considered in detail. Reclamation believes the Proposed Action best meets the purpose and need for this project.

PUBLIC INVOLVEMENT

Reclamation carried out public involvement activities for the RMP from October 1994 to September 2000. A planning group of 34 members from interested Federal, State, and local government agencies, private organizations, and individuals met in Price, Utah, October 19, 1994, and developed a list of issues and concerns surrounding the management of Scofield Reservoir. This list provided the basis for the scoping notice. A public scoping meeting was advertised in the Price, Utah, newspaper the *Sun Advocate,* and a scoping document was mailed to interested parties. The public scoping meeting was conducted in Scofield, Utah, November 19, 1994.

To contact the people most affected by the RMP, Reclamation mailed 391 scoping notices to private land owners to solicit comments, and received 47 responses. These comments are found in the Phase I Report. A user survey was conducted during summer 1995 to solicit comments from reservoir visitors across the Wasatch Front and throughout Carbon County. Additionally, Reclamation distributed 149 user surveys and received 68 responses. A copy of the survey and compilation of survey responses is retained in the Provo Area Office project file. An executive summary to the draft EA was released for public review and comment in September 2000. In

response to individuals desiring more detailed information, Reclamation mailed 60 copies of the draft EA and 179 executive summaries of the draft EA.

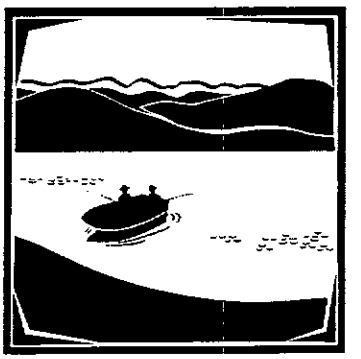
A public meeting to receive comments on the draft EA was conducted September 27, 2000, at Price, Utah, with 37 individuals attending, following which 26 comment letters were received. After evaluating the public comments, Reclamation determined that revisions to the draft EA were not needed. The project file in the Provo Area Office contains the comment letters as well as a complete description of all public involvement activities.

SUMMARY OF ENVIRONMENTAL IMPACTS

The predicted environmental impacts of the Proposed Alternative are described in Chapter 4 of the draft EA. The environmental analysis in that document focuses on impacts to partnerships, water resources, recreation and visual resources, natural and cultural resources, and land management. The environmental analysis indicates that the direct, indirect, and cumulative impacts will be temporary, short-term, and insignificant.

ENVIRONMENTAL MITIGATION COMMITMENTS

The environmental mitigation commitments prescribed for impacts resulting from implementation of Alternative C, the Proposed Action Alternative, will be carried out by Reclamation, by other managing or operating agencies, or by entities as described in Chapter 6 of the draft EA. These commitments have been incorporated into the RMP management direction and are incorporated by reference into this decision. The implementation and effectiveness of mitigation measures will be monitored by Reclamation. This monitoring will ensure incorporation of mitigation requirements in all construction contract specifications, as appropriate, and compliance with mitigation measures recommended by Reclamation or by other agencies.



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Chapter 1
Introduction

INTRODUCTION

The Resource Management Plan (RMP) for Scofield Reservoir, in Carbon County and Utah County Utah, provides management direction necessary to protect the rights of involved contracts, legislation, and agencies, while identifying and scheduling measures necessary to achieve desired future conditions of resources. Management direction (in the form of goals, objectives, standards, and guidelines) sets the stage for management actions to guide activities and uses which affect water, recreation, natural and cultural resources, partnerships, and land operations. Management direction is applied to both plan-wide and site-specific areas. Monitoring and evaluation requirements are intended to assure conformance with requirements, quality, and good stewardship.

The 10-15 year RMP duration is subject to certain contracts, agreements, and Bureau of Reclamation (Reclamation) instructions and policy. Actions that may take place are identified, but may not be assured because of site-specific conditions, changes in budgets, changes in economic conditions, and changes in laws and regulations.

This Resource Management Plan for Scofield Reservoir was prepared by Reclamation to protect the rights involved in contracts, legislation, and agencies. It also establishes management policy and planning direction for Reclamation lands and resources at Scofield Reservoir including: water resources, recreation and visual resources, natural and cultural resources, and land management.

MISSION

The United States Bureau of Reclamation was created within the Department of Interior by the Reclamation Act of 1902. The purpose of the Act was to reclaim the arid west and to provide economic stability in 17 western states by developing irrigation projects. Over the years, single purpose projects gave way to the development and construction of multipurpose projects.

Reclamation's mission is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

The vision statement of Reclamation's Upper Colorado Region is to enhance the quality of life through excellence in resource management.

HISTORY

Scofield Reservoir lies in the northwest corner of Carbon County and extends a few hundred feet into Utah County. It is located in Pleasant Valley, north of the coal mining community of Scofield. The picturesque reservoir rests at 7,600 feet and is enclosed by mountain slopes in a natural environment.

Irrigation of what is now Scofield Reservoir began in the early 1880's. Ditch companies were organized by the early settlers to divert the waters of the Price River onto the otherwise desert lands around Price City. From time to time the canal systems were combined and extended, but the natural flow of the river proved inadequate for more than a small portion of the cultivated lands.

Under the authority of the Price River Water Conservation District (PRWCD, organized in 1921 to develop storage facilities on the Price River), the original Scofield Dam was constructed during 1925 and 1926, storing water for the 1926 season. The dam was financed through the sale of bonds.

However, by 1928, the outlet tunnel was not stable. Consequently, on May 21, 1928, a tunneling beaver created a leak which almost caused failure of the dam. Fortunately, the combined efforts of surrounding communities averted the disaster (Stene, 1999). By 1942, the storage limit had been lowered to 30,000 acre-feet (one-half the original storage capacity) due to concerns about the stability of the outlet tunnel and other structures. It was then determined that the dam was unsafe and could not be economically repaired. Around this time, PRWCD was unable to redeem its bonds as they became due and efforts to refinance were unsuccessful (USBR, 1972).

During World War II, the second Scofield Dam was constructed to prevent possible flooding of communities, railway systems, coal mines, and power and telegraph lines in the area. In 1943, the project was approved by the President and construction began at the end of the year (USBR, 1972).

To facilitate the construction of the new dam, a contract was made between Reclamation, PRWCD, and Carbon Water Conservancy District (CWCD). Reclamation constructed the new dam 800 feet downstream from the old one under the authority of the Water Conservation and Utilization Act of 1939. The PRWCD furnished existing lands, easements, and water rights to the United States Bureau of Reclamation. The CWCD contracted to repay the reimbursable costs.

Reservoir Management and Capacity

The reservoir is operated to maximize water storage and delivery. All other reservoir, adjacent land, and facility uses, including recreation and wildlife uses, are subject to the fluctuation of reservoir levels resulting from the release of project waters and other conditions governed by such operation for water supply purposes. Scofield Reservoir receives an annual runoff volume of about 52,000 acre-feet with a total tributary drainage area of 154 square miles (Denton et. Al., 1983). Total storage capacity to the crest of the spillway is about 73,800 acre-feet, which includes about 8,000 acre-feet stored below the level of the low outlet (ReMillard et. Al., 1996). The reservoir water surface varies considerably throughout each year and from year to year.

Recreation, Wildlife, and Other Uses

Recreation at the reservoir was first administered by the Utah Fish and Game Commission (now the Utah Division of Wildlife Resources - UDWR) in October 1948. Utah Division of Parks and Recreation (State Parks) renewed the lease in April 1963 and have managed the area as a state park since that time. The UDWR administers fish and wildlife activities at Scofield consistent with Utah State Law. Other individual entities hold license agreements for various purposes, such as access.

MANAGING ENTITIES

By contract, the CWCD operates and maintains the Scofield Dam and project works. Under a Memorandum of Agreement (MOA) with Reclamation, State Parks administers boating and recreation-managed Reclamation lands. Scofield Reservoir Special Service District is responsible for sewage systems. The fishery is operated and managed by the UDWR.

Carbon and Utah Counties Sheriffs' Offices have lead responsibility for law enforcement of state and county laws in the Scofield area. The Utah Department of Natural Resources has lead responsibility for enforcing State Parks and UDWR rules and regulations.

PURPOSE AND NEED

The purpose of the Scofield Reservoir Resource Management Plan is to establish a 10-15 year management policy and planning direction for project lands at Scofield Reservoir.

The Resource Management Plan is needed:

- To assure that use and management of Scofield Reservoir lands and waters maintain and protect the authorized project purposes of the Scofield Project, such as water storage, quality, and delivery.
- To consider and incorporate best management practices associated with existing planning documents and studies. (See Scofield Reservoir Resource Management Plan Phase I Report for specific plans, studies, contracts, and agreements.)
- To establish and provide consistent management direction and guidance for Reclamation lands and water.
- To ensure that activities or uses occurring on project lands meet the applicable federal, state, and local regulations and policies regarding protection of environmental resources.
- To resolve resource management issues and problems.

PLAN SCOPE AND AREA DESCRIPTION

The scope of this RMP applies to the lands, resources, and public uses of the Scofield Reservoir Planning Area that comprises 3500 acres as displayed on Map 1.1. The water surface area at maximum water surface elevation (7630') equals 2800 acres.

The RMP is used to direct activities on Reclamation lands to maximize overall public and resource benefits and provide guidance for managing the area over the next 10-15 years. The RMP sets forth the policy and management direction for guiding and controlling future resource management actions and activities. The RMP does not address the functional operation of Scofield Dam and Reservoir. These operations are already prescribed by contracts, agreements, and operating procedures that were previously established.

Reclamation selected the preferred approach for managing Scofield Reservoir to be Alternative C, the Proposed Action, from Chapter 2 of the Draft Environmental Assessment.

Map 1.1 displays planning and management areas. Six specific management areas have been identified from traditional use, specific resource features, and existing development. These areas are displayed on the map. They are titled the Madsen Bay, Lakeside, Mountain View, Dam/Primary Jurisdiction Zone, East Side, and West Side Management Areas.

ISSUES ADDRESSED IN THE RMP

Planning Issues

Several comments and issues were identified through the public involvement process. These issues are listed below in five categories: partnerships, water resources, recreation and visual resources, natural and cultural resources, and land management. The issues are phrased as questions followed by a brief description of the concern.

Issue 1. Partnerships

Coordinated Land Management

1a. Would there be opportunities for coordination among governmental agencies? What would be the effect?

1b. Would there be opportunities for coordination between public and private landowners and managers in management of the shoreline? What would be the effect?

Issues include coordination between government agencies and private landowners, and better management of the shoreline. Adequate future funding to resolve conflicts is also an issue. Multiple jurisdictions are responsible for activities at Scofield Reservoir: CWCD has stewardship over the water operations; Reclamation is a major land owner; State Parks owns lands and manages recreation; UDWR manages the fishery; Utah Department of Transportation (UDOT) controls and maintains State Highway 96; the Carbon County Sheriff is responsible for responding to emergencies with assistance from State Parks; some private property owners have granted flood easements to Reclamation; and Utah and Carbon counties are responsible for zoning laws within their respective jurisdictions.

Information Partners

1c. Would users be provided information on the importance of protecting water quality and the natural resources? What would be the effect?

The public would like to see additional information and environmental interpretation provided for users which could improve awareness of the importance of protecting water quality, natural resources, private property, and user ethics.

Law Enforcement Administration Partners

1d. Would State Parks personnel provide emergency response outside the State Park? To what degree would this result in under-staffing?

There are concerns about adequate law enforcement. State Parks personnel provide emergency response in the park and the Scofield area when the

Carbon County Sheriff's Office is unavailable. When State Parks responds to emergencies outside the park, the State Park is left under-staffed.

Enforcement and Public Safety

1e. To what degree would there be public safety problems from visitors parking along Highway 96 to reach the shore of the reservoir?

1f. Would there be adequate numbers of sanitation facilities (including RV dump stations, boat stations, toilets, dumpsters, and drainfields) to serve the anticipated visitors on Reclamation-controlled lands?

1g. Would fixed features be identified or eliminated? What would be the effect?

In certain areas, Reclamation does not control the land adjacent to the reservoir. As a result there are inadequate public parking areas, particularly along the east and west sides of the reservoir. On the east side, anglers park along the highway and walk across the road to reach the reservoir. The parked cars and pedestrian traffic across the highway are both safety concerns.

Trash and human waste from both summer and winter use decrease the quality of the visitor experience, raise public health questions, and may contribute to water quality degradation. Many commentors recommended closing the reservoir to ice fishing to address this problem. Others were concerned that if this happened the winter recreation opportunity would be lost. It was noted that if UDWR continues promoting winter angling, there is a need during the winter for accessible rest rooms and parking on the west side.

Hazards around the reservoir are a concern. When UDWR treated the reservoir to eliminate undesirable non-sport fish, the dead fish were left to rot, contributing to excess weed and algae growth endangering swimmers. Also, private property owners place no trespassing signs and barbed wire fences below the high water mark of the reservoir. As the reservoir level rises, covering signs and fences, they can become hazards to anglers and boaters.

Enforcement and Trespass on Private Lands

1h. Would Reclamation-controlled lands be identified? What would be the effect on private land trespass?

Law enforcement is not available to enforce private trespass problems. For private landowners, the unauthorized use of their lands is a frustration and problem. Private landowners often request State Parks' staff to enforce private trespass. State Parks does not have the time or staff to respond. Some of the shoreline within the planning boundary is privately-controlled when it is not inundated by reservoir waters. Recreationists are often unable to differentiate between private lands and public-use areas except where private lands are posted. People use private land for parking, shoreline access, fishing, OHV use, and camping.

Access

1i. To what extent would shoreline access and associated parking be provided and identified?

1j. Would there be shoreline access trails or other opportunities for walking and hiking? If so, where?

Safe, adequate access to the reservoir for recreation purposes is an issue. Few access points are developed for public recreation. Users often reach the reservoir using private land where there are no public facilities and enforcement is limited. It was suggested that the entire shoreline should be open to public access and that Reclamation's landbase be enlarged to facilitate more comprehensive management (e.g. having one entity control the shoreline for better recreation access and control).

There are user-created parking pull-offs along the UDOT right-of-way and on private property. Informal trails have been established on privately controlled property to access fishing areas. These trails are steep and slippery. There is interest in developing shoreline access trails and walking and hiking trails not related to shoreline/angler access. Likewise, there is insufficient public parking around the reservoir for shoreline access. One commentor recommended that the west side angler parking area be paved. Shoreline access for individuals with disabilities is particularly limited.

Issue 2. Water Resources

2a. Would actions on Reclamation-controlled lands affect water quality?

Maintaining or improving reservoir and downstream water quality is a concern. Scofield Reservoir stores and delivers irrigation water and indirectly provides culinary water to the Price River Water Improvement District. Potential contributors to water quality degradation include: livestock grazing next to the reservoir; subdivision and campsite drain fields; and garbage/human waste deposited by boaters, summer and winter anglers, and other recreationists.

Nutrients, sediment, and other pollutants from the upstream watershed also contribute to degradation of reservoir water quality. The means to address these watershed sources of water quality degradation rest with multiple agencies and private landowners.

Issue 3. Recreation and Visual Resources

Boat Ramps and Docks

3a. How would boat launching be managed? Would there be congestion at the existing public boat ramps and docks?

3b. Would adequate parking facilities be provided for visitors? What would be the effect?

3c. Would opportunities to access the reservoir be afforded to individuals with disabilities? What would be the effect?

Perceived long waits for use of existing State Park boat ramps occur due to congestion at the ramp, in parking areas, and at the boat docks. Additional parking for vehicles, RV's, and boat trailers is desired at boat launch ramps. People launch small boats from the shore on the reservoir's west side which damages fragile banks. Docks should be accessible to individuals with disabilities and special needs.

Camping

3d. Do recreational facilities meet the anticipated demand and visitor desires? What would be the effect on trespass?

Some users feel there are insufficient campsites available for peak-use periods. Some people camp along roads and trespass on private property due to a lack of developed camp areas. Some people want more grassy, tent camping sites. Some people prefer more primitive camping opportunities.

Concessions

3e. Would additional services such as food, gas, or rental services be offered in the plan area? Would a concession on Reclamation-controlled land compete with local businesses?

Some people would like to have additional services offered at the reservoir such as boat rentals, food, and gas. Others are concerned that any concessions at the reservoir would create unfair competition with existing businesses in Scofield Town.

Other Facilities

3f. Would playground equipment be provided? If so, where? Would fish cleaning stations be provided? If so, where? What would be the effect?

A commentor requested playground equipment for small children at State Park facilities. Fish cleaning stations were requested on the north and west shores.

Water Use Conflicts

3g. Would the reservoir be crowded? If so, what would be the effect?

3h. Would conflicts among water users be resolved? Would competing and different uses detract from the user experience?

3i. What would be the effects of the creation and enforcement of no-wake areas?

There are concerns about conflicts between users on the reservoir (e.g. anglers, power-boaters, water-skiers, and jet-skiers) and about there being too many watercraft on the reservoir during peak-use periods. There are questions about the need for a no-wake zone in Madsen Bay around the boat dock and concerns about consistency of enforcement in no-wake zones. Users of various kinds of watercraft believe that competition between different uses detracts from their recreational experience.

Snowmobiling

3j. Would a snowmobile staging facility with sanitation facilities and plowed parking be provided? Would these facilities meet demand?

On one hand, private landowners are concerned about snowmobilers trespassing on their land. On the other hand, snowmobilers are interested in developed staging areas. There is a desire for snowmobile trailheads on the north and west side of the reservoir with parking and restrooms.

Visual Quality

3k. What would be the effect on visual quality?

Scenic quality is a concern. In the visitor survey, 73.5 percent of those surveyed at the State Park responded that scenic quality was a reason for their coming to the reservoir (State Parks 1995). One commentor asked that more trees be planted at Madsen Bay and in Mountain View Campground. Unused, unsightly old buildings on public property is an issue.

Issue 4. Natural and Cultural Resources

4a. What would be the change in the current type and distribution of vegetation? Would there be adverse or beneficial effects? How would changes in livestock grazing operations affect vegetation?

4b. Would wetlands be protected? If so, how? Would there be any adverse effects to wetlands?

4c. What would be the effect on bald eagles roosting in the area and on other protected species?

4d. What would be the effect to wildlife resources?

4e. What would be the effect on the fishery?

4f. Would noxious weeds be controlled? What would be the effect?

4g. What would be the effect to air quality?
4h. What would be the effect on cultural resources?

There is an interest in protection of vegetation, wetland, and riparian areas.

There is concern in avoiding seasonal conflicts with the bald eagle, a threatened species known to roost below the dam.

The public is interested in maintaining a healthy, highly successful, and sustainable fishery.

Noxious weeds are a concern. The public also expressed an interest in paving more of the roads to reduce dust. Some are concerned about erosion along the creeks. There is an obligation to protect trust resources of federally recognized Indian tribes and tribal members.

Issue 5. Land Management

Access

5a. Would user access be provided on Reclamation-controlled lands and water? What would be the effect?

Opportunities to provide parking and reservoir access from Reclamation-controlled lands, particularly on the east side of the reservoir are concerns.

Trespass on Reclamation Lands

5b. Would Reclamation-controlled lands be identified? What would be the effect?

Private trespass on Reclamation-controlled land occurs.

Environmental Justice

5c. What would be the effects on minority and low-income communities?

Reclamation is required to identify and address disproportionate effects on minority and low income communities.

ISSUES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

Comments About Entities Other Than Reclamation

A number of issues raised by the public requested actions that are outside Reclamation's jurisdiction because they occur on lands that Reclamation does not own. In addition, several issues were raised that are within the jurisdiction

of other governmental agencies. These issues are outside the scope of the Resource Management Plan and have been eliminated from further study.

The issues are listed below for the public to track how Reclamation addressed their concerns. When appropriate facilities become available, Reclamation will work with involved entities to develop partnerships which address these issues.

Private Interests

Commentors were concerned about water pollution from mining activities, the effects on the watershed of salting the roads in winter, and advertising that may increase tourist use of the reservoir.

County Interests

Concerns were expressed about assuring greater zoning protections for watershed lands, enforcing sewer hookups, enacting and enforcing stricter building codes, and the need for additional water at Bolotas Camp to flush sewer lines effectively.

Division of Wildlife Resources - Fishing

Issues were raised about changes in fish limits, length of fishing season, amount of enforcement of licenses, and number and size of fish planted and caught. These issues are responsibility of the Utah State Division of Wildlife Resources by state law.

Reservoir Storage Management

The public is concerned that the reservoir level fluctuates too much, too early, and too often.

Gooseberry Narrows Project

Comments were also received regarding the construction of the Gooseberry Narrows Project. The proposed Narrows Project consists of construction of a new dam on Gooseberry Creek (a tributary to Fish Creek) with a transbasin diversion to the Sanpete Valley. An Environmental Impact Statement (EIS) for the proposed project is presently being prepared.

Sensitive Species

A question was raised about whether there were any special considerations necessary for the Colorado Squawfish, which is found in the lower Price River. Trout Unlimited is interested in winter instream flows for trout in the Price River.

Effects from Potential Growth Areas

Issues were raised concerning private development occurring outside the planning area.

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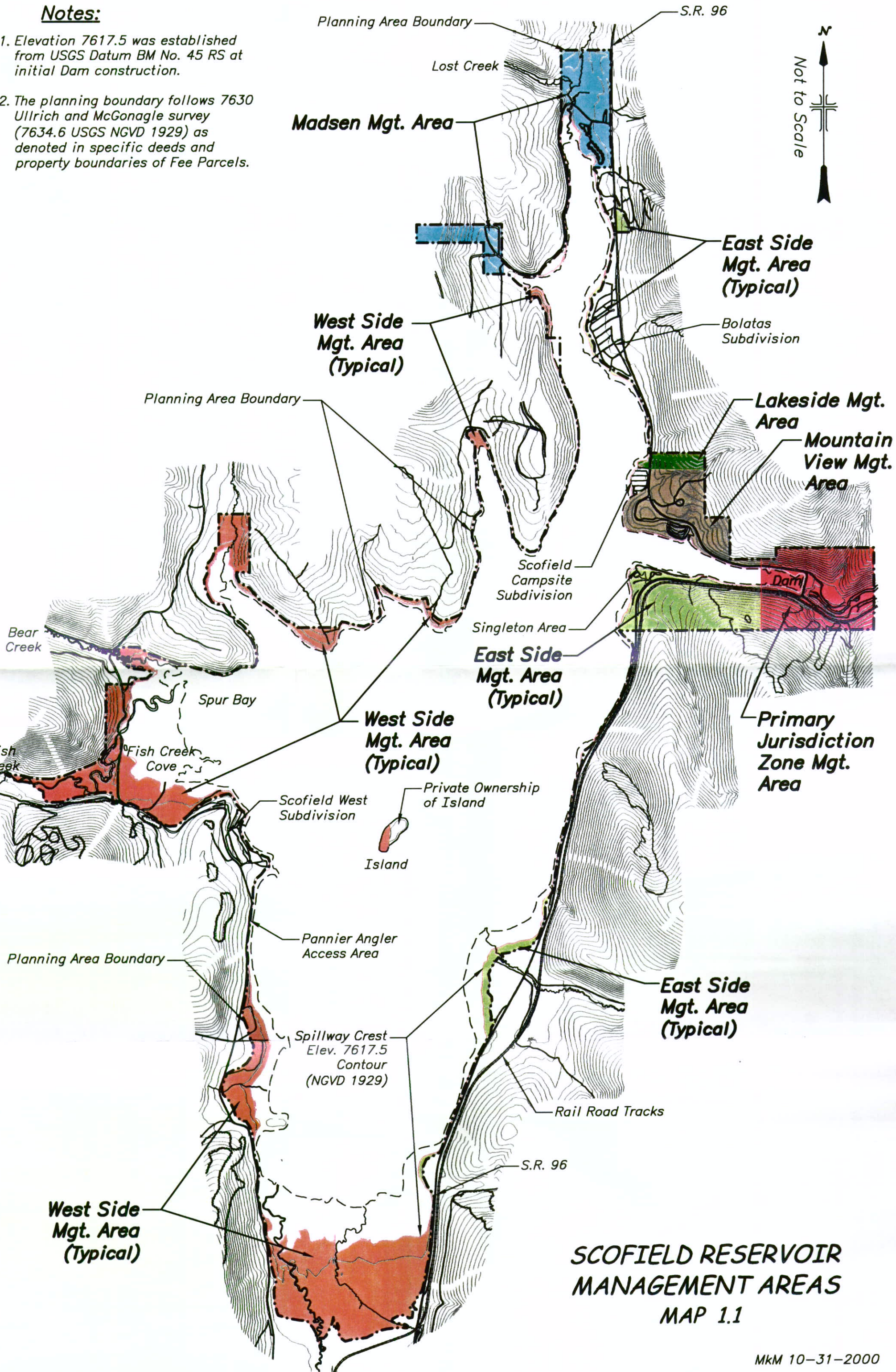
Notes:

1. Elevation 7617.5 was established from USGS Datum BM No. 45 RS at initial Dam construction.
2. The planning boundary follows 7630 Ullrich and McGonagle survey (7634.6 USGS NGVD 1929) as denoted in specific deeds and property boundaries of Fee Parcels.



SCOFIELD RESERVOIR MANAGEMENT AREAS

MAP 1.1

MkM 10–31–2000

2

MAP

Chapter 2
Existing Resources Inventory

INTRODUCTION

This chapter contains a description of the existing physical, biological, and socioeconomic conditions of the area. It provides a baseline for comparing the effects to resources from implementation of this Resource Management Plan.

PARTNERSHIPS

By contract, the Carbon Water Conservancy District (CWCD) operates and maintains the Scofield Dam and project works. Under a Memorandum of Agreement with the Bureau of Reclamation (Reclamation), State Parks administers Reclamation and State lands managed for recreation. Scofield Reservoir Special Service District is responsible for sewage systems. The fishery is operated and maintained by the Utah Division of Wildlife Resources (UDWR).

Carbon and Utah Counties Sheriffs' Offices have lead responsibility for law enforcement of State and County laws in the Scofield area; The Utah Department of Natural Resources has lead responsibility for enforcing State Park and UDWR Rules and Regulations.

WATER RESOURCES

Water Supply and Storage

Scofield Reservoir receives an average annual runoff volume of about 52,000 acre-feet of water with a total tributary drainage area of 154 square miles (Denton et. al.,1983). Approximate percentages of Scofield Reservoir inflow for each source is provided in Table 2.1.

Table 2.1 Scofield Reservoir Inflows	
SOURCE	Percent
Fish Creek	66%
Mud Creek	16%
Pondtown Creek	5%
Woods Canyon Creek	2%
Dry Valley Creek	2%
Miller Creek	1%
Shoreline	2%
Precipitation	6%
TOTAL	100%

Total storage capacity to the crest of the spillway (elevation 7,617.5 feet) is about 73,800 acre-feet, which includes about 8,000 acre-feet stored below the low level outlet (elevation 7,586.0 feet) and about 65,800 acre-feet (usable storage) between the low level outlet and the crest of the spillway (ReMillard et. al., 1996). Reservoir water surface elevation varies considerably during each year and from year to year. Maximum reservoir water surface elevation normally occurs during May or June in response to snowmelt inflows. Minimum water surface elevation normally occurs at the end of the irrigation season in September or October. The lowest usable storage volumes occurred in 1992. The 1992 water level was so low that there was concern about providing for downstream culinary requirements. To meet minimum downstream needs in 1992, channel improvements and an electrical system to prevent freezing around the outlet structures were put in place and other measures were put on stand-by (Franson-Noble & Associates, 1995).

Table 2.2 Scofield Reservoir Maximum and Minimum Usable Storage Volume (Acre-Feet)			
YEAR	Maximum	Minimum	CHANGE
1985	70,620	40,250	30,370
1986	74,370	44,210	30,160
1987	61,610	35,930	25,680
1988	56,970	27,160	29,810
1989	37,590	11,530	26,060
1990	22,130	7,400	14,730
1991	29,990	9,310	20,680
1992	13,880	1,100	12,780
1993	55,900	31,780	24,120
1994	41,730	10,670	31,060
1995	62,160	31,100	31,060
AVERAGE	47,905	22,767	25,137

Water Quality

The State of Utah has determined that Scofield Reservoir has beneficial use designations of:

- 1C, protected for domestic purposes with prior treatment;
- 2A, protected for primary contact recreation such as swimming;
- 2B, protected for boating, waterskiing and similar uses;
- 3A, protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain; and
- 4, protected for agricultural purposes including irrigation of crops and stock watering (Utah Department of Environmental Quality, 1994).

Scofield Reservoir discharges into the Price River. The Price River and its tributaries have beneficial use designations of 1C, 2B, 3A, and 4. Approximately 20,000 people depend upon the Price River and Scofield Reservoir for drinking water.

Scofield Reservoir is classified as mesoeutrophic to eutrophic. Eutrophic (high dissolved nutrient concentration) conditions in lakes promote the growth of algal blooms with a corresponding loss of dissolved oxygen (anoxic conditions). Anoxic conditions can result in taste and odor problems, and if severe enough, can have a direct impact on fish mortality. Phosphorous is believed to be the limiting nutrient for algal blooms in Scofield Reservoir.

"Major fish kills have been reported in the years 1960, 1961, 1972, 1976, 1977, and 1981. Beyond major observable fish kills, gill netting indicated poor survival of stocked fingerlings in 1981, 1982, 1985, 1987, and 1989, a discouraging trend (Christopherson et. al., 1991)." Declining water quality in Scofield Reservoir has been documented by a number of researchers (Mundorff, 1972; Price et. al., 1973; Utah Division of Water Resources, 1975; SEUALG, 1977; Utah Division of Water Resources, 1978; Clyde et. al., 1981; Messer et. al., 1983; Waddell et. al., 1982; Waddell et. al., 1983; Denton et. al., 1983; Stephens, D. Not Dated; Donaldson, 1989, Christopherson and Judd, 1991; Judd, 1992; and Stephens et. al., 1996).

Pollutant Sources

The largest source of total phosphorous to the reservoir is from watershed and stream bank erosion. "Erosion in the watershed leads directly to sediment release and the external loading of phosphorous and nitrates into the reservoir. Intensive livestock grazing in the watershed increases the natural erosion in the area. Combine this with road construction, recreational home construction and mining activities, and the damage to the watershed is considerable." (Christopherson and Judd, 1991). Much of the total phosphorous load to the reservoir is in the form of apatite phosphorous and is not available for algal growth. "Sewage, animal manure, and other organic debris contain much larger fractions of bio-available phosphorous in their total phosphorous as compared

to most sediments, hence their control should always carry some priority" (Denton et. al., 1983, p. 64).

Pollutant sources within the plan area include: livestock grazing, recreation, shoreline wash, and internal phosphorous loading during times of anoxic conditions.

Livestock Grazing

A majority of the lands within the plan area are held fee title by the U.S. Government subject to "grazing and any other use except when inundated." Each year, several hundred cattle graze in the areas of Scofield Reservoir exposed by low water. Cattle transform significant amounts of existing phosphorus from bio-unavailable phosphorus to bio-available phosphorus. Bio-available phosphorus is the phosphorus available for plant growth, including algae. When these areas become inundated, there is a potential for bio-available phosphorus in the cattle manure to become a nutrient for algae in the reservoir.

Recreation Use

Sources of phosphorous loading due to recreation include: erosion caused by dispersed recreation on shore slopes, leakage of oils and fuels from vehicle use below the normal reservoir high water level, and improper disposal of human wastes from dispersed recreationists and boaters.

Phosphorous loading from shoreline wash has been estimated to be about 5% of the total phosphorous loading to the reservoir. The portion of shoreline wash contribution due to dispersed recreation is unknown.

Water quality data for Scofield Reservoir do not show evidence of contamination from leakage of oils and fuels. None of the reported contaminant concentrations which could be attributable to oil leakage from cars and boats have exceeded water quality standards.

Winter access and, in particular, ice fishing have been raised as concerns to reservoir water quality, especially since the State implemented year-round fishing in 1987. Littering and the occasional disposal of human waste occur from angler recreation. Litter left during the winter ice fishing season is particularly noticeable.

Insufficient data is available to quantify the volume of fecal material left by recreationists at Scofield Reservoir.

Internal Phosphorous Loading

Scofield Reservoir sediment chemistry analysis and correlation of phosphorous concentration with dissolved oxygen indicates that the reservoir sediments support moderate rates of phosphorous release under anaerobic conditions

Scofield Reservoir Visitation Data

Since 1972, annual visits to Scofield have varied from year to year—from a low of 15,981 in 1978 to a high of 126,689 in 1993. Low water levels, inclement weather, fish kill, and park closures explain some of the dramatic changes in attendance. Since 1993, however, attendance has remained well above 100,000—perhaps due to improved fishing conditions, or more thorough counting methods, or a combination of both. No official count exists for visitation outside Madsen Bay and Mountain View management areas (areas controlled by State Parks), including UDWR fishing access points and private property owners that recreate heavily on the weekends (UDNR 1996).

According to monthly data from 1985, July is the most popular month for visits with 21.3 percent of total visits. Following July is August, 18.5 percent, and June, 16.4 percent. September and May round out the top five with approximately 13.0 percent of visitation per month.

Description of Existing Public and Private Use Areas

Madsen Bay Management Area — Public Management

At the far north end of the reservoir, Madsen Bay provides seasonal facilities for camping, fishing, boating, hiking, and nature study. The Madsen Bay recreational area includes the developed areas on both sides of the Bay.

The north recreational area provides the first point of contact for most visitors from areas outside Pleasant Valley. A small parking lot associated with an interpretive facility is just off Highway 96. The Huntington/Eccles Interpretive Site was developed by the U.S. Forest Service, Utah Department of Transportation and State Parks. The "theme" and design of the interpretive site ties into the Huntington/Eccles Canyons Scenic Byways. A small administration building is used by State Parks as a fee collection station. During high use times the station is staffed by Utah State Parks personnel. During periods of lower use, fees are deposited in a fee collection box.

On busy summer weekends and holidays, the Madsen Bay facilities can fill quickly. Often, State Parks personnel have had to turn away people due to crowding. During these times State Parks allows overflow parking to occur in the grassy area north of the fee collection station. The camping overflow area accommodates 6 to 12 vehicles.

West of the fee collection building is the entrance to the campground, the restroom, fish cleaning station, and sanitation dump station. The Madsen Bay Campground on the east side of Madsen Bay has 36 developed camping sites. The campground roads and parking units are gravel. Individual sites have picnic tables and pedestal grills. The location of the campground is close to the reservoir and visitors can easily walk to the shore to fish.

(Messer and Ihnat 1983, Christopherson and Judd 1991). Internal phosphorous loading is a secondary effect brought about by anoxic (oxygen deprived) conditions. A key factor to the development of anoxic conditions is blue-green algal growth. External loading of bio-available phosphorous can stimulate algal growth and can lead to anoxic conditions.

Sewage

One source of pollution identified in the 1983 Scofield Reservoir Phase I Clean Lakes Study (Denton, Cox and Merritt 1983) was sewage from recreation subdivisions, Scofield and Clear Creek Town. In response to the concern, the Scofield Special Service District was formed. A Wastewater Facility Plan was completed in 1985. Sewer system gravity collection systems, lift stations, pressure transmission lines, and drain fields were constructed in about 1987.

A field visit of the drain field systems located around Scofield Reservoir operated by Scofield Special Services District was performed on August 6, 1996. In particular, splitter boxes and drop boxes were inspected for evidence of drainfield back up; and downstream slopes were investigated for evidence of break out. The drainfield systems were found to be functioning appropriately with no evidence of hydraulic failures. The adequacy of the water quality treatment provided by the drain field systems is not as easily verified. Under present conditions, it is believed that very little, if any, phosphorous from drainfield systems is reaching Scofield Reservoir. It seems likely that given enough time, continuous loading from a drainfield system will eventually result in phosphorous leaching through the system to the reservoir. More study is needed to ascertain the allowable life of the existing drainfield systems.

A concern was raised during the scoping phase of the RMP study related to the potential for pollution to wells in the Bolotas Subdivision from the Bolotas drainfield. The best indicator of pollution from drainfield systems is nitrate. It was recommended that suspect wells be sampled for nitrates. If nitrate contamination is present in the shallow aquifer, it may be difficult to determine whether the source of the nitrate is the new drainfield systems or residual contamination from the old sewage disposal systems.

RECREATION RESOURCES

Scofield Reservoir is known as a good cold water fishery. The 1995 Scofield State Park Visitor Survey Report indicated that 93 percent of the respondents stated they had participated in fishing during their visit. Fishing occurs along the shoreline, from boats, and along the streams that feed and empty the reservoir. Families with young children and the elderly enjoy successful fishing at Scofield.

Boating, camping, sightseeing, and picnicking all had survey response rates over 20 percent. In addition, waterskiing, swimming, hiking, nature study, off-highway vehicle use, personal watercraft use, photography, and biking were also listed as activities that people enjoyed during their stay. Prime winter activities include ice fishing and snowmobiling.

Scofield State Park Visitor Profile

Visitor Origins

As a high, cool, mountain recreation area, Scofield Reservoir offers a year-round retreat for the major population centers in Salt Lake, Utah and Carbon Counties. Results of the user survey indicate that the majority of Scofield State Park visitors reside in Utah County (48 percent), followed by Salt Lake County (24 percent), and Carbon County (13 percent), which includes the community of Scofield (Utah Department of Natural Resources [UDNR] 1995). Most of the people in Carbon County live within a one-hour drive from the reservoir. Scofield Reservoir is located within a two and a half-hour drive from Salt Lake County and one and a half hours from Utah County along State Highway 96.

Visitor Characteristics

Most Scofield visitors arrived in the morning (76 percent) and returned home the same day (72 percent) after staying for an average of eight hours. The average group size was three persons, consisting of two adults and one child. The median age of those who filled out surveys was approximately 53 years. A slight majority, 54 percent, of respondents had visited Scofield previously that summer and 47 percent of all visitors planned on returning at least five times during the remainder of 1995. Scofield was the primary destination of 94 percent of those surveyed. When asked where they would recreate if Scofield was closed for the summer, 37 percent chose Strawberry Reservoir, while nine percent chose Joe's Valley (UDNR 1995).

Reasons for Visiting Scofield State Park

Visitors were asked to identify the reasons they visited Scofield State Park. Both the natural setting and family fishing qualities of the reservoir attracted 77 percent of respondents. Other attractions included scenic quality (74 percent), peacefulness (62 percent), and close proximity to place of residence (59 percent) (UDNR 1995).

Activities

According to survey results (which allowed multiple responses), fishing was the primary activity of Scofield visitors (93 percent). Following fishing was boating (43 percent), camping (31 percent), sightseeing (25 percent), and picnicking (22 percent) (UDNR 1995). While 1995 *Monthly Use Reports* recorded only one activity per visitor (no multiple responses), the order of participation remained the same (UDNR 1990-1996).

Winter activities are also popular. The climate and high elevation create opportunities for ice fishing, snowmobiling, and cross-country skiing. The reservoir is one of the first large water bodies in the state to ice-over and thicken to the point that ice fishing can occur. The deep winter snows, long season and cold temperature create near ideal conditions for snowmobiling. Accordingly, from the mouth of Little Bear Canyon on the west side of the reservoir, State Park personnel groom 115 miles of snowmobile trails in the Scofield area.

Visitor Spending and Income

In connection with their trip to Scofield, visitors spent an average of $25. The majority of money was spent in Utah County for transportation-related expenditures.

Problems at Scofield State Park

When visitors were asked to indicate any problems encountered at Scofield, litter was stated most often (22 percent), followed by parking/roads and personal watercraft, each with 19 percent.[1] Also commonly mentioned were conditions of campground facilities, restrooms, and the overall water quality.[2] One-third of respondents had no complaints (UDNR 1995).

Based on information in the "Visitor Survey Report," crowdedness is not a significant problem—4.4 percent of respondents indicated that crowdedness is a problem at Scofield. It is not clear whether respondents were referring to watercraft on the reservoir or people along the shore and in land-based facilities, but regardless, it was not perceived as a problem by the majority of respondents.

The photo survey shows that on the day where the most comments were recorded regarding crowding and congestion, the average on-shore use (vehicles or persons at one time) was 98 and the average off-shore (boats on the water at one time) was 72. Photos reveal that the perception of crowdedness or congestion may come from the small areas where people are concentrated such as the boat ramps and docks, in the campgrounds, and where there is access to the limited shoreline available for fishing.

The maximum number of boats counted from photographs at various locations surrounding the reservoir was 84 on a Saturday morning in early July (July 8, 1995). Other randomly selected days in July yielded much lower numbers ranging from a low of 14 on a Wednesday to the high of 84 on a Saturday. These are actual counts of boats on the reservoir, and do not include a peak weekend such as July 4 or July 24. Respondents to the user survey indicated that personal watercraft (PWC) were a problem. Comments indicated PWC users "play too close" to anglers, that they do not maintain wakeless speeds, and that perhaps personal watercrafts and ski boats should be eliminated from the reservoir altogether.

At the northern end of Madsen Bay, the road crosses Lost Creek as it enters the reservoir. North of the bridge is a wetland/riparian area. The creek and associated wetlands are open to public fishing on a seasonal basis as governed by Utah Division of Wildlife Resources. All permanent streams and rivers flowing in or out of the reservoir are protected and managed for fish production.

The Madsen Bay boat ramp is located on the west side of Madsen Bay. The ramp and adjacent parking lot can accommodate 40 to 50 vehicle/trailer combinations or 80 to 100 cars at one time. One courtesy dock is provided near the ramp. Two vault toilets are located adjacent to the parking lot.

The tent or primitive camping area is located in a grove of aspen trees northwest of the ramp and provides the opportunity for an undeveloped camping experience. Several picnic tables are located throughout the camping site. Due to the fact that camping sites are located away from the parking areas and are undeveloped, the area is perceived as a more natural area.

State Parks has lead management responsibility for the Madsen Bay Area. Cooperating agencies include the Division of Wildlife Resources, Department of Transportation, and U.S. Forest Service.

Bolotas Subdivision — Private Management

Bolotas Subdivision, located on the northeast side of the reservoir, is a privately-owned development built around the reservoir's recreational opportunities. The subdivision is a mixture of single family residences, trailer homes, and open lots for seasonal recreational vehicles.

Lakeside Management Area — Public Management

Lakeside is located on the northeast side of the reservoir, south of Bolotas Subdivision. It contains a fishing pier that is under development . Boats launched from one of the other locations can pick up individuals with disabilities at the fishing pier. A small parking lot and picnic pavilion provide opportunities for groups with special needs to enjoy the reservoir. A new two-unit flush restroom has been constructed near the pavilion. State Parks has lead management responsibility for the Lakeside area.

Scofield Campsite Subdivision — Private Management

Scofield Campsite Subdivision, located just south of Lakeside, is a privately owned development built around the reservoir's recreational opportunities. The camp is a collection of homes and seasonal residences.

Mountain View Management Area — Public Management

The Mountain View Recreational Area is located northwest of the dam and currently serves as the State Parks and the Utah Division of Wildlife Resources

headquarters at the reservoir. An office/fee station is located along the entrance road. The office is staffed as needed throughout the summer season.

The campground has 34 developed camp sites with paved roads and gravel parking sites. Potable water and trash facilities are located throughout the camp area. Each site has picnic tables and pedestal grills. The campground has one six-unit flush restroom, two showers, and one wheelchair accessible vault toilet located by the day use area. Mature trees provide shade. There is a small day use area with picnic tables and pedestal grill. There is also a small informal turf picnicking area.

A boat ramp and parking area provide parking for 20 to 30 vehicle/boat combinations. Overflow parking occurs along the entry road. State Parks manages nine boat rental slips and provides a six-slip courtesy dock near the ramp. A fish cleaning station and sanitation dump station are provided.

A group use area is being added to accommodate a group of up to 25 people. This area is scheduled to be completed during the summer of 2001.

State Parks has lead public management responsibility for the Mountain View Recreational Area. The Utah Division of Wildlife Resources acts as a cooperating agency in this area.

Dam and Primary Jurisdiction Zone — Public Management

The Dam and Primary Jurisdiction Zone includes the dam and appurtenant structures. Reclamation and the CWCD controls use of the Primary Jurisdiction Zone to assure proper operation and protection of the project works. Public access to the Price River below the dam is provided through the Primary Jurisdiction Zone.

Lead public management responsibility for the Dam and Primary Jurisdiction Area is held by Reclamation. Cooperating agencies in the area are the Carbon Water Conservancy District, State Parks, and UDWR.

The parking areas east of the dam are restricted to day use and serve as a staging point for popular downstream fishing activities. A vault toilet, parking area, and bridge are located at the staging area.
State Parks has lead public management responsibility for the parking and use areas east of the dam. Cooperating agency in the area is the Utah Division of Wildlife Resources.

East Side and Singleton's Management Area — Public/Private Management

Singleton's is located on the south side of the east arm of the reservoir. The area is owned and controlled by Reclamation. At one time, Singleton's Boat Camp

provided a café and marina for the public, but they have been closed for many years and there are no public facilities there now. Access to the area is informal and unregulated. Dispersed camping, fishing, parking, and day-use occur. State Parks has the lead public management responsibility for the Singleton's Boat Camp Area.

Informal parking occurs along the southeast side of the reservoir along the shoulders of Highway 96. There are no developed public facilities in this area. Property adjacent to Singleton's is privately owned (Perry's Camp) and some other property to the south is privately controlled when not inundated by water. Fishing is a major activity in the area. Reservoir access is informal and undesignated. Vehicles access the beaches during low water. The shoreline is generally steep and rocky and receives heavy fishing use because it is considered one of the better shoreline fisheries. Visitors routinely park on the edge of the highway and walk across the private property to fish. Parking along the highway can disrupt traffic and also creates a potentially dangerous situation where visitors are crossing the highway to access their vehicles. Evidence of past use such as trash, fishing line, and fire rings is common along the shoreline.

Lead land management responsibility for much of the southeast side of the reservoir rests with private entities. Cooperating agencies include Reclamation, State Parks, and Utah Department of Transportation.

West Side Management Area — Public/Private Management

South Shore - Private Management

The south shoreline has a very gentle slope down into the reservoir. Because of this slope and the wetland vegetation, the area is not as highly used by anglers as other areas. The property along the south slope has private control when not inundated by water and is grazed during the year. The area provides a quality wildlife habitat for birds and small mammals.

Lead land management responsibility for the south shore of the Reservoir lies with private entities. The cooperating agencies include Reclamation, UDWR and State Parks.

Fish Creek Cove and Spur Bay - Public/Private Management

Nine acres near the mouth of Fish Creek are being mined for road gravel, rock products, fill material and topsoil for construction projects. Under the existing Department of Army permit, the haul road is scheduled to be removed when gravel operations cease. Property in the area has unclear boundaries. Trespass is occurring.

One mile up Fish Creek, from the reservoir, a dirt road leads to a Forest Service campground. The campground receives some overflow camping that is turned away from the developed camping areas within the State Park on busy weekends. The campground also serves as a trailhead for the non-motorized Fish Creek National Recreation Trail providing access to Skyline Drive in the Manti Division of the Manti La-Sal National Forest.

Recreation management responsibility for Fish Creek Cove and Spur Bay is by State Parks. When not inundated by water much of the low area is privately controlled.

The northwest shoreline from Bear Canyon north to the Boy Scout Camp is a mix of private and Reclamation controlled lands. Access to the shoreline, for the most part, is by foot. The area does not receive much trespass because access is limited. Management responsibility for the area north of Bear Canyon is State Parks. When not inundated by water much of the area is controlled by private parties. The cooperating agency is Reclamation.

The Island - Public/Private Management

Roughly one-half of the island has Reclamation jurisdiction, the other half is privately owned. The Boy Scouts of America use the island for some overnight camping.

Mountain Home Subdivision — Private Management

Of the two private developments along the west shore, Mountain Home Subdivision is the most removed from the reservoir due to its setting above the county road. The area is developed with single family residences and summer homes. The area receives some trespass from summer visitors walking in the area. Winter visitors informally use the entrance to the subdivision as an informal snowmobiling staging area.

UDWR/Pannier Angling Access — Public/Private Management

Between Mountain Home Subdivision and Scofield West, some property owned by the Pannier and Hansen families is used for public fishing access. The Utah Division of Wildlife Resources has an informal agreement with the landowners for public access to about 0.6 mile of shoreline. The area is a narrow, fenced strip of land located between the shoreline and the county road. It is managed as a walk-in only, day-use-only area, with vehicles restricted to a centrally-located parking lot. There are no sanitation facilities.

The area is a popular fishing spot and has a gentle grassy slope from the road down to the shore that children, elderly, or some individuals with disabilities can manage. Parking can become a problem during busy weekends because the only overflow parking is along the side of the road. The county road is not as busy as Highway 96 across the reservoir but traffic problems occur when the

area becomes congested. The lead management agency for this area is the Utah Division of Wildlife Resources. Cooperating parties are State Parks and the private landowner.

Scofield West Subdivision — Private Management

Scofield West, located just north of the UDWR public access area, is a privately owned development built to take advantage of the recreational opportunities at Scofield Reservoir. The camp is a collection of homes and seasonal residences of varying types.

Boy Scout Camp — Private Management

The Boy Scout Camp is located on the west facing slope of the ridge that runs along the west side of Madsen Bay. The camp is located on private property and access is through the Madsen Bay State Park area. The camp is partly visible from the northeast side of the reservoir. The Scout Camp uses Spring Bay for most water related activities like swimming, fishing, canoeing and kayaking. Camp activities do not appear to conflict with visitors to Scofield State Park. Management responsibility for the Boy Scout Camp is Boy Scouts of America.

Lazy Anchor Campground — Private Management

In Scofield Town, camping opportunities are provided by Lazy Anchor Campground.

General Recreation Opportunities

The type of recreational opportunities existing at Scofield Reservoir, which supply preferred activities in preferred environmental settings, are identified through the Recreation Opportunity Spectrum (ROS) System. The system describes a spectrum of primitive through urban experiences a visitor could have when visiting any area. The ROS System and detailed classifications (social, physical, and managerial aspects) for Scofield reservoir are on file at Reclamation's Provo Area Office. ROS class ranges with brief evidence of humans class descriptions are listed in the following table:

Table 2.3 Basic ROS Classifications

Class	Description
Semi-Primitive, Motorized	Minimal sights and sounds of man.
Roaded Natural	Moderate sights and sounds of man.
Roaded Natural/SPM	Roaded Natural managed as Semi-Primitive.
Rural	Prevalent sights and sounds of man.
Urban	Extensive sights and sounds of man.
Urban/SPM	Urban managed as Semi-Primitive.

ROS classes serve as the existing base from which to compare future ROS levels, associated with various land and resources uses.

The existing public use area ROS classifications follow:

Table 2.4 Public Use Area ROS Classifications	
Use Area	**ROS Class**
Madsen Bay	Urban
Madsen Bay Wetland/Riparian Area	Urban, managed as Semi-Primitive
Lakeside	Urban
Mountain View	Urban
Dam and Primary Jurisdiction Zone	Urban
East Side and Singleton's	Rural
West Side	Roaded Natural Appearing
Fish Creek and Spur Bay	Roaded Natural Appearing
Island	Roaded Natural Appearing, managed as Semi-Primitive

VISUAL RESOURCES

Characteristic Landscape

Scofield Reservoir is situated high in the Wasatch Plateau with its typical vegetation of aspen communities, conifer forests and sagebrush steppe. The reservoir is located in picturesque Pleasant Valley which provides a sense of enclosure and intimacy with the natural environment of the valley. The reservoir, wetlands/grassy meadows, and the surrounding mountains dominant the visual environment of the valley.

Scofield Reservoir in the northern end of Pleasant Valley distinguishes Pleasant Valley from several adjacent valleys by providing a refreshing view of a large open body of water that contrasts with the sagebrush steppes of the area. The reservoir creates a cool reflective surface that allows for long flat vistas across the valley. Most people enter Pleasant Valley along Highway 96 at the north end of the valley. From that vantage point, their first view of the town of Scofield is eloquently framed by the mountains and the blue water of the reservoir. The reservoir provides a sense of character and beauty that separates Pleasant Valley from the surrounding valleys.

The wetlands and grassy meadows along the southern shoreline of the reservoir soften the interface between the town of Scofield and the reservoir. The shoreline has a very gentle slope down into the water along this edge, and the wetlands and grassy meadows growing in this area continually fluctuate with

the water level. The wetland meadows provide a visual buffer between the town of Scofield and the reservoir. The deep lush green color of the wetland vegetation contrasts with the blue water and the gray, greens and browns of the surrounding sagebrush slopes. The meadows that extend toward town are periodically grazed and this reinforces the natural or rural quality of the town.

The surrounding mountains visually define Pleasant Valley. Views from the valley floor are confined by these mountains and hills. The area is covered with a patchwork of vegetation types that include exposed sagebrush communities, patches of quaking aspen, and areas of conifer forests. The current level of development is predominantly contained within the area along the valley floor which leaves the hillsides undisturbed. Most of the views from the town of Scofield and the recreational areas are toward these hillsides. The perception that the area is contained and isolated from other more developed areas is heightened by the limited views toward the mountain hillsides.

Variety Class

Variety Class is a method used to classify the natural landscape in terms of its degree of variety or diversity. To determine Variety Class, the surrounding characteristic landscape is used as a frame of reference. Landscape elements within Scofield State Park determined to be distinctive are assigned to Variety Class A, Distinctive. These areas include the reservoir surface, wetland areas, riparian corridors, and streams.

Landscape elements that are common to the surrounding characteristic landscape are given a Variety Class ranking of Class B, Common. These landscape elements include the sagebrush steppe and the aspen woodlands plant communities. Both plant communities are typical of the surrounding characteristic landscape.

Elements in the landscape that are considered to have minimal variety or diversity, or elements that have the lowest potential for scenic interest are ranked as Class C, Minimal. These areas include urban or disturbed lands, such as the Scofield dam structure.

Cultural Modifications

Cultural modifications are evident in several areas around the reservoir. Most of the modifications are recreational developments or support areas. The areas can be loosely grouped in the following categories.

Transportation-based Modifications

State Highway 96 and the county road that access the west shoreline, the Denver and Rio Grande Western Railroad, and several smaller two track roads are included in this category. The highway runs along the east side of the reservoir from the north to the south end of the reservoir where it leaves the edge of the

reservoir and heads south to the town of Scofield. The highway is a two lane paved road that handles the commuter traffic to the town of Scofield for residents and miners who work in the area, and also traffic generated by people coming to recreate within Pleasant Valley. The highway is visible from several higher vistas, but from the campgrounds and reservoir surface it is not readily visible. At high use times, parked cars and traffic along the road create an even higher level of visual awareness of the highways presence. The railroad line is used to haul coal.

Public Recreational Developments

Madsen Bay Campground, Mountain View Campground, and the public fishing access point along the west side are included in this category. Because of the low absorptive capability of the native landscape in both of the campground areas, the structures, roads, and campsites are very visible from the highway and the reservoir. Mountain View Campground is the oldest of the areas, so much of the landscape installed during construction has matured and helps to lessen the visual impact of the development. The public fishing access point along the west side of the reservoir is perceived mostly as a natural landscape with minimum development. The area is undeveloped with only a post and rail fence to keep vehicles from driving down to the shoreline.

Private Recreational Developments

Bolotas Subdivision, Scofield Campsite Subdivision, Perrys Boat Camp, Scofield West, and the Boy Scout Camp are included in this category. Each area is developed to various degrees to accommodate people recreating at Scofield Reservoir.

Utilitarian Developments

The dam structure and storage facilities at Scofield State Park are included in this category. The dam is an imposing visual structure. The area at the base of the dam has been disturbed due to the dam's construction, but downstream the area is predominantly undisturbed and viewed as a natural landscape.

Sensitivity Level

Sensitivity Level measures the amount of public concern for a particular landscape. Landscapes that are important to the public should and do receive a greater degree of protection in the Visual Management System. To receive a Sensitivity Level 1, the landscape must be visible from a primary travel route where, at a minimum, at least one-fourth of the visitors have a major concern for scenic quality of the area; or the landscape must be visible from a secondary travel route, use area, or water bodies where at least three-fourths of the visitors have a major concern for scenic quality. State Highway 96, which provides access to Scofield Reservoir, is of local concern and is considered a secondary travel route. In the *Scofield State Park Resource Management Plan and Visitor Survey Report (1995)*, 73.5 percent of the visitors surveyed responded that scenic

quality was a reason for their coming to Scofield Reservoir. Seventy-three percent of the visitors is slightly below the 75 percent needed to consider the site a Sensitivity Level 1, therefore the entire site has been given a Sensitivity Level 2.

Visual Quality Objectives

The Visual Management System developed by the U.S. Forest Service combines the scenic quality (variety class) with the user's sensitivity level (user's concern for scenic quality) at various viewing distances (foreground, middleground and background) to establish Visual Quality Objectives (VQO).

There are two Visual Quality Objectives in the project area: Partial Retention and Modification. Partial Retention allows for management activities that remain visually subordinate to the characteristic landscape. Activities may repeat form, line, color, or texture common to the characteristic landscape, but changes in qualities such as size, amount, intensity, direction, and pattern remain visually subordinate to the characteristic landscape. One may see the changes but they appear natural and congruent. Modification allows for activities that visually dominate the characteristic landscape. However, activities of vegetation and land form alteration must borrow from naturally established form, line, color, or texture so completely, and at such a scale, that its visual characteristics are those of natural occurrences within the surrounding area or landscape character.

Table 2.5 Visual Quality Objectives by Area
(See pages VR 1-11 Visual Resources Photos)

Use Areas	Visual Quality Objective
Madsen Bay	Modification
Madsen Bay Wetland/Riparian Area	Partial Retention
Lakeside	Modification
Mountain View Campground	Modification
Dam and Primary Jurisdiction Zone	Modification
East Side and Singleton's	Partial Retention
Southeast Side of Reservoir	Partial Retention
West Side of the Reservoir	Partial Retention
Fish Creek Cove and Spur Bay/Gravel Operation	Partial Retention/Modification

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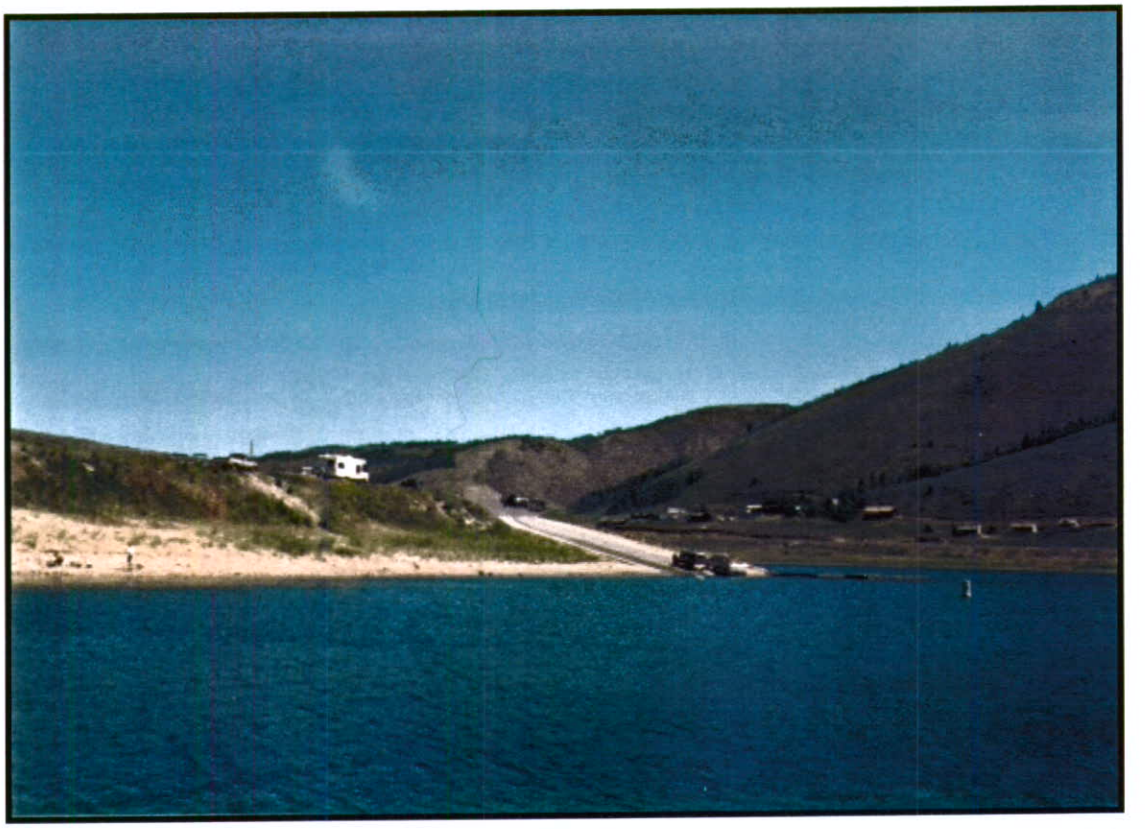
Madsen Bay - Modification VQO
Looking south-easterly across Madsen Bay at the campground.

Madsen Bay - Partial Retention VQO
Looking westerly across Lost Creek from the riparian area.



Madsen Bay - Modification VQO
Looking north-easterly toward the boat ramp.

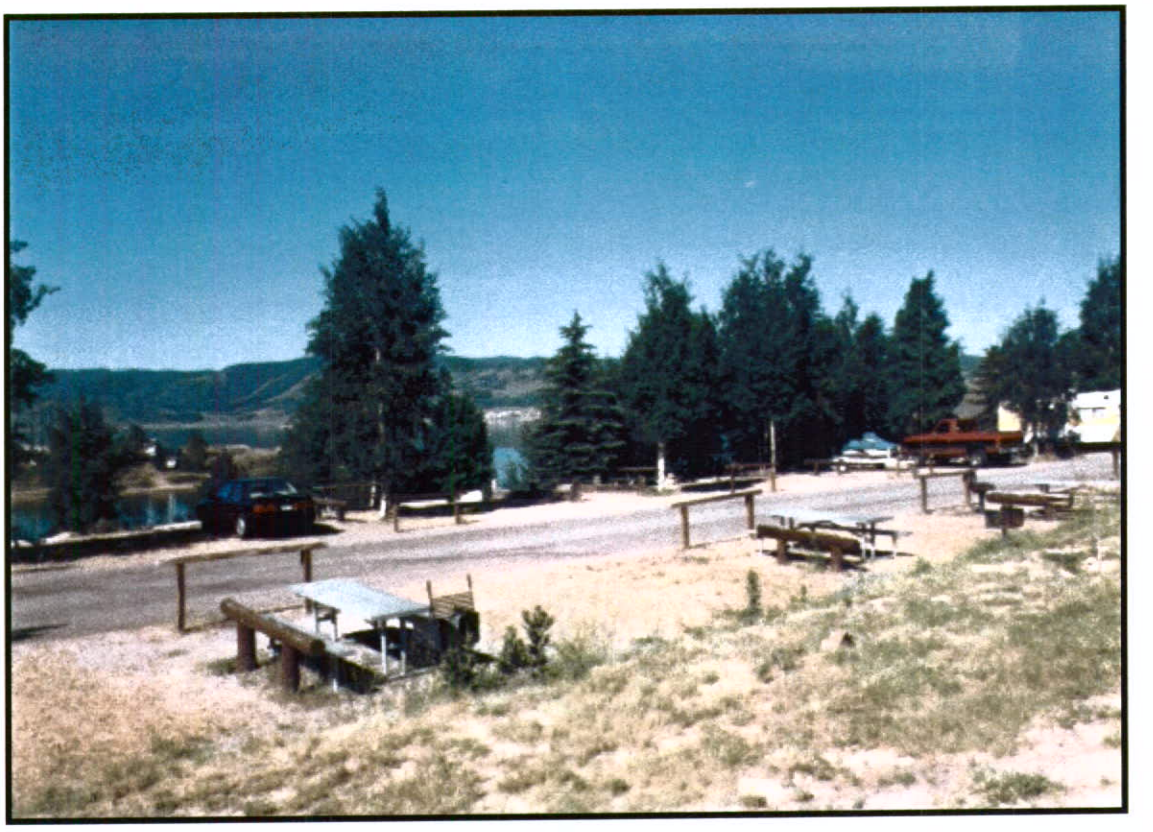
Madsen Bay - Modification VQO
Looking south-easterly toward the Reservoir from the Old Carbon County Campground.

Lakeside - Modification VQO
Looking easterly toward the fishing platform.

Lakeside - Modification VQO
Looking north-westerly toward the pavilion.

Lakeside - Modification VQO
Looking westerly. Scofield Campsite Subdivision is on left of photo.

Lakeside - Modification VQO
Looking southerly at Scofield Campsite Subdivision beach area.



Mountain View - Modification VQO
Looking westerly across the campground.

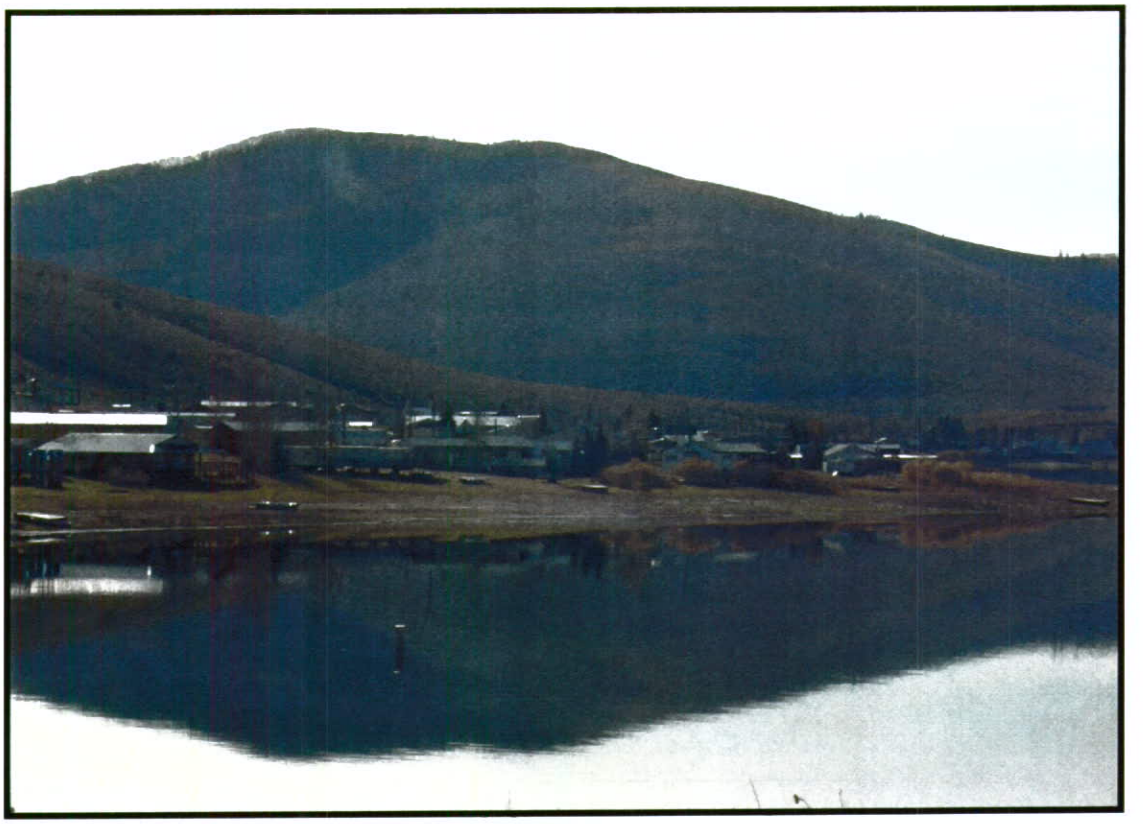
Mountain View - Modification VQO
Looking northerly toward the boat ramp.

Dam and Primary Jurisdiction Area - Modification VQO
Looking westerly toward the dam and the dam tender's housing area.

Dam and Primary Jurisdiction Area - Modification VQO
Looking westerly into the spillway.

Dam and Primary Jurisdiction Area - Partial Retention VQO
Looking southerly across the foot bridge.

Dam and Primary Jurisdiction Area - Partial Retention VQO
Looking down canyon from the foot bridge at the stream and riparian area.



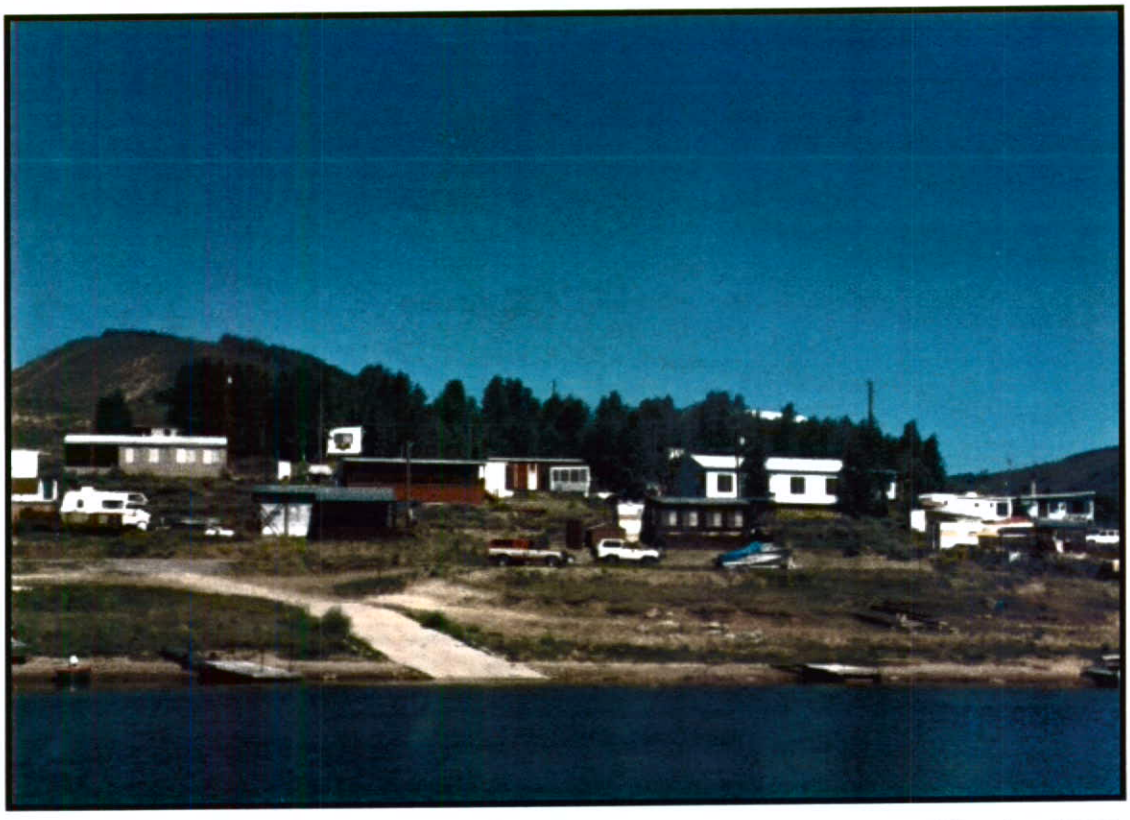
East Side - Modification VQO
Looking easterly toward the Bolotas Subdivision.

East Side - Partial Retention VQO
Looking southerly from Mountain View Campground at the Singleton's Area.

East Side - Partial Retention VQO
Looking southeasterly, note dispersed recreation use.

East Side - Partial Retention VQO
Looking easterly at the rocky shore adjacent to SR-96.

West Side - Partial Retention VQO
Looking southerly toward the southern end of Reservoir.



West Side - Modification VQO
Looking westerly toward the Scofield West Subdivision.

West Side - Partial Retention VQO
Looking northwesterly into Fish Creek and Little Bear Canyons.

West Side - Partial Retention VQO
Looking northerly toward the Boy Scout Camp.

NATURAL RESOURCES

Vegetation

This section describes the terrestrial vegetation cover types that occur in the Scofield Reservoir planning area. The plan area consists of approximately 4,335 total acres, including approximately 2,908 acres of surface water and 1,447 acres of terrestrial and wetland habitat types, as delineated and mapped with the reservoir at full pool. These values change on both an annual and a seasonal basis, depending upon the water level in the reservoir at any given time.

The vegetation in the plan area comprises a mosaic of midmontane vegetation types, ranging from meadow and shrub-steppe to forested areas. Although large forest patches occur in the vicinity of the reservoir, most of these stands are outside of the planning area boundary which, for the most part, closely follows the reservoir shoreline. Interspersed within the terrestrial landscape are narrow riparian communities associated with tributary streams and the shoreline of Scofield Reservoir. Four distinct habitat or cover types were identified within the plan area: sagebrush steppe, aspen forest, urban lands, and wetlands/riparian. These vegetation types are described by the dominant plant species that occur in each type, and represent a reasonable classification that provides an appropriate description of the various communities that comprise the diverse and complex natural ecosystem of the Scofield area. Note that plant names follow the Utah Flora (Welch 1993). Dominant plant species observed in each vegetation type are listed in the type descriptions, below.

The establishment and perpetuation of any given plant community is influenced by the physical and biological variables that determine the environmental characteristics of the site on which it occurs. These characteristics include edaphic (soil), topographic (elevation, slope, and aspect), meteorologic, anthropogenic, and zoogenic (effects of wild and domesticated animal populations) factors. The species composition of a given site is determined partially by interactions among these factors and disturbance resulting from human and animal activities. Such disturbances include human use and development and livestock grazing, both of which can alter the structure and composition of a community (Huntly and Inouye 1988; Naiman 1988, Anderson and MacMahon 1981, MacMahon 1981). In particular, the disturbance associated with the initial construction, inundation, and maintenance of the reservoir has, in effect, irrevocably altered the landscape and its associated plant communities within and immediately surrounding Scofield Reservoir.

Aerial photo interpretation was used to delineate the vegetation type boundaries within the plan area. Sites with similar species compositions and physical appearances were identified and typed to produce a habitat map. This map was then groundtruthed to ensure that the depiction of different communities was

accurate and biologically valid. The unique biological and physical characteristics of each type identify these habitats in the field; however, the boundaries delineating two separate cover types are not always as sharp or well-defined as depicted on the map. In some polygons, the characteristics (particularly species composition) of a site can be diverse, making it difficult to ascertain whether the area represents several smaller, distinct communities, or if the area shows local variability but belongs to the same overall habitat type. For purposes of evaluating the existing vegetation communities and potential resource management alternatives at Scofield Reservoir, several similar plant communities were classified into a single mapping unit (for example, the sagebrush steppe cover type describes communities ranging from stands of almost pure sagebrush to areas that have a significant component of grasses and forbs). Although they are depicted as a single cover type on the vegetation map, these general habitat types encompass communities which actually form a continuum, or a series of intergrading, and often very similar, vegetation subtypes that occur in response to the previously listed factors. This variability is addressed in more detail in the text description for each vegetation type.

Sagebrush Steppe

This vegetation type is the most common in the plan area. It occurs on a variety of terrain, including slope gradients ranging from nearly flat to very steep. The species composition of this cover type changes in response to aspect, gradient, and edaphic variables to include a range of communities from those dominated by big sagebrush (*Artemesia tridentata*) with little understory, to sites having a more diverse shrub component, including big sagebrush, mountain snowberry (*Symphoricarpos oreophilus*), bitterbrush (*Purshia tridentata*), silversage (*Artemisia cana*), rabbitbrush (*Chrysothamnus nauseosus, C. viscidiflorus*), chokecherry (*Prunus virginiana*), and shrubby cinquefoil (*Potentilla fruticosa*). These communities commonly have a diverse understory of grasses, including bluebunch wheatgrass (*Elymus spicatus*), western wheatgrass (*Elymus smithii*), Junegrass (*Koeleria macrantha*), wildrye (*Elymus spp.*), blue grass (*Poa glauca, P. spp.*), squirreltail (*Elymus elymoides*), fescue grass (*Festuca spp.*), and cheatgrass (*Bromus tectorum*).

Aspen Forest

Although aspen and conifer forests are prominent in the landscape around Scofield Reservoir, only the aspen type occurs within the plan area boundary. This type is restricted to a small north-facing slope south of the dam and several other minor occurrences around the reservoir. In the larger aspen forest stands, aspen (*Populus tremuloides*) is the dominant overstory, with a grass/forb understory, including wallflower, buttercup (*Ranunculus spp.*), potentilla (*Potentilla spp.*), monument plant, sweetpea (*Lathyrus lanszwertii*), milkvetch, phacelia, pussytoes, columbine (*Aquilegia coerulea*), mountain strawberry (*Fragaria virginiana*), orange sneezeweed, and pretty paintbrush (*Castelleja rhexifolia var. sulphurea*). In addition, there is a shrub component in the understory composed of Woods rose (*Rosa woodsii*), common juniper

(*Juniperus communis*), rabbitbrush, snowberry, and Oregon grape. In some stands, subalpine fir (*Abies lasiocarpa*) is a minor component of the overstory. In smaller, more isolated aspen stands the understory is characteristic of the edge community found in larger aspen stands, and is dominated by grasses including needle grasses (*Stipa nelsonii, S. comata, S. lettermanii,* and *S. pinetorum*), smooth brome (*Bromus inermis*), and wildrye. In addition to the grasses, some of the forbs listed above also occur, but are not a dominant component.

Urban/Disturbed Lands

This cover type includes those areas that have been highly disturbed by human use, including the campgrounds, boat ramp areas, the dam and the area immediately below it. Some of these areas have been paved and support little vegetation, while other areas support communities dominated by introduced or weedy species.

Noxious Weeds

Noxious weeds and other undesirable species are of concern because of their ability to completely transform or replace the native plant communities that previously occupied an area, thereby displacing wildlife communities through the resultant alteration or replacement of wildlife habitats. Invasion by exotic species is facilitated by improper or excessive land use or disturbance of the native plant community, and can be used as an indication of the relative health of the landscape.

Four undesirable species that are of particular concern in the planning area include cheatgrass, musk thistle, Canada thistle (*Cirsium arvense*), and whitetop (*Cardaria draba*). Cheatgrass has invaded the sagebrush steppe type, and although it has not yet formed extensive stands in most areas, it is present. The latter three species, all listed as noxious by the state of Utah, occur sporadically throughout the plan area, but are often more concentrated in wetland areas. Several occurrences of musk thistle were noted in the sagebrush steppe type as well.

Wetlands

Wetland and riparian habitat types within the Scofield Reservoir planning area include shoreline willow, riparian willow, wet meadow, seep/spring, and exposed reservoir bottom. These habitats represent potential jurisdictional wetland and riparian areas which could be regulated by the U.S. Army Corps of Engineers (COE) under Section 404(b)(1) guidelines of the Clean Water Act of 1977 (CWA). The Clean Water Act sets forth a goal of restoring and maintaining existing aquatic resources. To achieve a goal of no overall net loss of wetland values and functions, the COE strives to avoid adverse impacts and offset unavoidable adverse impacts to existing aquatic resources through mitigation requirements.

Wetland and riparian habitats within the Scofield Reservoir planning area were generally characterized to facilitate development suitability analyses for future management strategies. Detailed wetland identification and delineation studies were not contacted as part on this planning process.

The COE (Federal Register 1986) and Environmental Protection Agency (Federal Register 1980) jointly define wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (Federal Register 1986). In general, wetland plants are typically adapted to saturated soil conditions and are able to grow, compete, reproduce, and/or persist in anaerobic soil conditions. Areas exhibiting wetland hydrology are permanently or periodically inundated or have soil saturation within a major portion of the root zone during the growing season of the prevalent vegetation. Functional values associated with wetland and riparian habitats include groundwater recharge and discharge, flood storage and synchronization, sediment trapping, shoreline anchoring, food chain support, fish and wildlife habitat, and active and passive recreation. Wetlands and riparian areas within the Scofield Reservoir plan area provide numerous beneficial functional values and are generally moderate to high quality.

Shoreline willow comprises the most extensive wetland habitat type within the Scofield Reservoir plan area and occurs on approximately fifty percent of the exposed shoreline particularly along shallower areas where intermittent and perennial creek drainages convey fine textured sediment to the reservoir. Riparian willow comprises the majority of riparian habitat type within the planning area and occurs along greater than eighty percent of perennial and intermittent creek drainages including the Price River. Wet meadow vegetation is present in moderate quantities and primarily occurs on shallower shoreline where fine sediment deposited by perennial and intermittent creeks remains saturated throughout a major portion of the growing season. Seeps/springs are present in isolated areas within the Scofield Reservoir plan area boundary and comprise the least common wetland habitat type. The extent and location of exposed reservoir bottom varies depending upon seasonal fluctuations in reservoir storage levels. Large expanses of muddy exposed reservoir bottom typically occur where perennial creek drainages deposit fine textured sediment into the reservoir.

Shoreline willow occurs along a majority of the periodically exposed east shore, isolated areas of the west shore, the entire island shoreline east of the Scofield West development, and shallow alcoves east of Fish Creek and Pondtown Creek where fluctuating water levels and substrate drying produce conditions conducive to development of more drought-tolerant hydrophytic species. Dominant overstory vegetation includes sandbar willow (*Salix exigua*). Dominant understory vegetation includes Kentucky bluegrass (*Poa pratensis*),

quackgrass (*Elymus repens*), clustered field sedge (*Carex praegracilis*), and spreading rabbitbrush (*Chrysothamnus linifolius*). Various annual weedy species are present including whitetop (*Cardaria draba*), Canada thistle (*Cirsium arvense*), and musk thistle (*Carduus nutans*), all Utah noxious weeds. Functional values of shoreline willow include shoreline anchoring through reduced wind and wave erosion, sediment trapping, food chain support, and fish and wildlife habitat.

Shoreline willow is the most developed and frequently impacted wetland habitat type within the Scofield Reservoir plan area. State-operated day use, overnight camping, and boat launch facilities are located primarily along the shoreline in Madsen Bay and Lakeside. Large numbers of recreationists also use unregulated, undeveloped areas north and south of Miller Canyon, east of Madsen Bay, and along a majority of the east shore throughout the year with limited oversight by resource managers. Vegetation trampling by recreationists and livestock, and wind and boat wake shore erosion continually impact this fairly resilient wetland vegetation. Use of unimproved access roads to the reservoir shore results in continual degradation of shoreline vegetation, soils, water quality, and wildlife habitat. During popular summer holidays when reservoir levels are low and extensive areas of easily accessible shore is exposed, human waste, trash, oil and gas and other contaminants are often deposited below the high water line further degrading shoreline vegetation and water quality.

Riparian willow vegetation occurs along Fish Creek, Pondtown Creek, Mud Creek, North Madsen Bay, and intermittent creek drainages north and east of North Madsen Bay. Dominant overstory vegetation includes Booth willow (*Salix boothii*), Drummond willow (*Salix drummondiana*), and sandbar willow. Dominant understory vegetation includes beaked sedge (*Carex rostrata*), Nebraska sedge (*Carex nebrascensis*), water sedge (*Carex aquatilis*), Baltic rush (*Juncus balticus*), reed canarygrass (*Phalaris arundinacea*), starry-eyed solomon seal (*Smilacina stellata*), silver sage (*Artemisia cana*), redtop (*Agrostis stolonifera*), and Kentucky bluegrass. Various annual weedy species are present including Canada thistle, a Utah noxious weed. Functional values of riparian willow include shoreline anchoring, sediment trapping, food chain support, fish and wildlife habitat, and active and passive recreation.

Riparian willow is minimally impacted by recreation activities along Fish Creek, Pondtown Creek, Lost Creek, Mud Creek, and other small intermittent and perennial creek drainages as this high quality riparian habitat type is very densely vegetated and generally outside high use areas. Vegetation trampling, stream bank erosion, and human waste and trash accumulation associated with angler use has substantially impacted riparian willow habitat along the Price River. The Mud Creek riparian willow habitat has been degraded as a result of intensive livestock grazing and subsequent stream bank erosion.

Wet meadow vegetation occurs primarily along the southeast reservoir boundary and in association with riparian willow at North Madsen Bay, Fish Creek, Mud Creek, and the Price River. Smaller, isolated areas of wet meadow are present along the reservoir shoreline southeast of Fish Creek, in seeps/springs south of Tucker Canyon and southeast of Fish Creek, and in smaller intermittent drainages along the east shore. These areas are inundated or saturated at a duration and frequency sufficient to support a prevalence of vegetation typically adapted to moist soil conditions. Dominant wet meadow vegetation associated with riparian willow communities include beaked sedge, starry-eyed solomon seal, Baltic rush, Nebraska sedge, water sedge, field horsetail (*Equisetum arvense*), white clover (*Trifolium repens*), buttercup (*Ranunculus* spp.), Richardson geranium (*Geranium richardsonii*), reed canarygrass, goldenrod (*Solidago* spp.), and moss. Dominant wet meadow vegetation along the southeast reservoir boundary includes broadleaf plantain (*Plantago major*), moss, Baltic rush, Kentucky bluegrass, Nebraska sedge, arrowgrass (*Triglochin maritima*), clustered field sedge, and common spikerush (*Eleocharis palustris*). Dominant wet meadow vegetation associated with seeps/springs include Nebraska sedge, beaked sedge, clustered field sedge, fowl mannagrass (*Glyceria striata*), marestail (*Hippuris vulgaris*), Baltic rush, white clover, and Kentucky bluegrass. Various annual weedy species are present in all wet meadow areas; however, no Utah noxious weeds were observed. Functional values of wet meadow include groundwater recharge and discharge, flood storage and synchronization, sediment trapping, food chain support, and wildlife habitat.

Wet meadow is minimally impacted by recreation activities as this habitat type is generally outside high use areas. Livestock grazing along the south reservoir boundary effects the potential of this area to provide high quality wildlife and waterfowl habitat and increases the potential for weedy species invasion.

Seep/spring wetland habitat is present southeast of Fish Creek, south of Tucker Canyon, and in the Madsen Bay campground. Vegetation is supported by perennial seepage through permeable geologic formations. Dominant vegetation includes beaked sedge, Nebraska sedge, white clover, buttercup, common spikerush, Baltic rush, clustered field sedge, and fowl mannagrass. Few annual weedy species are present. Functional values of seeps/springs include groundwater recharge and discharge, food chain support, and wildlife habitat. Seeps/springs present along the east shore are minimally impacted by recreation activities as they are generally outside high use areas. Horse grazing in the seep/spring southeast of Fish Creek has affected this high quality habitat through vegetation trampling and increasing the potential for invasion of undesirable weedy species. The seep/spring located in the Madsen Bay campground has been impacted through vegetation trampling by recreationists.

Exposed reservoir bottom consists of muddy and rocky substrates depending upon the topography of the exposed shoreline. Large expanses of muddy

exposed reservoir bottom exist during seasonally low reservoir levels where Fish Creek, Pondtown Creek, Mud Creek, and Lost Creek deposit sediment into the reservoir. Transition zones in these areas may be sparsely vegetated with sandbar willow and annual weedy species.

Aquatic Resources

Scofield Reservoir supports a significant fishery resource. At maximum capacity the reservoir covers 2,908 surface-acres and stores 65,780 acre-feet of water. Scofield has traditionally been one of Utah's top fisheries, providing game fish of desirable quantity and size for both boat and shore anglers. In 1986, the estimated economic value of fishing at the reservoir was $2,452,240 (Christopherson and Judd 1991).

Substrate in the impoundment consisted mainly of large boulders and cobble with silt-filled interstitial spaces. The shallow inlets in the north arm of the reservoir (Madsen Bay) had extensive aquatic macrophyte growth down to approximately 1-2 meters depth. It was observed that littoral zone macrophytes were heavily utilized by fingerling rainbow trout. One of the inlets on the west side of the reservoir was being utilized as a watering point for sheep. Approximately 150 sheep were observed watering at this inlet and the shoreline and littoral zone substrate showed evidence of livestock disturbance.

Large (approximately 12 inches) rainbow trout (*Oncorhyncus mykiss*) were observed in deeper water (≈25 feet deep) around the island near the center of the reservoir. Large numbers of crayfish were observed both in the inlets and in deeper water. Crayfish generally graze on submerged macrophytes when they are available. However, there was no observable evidence that crayfish have impacted aquatic vegetation in Scofield Reservoir.

The two main tributaries of Scofield Reservoir are Mud Creek and Fish Creek (Judd 1992). Some trout were observed in Fish Creek, but no non-game species were observed. It was obvious that some sediment was entering the reservoir from Fish Creek. Visibility was worse in Fish Creek Cove than in the reservoir. Mud Creek enters a large marshy area before it drains into the reservoir, therefore it did not have the defined stream channel conducive to diving or snorkeling.

Approximately ¼ mile of the Price River below the dam was surveyed with snorkel equipment in June 1996. Fish observed included redside shiner (*Richardsonius balteatus*), Utah chub (*Gila atraria*), carp (*Cyprinus carpio*), and brown trout (*Salmo trutta*). Of these, the Utah chub was the most abundant species, followed by redside shiner, carp, and brown trout.

In the past, Scofield Reservoir has primarily been managed as a rainbow trout and cutthroat trout (*Oncorhyncus clarki*) fishery. Other species that have inhabited the reservoir include kokanee (*Oncorhyncus nerka*), redside shiner,

carp, Utah chub, and illegally introduced walleye (*Stizostedion vitreum*). Because of the recent chemical renovation and stocking, the most abundant species in the reservoir is currently rainbow trout (Cavalli 1996), with cutthroat trout and shiners present, but in smaller numbers.

Past Management Strategies

Since its first chemical renovation in 1958, Scofield Reservoir has been managed as a put-grow-take fishery. Three-inch fingerling rainbow trout were typically stocked in the reservoir in early spring, where they grew until they reached a harvestable size (typically >9 inches). This management approach had been fairly successful up to 1972, however, by 1973 competing non-game fish had become so abundant that growth and survival of stocked trout were impacted. These impacts were addressed by stocking larger fingerlings (5 inches), which improved trout survivability for a number of years. In 1977, another chemical renovation was conducted. Stocking subsequent to the renovation provided mixed success, probably because of low water conditions which exacerbated existing water quality problems. By 1990, water levels were judged unfavorable for fingerling survival and all stocking was canceled (UDWR 1992). In 1991, the reservoir was chemically renovated for a third time in an effort to control undesirable species such as carp, chub, and walleye. After this renovation, the reservoir was stocked with five-, seven-, and nine-inch trout to facilitate rapid recovery of the fishery for the 1992 season (UDWR 1992). A creel census conducted from June through September 1992 estimated a mean seasonal catch rate of 0.732 fish per hour, indicating good survival of stocked fish.

Current Problems and Future Management Strategies

In spite of the initial apparent success of the 1991 chemical renovation, the future of the Scofield fishery appears to be tied more to water quality limitations than competition or predation by non-game species or introduced exotics (Christopherson and Judd 1991). The success of a put-grow-take fishery is dependent upon the survivability of stocked fingerlings. If the fingerlings do not survive long enough to grow to harvestable size, the fishery will decline.

During the last decade Scofield Reservoir has experienced a steady decline in water quality with a concomitant drop in the quality of the fishery (Christopherson and Judd 1991). Non-point nutrient inputs of phosphorus are implicated in the degradation of water quality in the reservoir. These inputs often generate late summer blooms of blue-green algae. Blue-green algae tends to out compete other phytoplankton in phosphorus loaded systems and, in many cases, represents the dominant primary producer. Because it is inedible to most zooplankton, the overabundance of blue-green algae results in a drop in zooplankton densities and causes corresponding ripple effects through the food chain. The ultimate result is a reduction in forage for game fish.

Respiration of the profuse algae often results in decreases in dissolved oxygen. Additionally, the enrichment of bottom sediments in Scofield Reservoir has increased bacterial activity, causing deep water oxygen depletion after summer stratification (layering of water due to temperature differences). This effect, combined with the algal respiration, has caused drops in dissolved oxygen concentrations in the reservoir in late-summer and/or winter. Fish kills due to lack of oxygen have occurred in Scofield during the winters of 1960-61, 1961-62, and the summers of 1962 and 1981 (UDWR 1992).

In the winter of 1993 adequate dissolved oxygen concentrations were available only in the top meter of water in the reservoir, and a fish kill seemed imminent (Christopherson 1993). This fish kill did not occur, however small fish kills have occurred in 1995, 1996 (Christopherson, *pers. comm.* 1996) and 1999 (Twitchell, *pers. comm.* 2001).

The water quality problems in Scofield are likely a result of the combination of high nutrient input and poor flushing. Past fish kills in the reservoir correlate with years when the flushing rate of the reservoir is low. If as much or more water is discharged from the reservoir as enters the reservoir (flushing rate >1.0), the water quality and fish survivorship appears to improve (Christopherson and Judd 1991).

A study done by the Utah Bureau of Water Pollution Control (UBWPC) indicated that most of the nutrient inputs to the reservoir come from the tributaries. Approximately 77 percent of the external nutrient loading was estimated to be coming from Fish Creek and Mud Creek, with the remaining tributaries and shoreline contributing 18 percent and 5 percent respectively. Furthermore, the timing of the inputs correlated with the presence of livestock in the drainage (Christopherson and Judd 1991). Erosion due to poor watershed management was also implicated as a major source of pollution. Anglers were not found to be significant contributors to water pollution. For more information refer back to water resources section of this chapter.

In order to respond to the impacts of pollution on the fishery, the Utah Division of Wildlife Resources and the UBWPC has recommended:

- The Price River/Scofield Reservoir watershed be managed specifically for watershed protection,
- Streambanks of tributaries of the reservoir be stabilized,
- Wetlands be created to trap sediments before they enter the reservoir,
- Chemical renovation to remove carp be undertaken, and
- A study be conducted to evaluate the survivability of different sizes of stocked rainbow trout and cutthroat trout in the system (Christopherson and Judd 1991).

The last two recommendations have been successfully implemented by UDWR. Since the last chemical renovation in 1991, there have been no written documented observations of carp or chub in the reservoir. Additionally, stock-recapture studies of various sizes of fingerling trout since 1991 indicate good survivorship of small fingerlings.

Wildlife

As indicated in the vegetation section, three major wildland habitat types utilized by wildlife occur within the planning area. These types include: sagebrush steppe, aspen forest, and wetland/riparian. A fourth type, urban/disturbed lands, is also present but does not constitute significant wildlife habitat. Two additional, non-vegetated, habitat types include the mud flats exposed during reservoir draw down and the open water of the reservoir. Wildlife is discussed in the following sections: Big Game; Other Mammals; Raptors; Waterbirds and Upland Gamebirds; Other Avifauna; Reptiles and Amphibians; and Threatened, Endangered, and Sensitive (TES) Species. A list of animals, with their scientific names, observed in 1996 within the planning area can be found at the Bureau of Reclamation's Provo Area Office.

Big Game

Although mule deer may occasion portions of the planning area throughout the year, the majority of use is from populations which spend the summer in the area and move down below the dam during the winter months. Accordingly, the planning area and adjacent uplands are classified by UDWR as critical summer range for mule deer whereas the Price River corridor below Scofield Dam is identified as critical winter range (UDWR 1996). Observations made by a Scofield Park Ranger indicate that the local deer population has declined over the last 10 years but may be currently experiencing an increase (Jones 1994). Within the planning area, mule deer sign was most prevalent in aspen forest to the south of the dam and in wetland riparian zones along tributary streams, in the Madsen Bay area, and below the dam.

The entire area surrounding and including Scofield Reservoir is identified as critical elk (*Cervus elaphus*) summer range by the UDWR (UDWR 1996). Although they utilize each of the vegetation cover types within the planning area, elk are most likely to be found in or adjacent to types capable of providing adequate thermal and hiding cover. Within the planning area, these types include the aspen forest to the south of the dam and the more wooded occurrences of wetland/riparian habitat in the Madsen Bay area and below the dam. On slopes adjacent to the planning area, elk likely utilize spruce-fir and gambel oak habitats as well.

Riparian corridors associated with Scofield Reservoir's tributaries provide year-round habitat for moose (*Alces alces*) (Land Design 1982). While moose may occasionally be seen in and around the planning area, it is unlikely that the

reservoir and associated lands contain important quantities of habitat for this species.

Black bears (*Ursus americanus*), mountain lions (*Felis concolor*), and coyote (*Canis latrans*) are all present in the Scofield Reservoir area. During the dry conditions prevailing in the summer of 1994, human-bear interactions were relatively common. During this time, bears were spotted within the town of Scofield.

Other Mammals

Other mammals common within the planning area include the bobcat (*Lynx rufus*), yellow-bellied marmot, beaver, badger, striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), porcupine (*Erethizon dorsatum*), northern pocket gopher (*Thomomys talpoides*), and Uinta ground squirrel. The majority of mammal sign (visual observations of individuals, tracks, and scat) was observed in the wetland/riparian habitats below the dam. Suitable habitat for mink (*Mustela vison*) and beaver occurs in marsh and wetland/riparian habitats above and below the reservoir. Beavers were also observed in the Madsen Bay Interpretive Area on the north end of the reservoir. Numerous active beaver colonies have been reported along Scofield Reservoir's tributaries including Miller, Mud, Fish, and Pondtown Creeks (Land Design 1982). Long-tailed and short-tailed weasels (*Mustela frenata* and *M. erminea*) are probably common and, though they may occur in all cover types throughout the planning area, are likely concentrated in riparian zones where prey densities are greatest. Mountain cottontail (*Sylvilagus nuttallii*) is likely to occur within the sagebrush steppe habitat type. Other mammals having potential to occur in various habitats within the planning area include the red fox (*Vulpes vulpes*), least chipmunk (*Tamias minimus*), deer mouse (*Peromyscus maniculatus*), and various species of shrews (*Sorex* spp.), voles (*Microtus* spp.), and bats (for example, *Myotis* spp., *Eptesicus fuscus*).

Raptors

Birds of prey, or raptors, that have been observed within or adjacent to the Scofield planning area include the great horned owl (*Bubo virginianus*), barn owl (*Tyto alba*), western screech owl (*Otus kennicottii*), snowy owl (*Nyctea scandiaca*), golden eagle (*Aquila chrysaetos*), bald eagle (*Haliaeetus leucocephalus*), red-tailed hawk, and American kestrel (*Falco sparverius*) (Jones 1994). Although not technically considered a raptor, turkey vultures have also been observed within the planning area.

Water Birds and Upland Game Birds

Water birds include waterfowl, shorebirds, and other wading birds typically associated with wetlands and bodies of surface water. Scofield Reservoir serves as an important migratory stopover for water birds in the fall and spring (Denton *et al.* 1983). Depending on water level, emergent vegetation at the

mouths of Mud, Fish, and Little Bear Creeks and in the Madsen Bay Natural Area provides nesting habitat for a variety of waterfowl from mid-March to mid-July. Between mid-July and mid-August, the reservoir is more likely to be used as brood-rearing habitat, again with emergent vegetation playing an important role as hiding cover. Mud flats exposed in late summer and fall provide foraging areas for shore and wading birds while on their southern migration. Water birds observed during site visits in the summers of 1995 and 1996 include the pied-billed, eared, and western grebes; gadwall; mallard; cinnamon teal; and California gull. Additional waterfowl observed during the fall migration (October 1996) include the northern shoveler, lesser scaup, green-winged teal, and northern pintail. Many of these species were observed feeding at the north and south ends of the reservoir with the aquatic macrophyte Canada waterweed (*Elodea canadensis*) appearing to comprise an important fall forage for the dabbling ducks. Other species commonly observed at Scofield Reservoir during the spring and fall include the common loon (*Gavia immer*) and American White Pelican (*Pelecanus erythrorhynchos*) (Bates, *pers. comm.* 1996, Jones 1994).

With the exception of mourning doves, no upland game birds were observed during site-visits. However, sage grouse (*Centrocercus urophasianus*) are known to occur in the area and the UDWR has identified the area as high priority summer habitat for this species (UDWR 1996). Ruffed grouse (*Bonasa umbellus*) are also likely to be found in the vicinity within the aspen forest habitats located on and adjacent to the planning area.

Other Avifauna

Probably the most common birds at Scofield Reservoir are swallows. Tree, violet-green, northern rough-winged, and cliff swallows all occur within the planning area. Of these, the most abundant are the cliff swallows. Other songbirds, including the mountain bluebird, yellow warbler, and song sparrow, have been observed in or near riparian habitats within the planning area. Other songbirds which may occur within the state park include the American goldfinch (*Carduelis tristis*), western kingbird (*Tyrannus verticalis*), western meadowlark (*Sturnella neglecta*), common nighthawk (*Chordeiles minor*), loggerhead shrike (*Lanius ludovicianus*), white-crowned sparrow (*Zonotrychia leucophrys*), sage thrasher (*Oreoscoptes montanus*), green-tailed towhee (*Pipilo chlorurus*), and rufous-sided towhee (*P. erythrophthalmus*) in open, shrub-dominated habitats; the red-naped sapsucker (*Sphyrapicus nuchalis*), downy woodpecker (*Picoides pubescens*), western tanager (*Piranga ludoviciana*), and warbling vireo (*Vireo gilvus*) in aspen forest; and MacGillivray's (*Oporornis tolmiei*), orange-crowned (*Vermivora celata*), Virginia's (*V. virginiae*), and Wilson's (*Wilsonia pusilla*) warblers in riparian willow habitat. Another group of birds frequently observed at Scofield State Park comprises the corvids, including jays (*Cyanocitta* spp.), the black-billed magpie, and the common raven.

Reptiles and Amphibians

The only reptiles observed were the wandering garter snake and the short-horned lizard. The former was located in wetland habitat in the Madsen Bay interpretive area while the latter was observed in sagebrush steppe habitat on the western shore of the reservoir. Other reptiles with potential to occur in the planning area include the rubber boa (*Charina bottae*), Utah mountain kingsnake (*Lampropeltis pyromelana*), western yellowbelly racer (*Coluber constrictor*), wandering garter snake (*Thamnophis elegans vagrans*), Great Basin gopher snake (*Pituophis melanoleucus deserticola*), western smooth green snake (*Opheodrys vernalis blanchardi*), regal ringneck snake (*Diadophis punctatus regalis*), northern plateau lizard (*Sceloporus undulatus elongatus*), sagebrush lizard (*S. graciosus*), northern tree lizard (*Urosaurus ornatus*), and the Great Basin whiptail (*Cnemidophorus tigris tigris*). Amphibians with potential to occur in the planning area include boreal chorus frog (*Pseudacris triseriata*), northern leopard frog (*Rana pipiens*), Arizona tiger salamander (*Ambystoma tigrinum nebulosum*), Great Basin spadefoot toad (*Scaphiophus intermontanus*), boreal toad (*Bufo boreas*), and Woodhouse's toad (*Bufo woodhousei*).

Threatened, Endangered, and State Sensitive Species

Based on information from the U.S. Fish and Wildlife Service, Salt Lake City Office (USFWS 1994) and the Utah Natural Heritage Program (1994), no threatened, endangered, candidate, or sensitive plant species are known to occur within the plan area or areas that could be affected. Similarly, no state species of special concern were located during the vegetation surveys conducted by Pioneer biologists.

Federally Listed Species

In a 1994 memorandum, the United States Fish and Wildlife Service (USFWS) provided a list of federally listed threatened, endangered, and then candidate (now considered federal species of concern) fish species that may occur within the Price River drainage. These species include the Colorado squawfish (*Ptychocheilus lucius*), razorback sucker (*Xyrauchen texanus*), bonytail chub (*Gila elegans*), and humpback chub (*Gila cypha*). Water depletions in the upper Colorado River basin are considered by the USFWS to comprise a major impact to the recovery of these fish species. Accordingly, under the Recovery Implementation Program (RIP) for the listed fish, any proposed project which may result in a depletion of water from the Upper Colorado River Basin is considered a jeopardy to the fish and would thus require formal consultation with the USFWS. Impacts and potential conservation measures are identified through a Section 7 consultation of the Endangered Species Act (ESA) of 1973, as amended, between the FWS and the acting federal agency.

With the exception of the Colorado squawfish which has recently been reported in the lower Price River, none of the above listed species are known to occur in

this drainage. All four species are located in the upper Colorado River Basin, of which the Price River is a tributary.

The bald eagle has been identified with potential to be affected by actions at Scofield Reservoir (USFWS 1994). A number of species formerly classified as Category 2 Candidate Species were also identified by the USFWS as having potential to occur in the planning area. These include the black tern (*Chlidonias niger)*, western least bittern (*Ixobrychus exilis*), and white-faced ibis *(Plegadis chihi*). These animals, now officially classified as federal Species of Concern, receive no legal protection under the ESA. However, with the exception of the white-faced ibis, each has been identified by the UDWR as a state species of special concern. Consequently, they are treated below under State-listed species.

Bald Eagle

Large Engelmann spruce trees below Scofield Dam are known to provide winter roosting habitat for bald eagles. A number of bald eagle wintering sites are known in Utah. These sites are primarily concentrated along lower-elevation, open river, and reservoir areas.

Although areas that have historically been used by bald eagles for nesting are considered breeding range and include a majority of the North American continent, bald eagle habitat in Utah consists primarily of winter range (USFWS 1986). Bald eagle winter range usually includes areas of open water such as lakes or major river systems, although arid valleys may be used as well (Edwards 1969; Spencer 1976). Migration of bald eagles from breeding areas generally takes place between September and December. Food availability is probably the most significant factor determining the wintering distribution and abundance of eagles in any given area (Steenhof 1976). Bald eagles generally utilize cottonwoods (*Populus* spp.) and snags near open bodies of water as winter roosting sites. Cottonwoods afford the eagle an unobstructed view of the topography and unimpeded access to the large limbs utilized for roosting.

State Listed Species

State listed species are designated by the UDWR according to the following classification: Endangered, Threatened, and Sensitive. Sensitive species are further divided into three categories: S1 = a species whose population has been greatly depleted and is declining in numbers, distribution, and/or habitat; S2 = a species that occurs in limited areas and/or numbers due to a restricted or specialized habitat; S1/S2 = a species with both of the above characteristics. A list of state sensitive species can be found at the Bureau of Reclamation's Provo Area Office. However, none of the species listed has been observed in the plan area.

Range Resources

The majority of the land around Scofield Reservoir comprises rangeland. Historically, much of this land has been grazed by livestock. Grazing continues to be a major use. Steep slopes and a short growing season make it unsuitable for other, more intensive agricultural uses. Increased recreational use has resulted in conflicts between recreationists and livestock operators. These conflicts most often take the form of trespass, vandalism, and littering.

Rangelands around Scofield Reservoir are used primarily for early summer and fall grazing before and after the livestock are moved onto higher pastures on National Forest System lands. In addition, some cow/calf pairs and yearlings spend the entire summer and early fall in pastures on the south and west sides of the reservoir. Livestock uses include grazing by cow/calf pairs, yearlings, and sheep. Four livestock operators control most of the grazing, either through direct ownership of the land or the rights to graze the land, or through leasing the grazing rights. Table 2.6 summarizes the amount of range use around the reservoir.

Table 2.6 Livestock Use in the Vicinity of Scofield Reservoir

Type of Use	Number	Season of Use
Cattle-yearlings[1]	180 - 200	June-October
Cattle-cow/calf pairs[1]	60	June-October
Cattle-cows[2]	300	August-October
Cattle-cows	400	15 days in spring; 15 days in fall
Sheep	200	2-3 days in June-July
Sheep	800	June-mid July; late September-November

[1] Cattle are rotated between a pasture on the west side of the reservoir in the spring to a pasture south of the reservoir in mid to late summer. [2] Cattle graze June through July in mountain pastures east of the reservoir before being moved to the pasture on the south end of the reservoir.

CULTURAL AND HISTORICAL RESOURCES

A cultural resources inventory of seven parcels of land around the reservoir (including the Scofield Dam Complex) was conducted. These parcels, which were selected by Reclamation, are located on lands administered by Reclamation and the Utah Department of Natural Resources in T. 11 S., R. 7 E., S. 33; and T. 12 S., R. 7 E., S. 8, 10, 11, 16-18, 20, 21, 28, and 29 on USGS 7.5' Quadrangles Colton, Utah (1979), Scofield, Utah (1979), and Scofield Reservoir, Utah (1978).

This inventory constitutes the second phase of cultural resources work carried out at the reservoir under this planning process. The first phase, completed in August and September 1994, consisted of a Class I cultural resources overview of the plan area. Fieldwork for the current project was carried out from July 9-11, 1996. This work was conducted under authority of Utah State Antiquities Permit No. U-96-SJ-0401w,s.

During preparation of the Phase I overview, a file search for previously conducted cultural resources work, previously recorded cultural resources sites, and known paleontological localities was carried out at the Utah State Historic Preservation Office (SHPO) and at the State Paleontologist's Office, both in Salt Lake City, Utah. At that time, additional research was conducted at several institutions including the Utah State Historical Society Library, and the Bureau of Land Management in Salt Lake City, and the Weber County Library in Ogden, Utah. Further research included consulting the National Register of Historic Places (NRHP) for any listed or determined eligible sites within the plan area. No NRHP sites are located within the current plan area. A supplemental file search was conducted by the author at the SHPO on July 9, 1996 in order to update the previous file search. No new cultural resources projects have been conducted and no new cultural resources sites have been documented since the initial file search.

Four previous cultural resource project have been carried out, and four cultural resource sites have been recorded in and near the current plan area. In 1977, Archaeological-Environmental Research Corporation of Salt Lake City conducted two cultural resources projects near the plan area. The first was an archaeological clearance of a drill station adjacent to Scofield Reservoir (Hauck 1977). No cultural resources were located during this inventory. The second project consisted of sample reconnaissance conducted for the potential development of UP&L facilities, transmission lines, and pipeline routes. Although a number of archaeological sites were located during this extensive survey, none are located in the immediate vicinity of the current plan area (McDonald and Hauck 1977).

In August 1985, Cultural Resources Management Services of Brigham Young University conducted a cultural resources inventory of six seismic lines in southeastern Utah and western Carbon Counties (Talbot 1985). Portions of this survey lie directly adjacent to the reservoir. Only one historic site, the Milburn Mine, was recorded during this inventory, and this site is located too far from the current plan area to be considered here.

In 1986, the Office of Public Archaeology (OPA) of Brigham Young University carried out an archaeological inventory of the Scofield drain fields (Duffin 1986). No sites were located during this inventory. In 1995, OPA undertook another inventory within the park boundary. This inventory consisted of a survey of 12.2 acres for proposed campground renovations (Irvine 1995). No cultural or paleontological resources were located during this inventory

In addition to these projects, four cultural resources sites have been recorded near, but outside, the current project area. These sites, all historic mine properties, were recorded during the 1985 activities of the Utah Abandoned Mines Program of the Division of Oil, Gas, and Mining (Berry 1985). A brief description of the sites can be found in the final report filed in the Bureau of Reclamation, Upper Colorado Region Archaeologist office in Salt Lake City, Utah.

Four cultural resources sites (42Cb1053, 42Cb1054, 42Ut989, and 42Ut990), one historic dam complex (SJ-501), and one isolated artifact were recorded as a result of this study. The isolated find was not associated with any known site or sites and, in-and-of itself, cannot be considered for eligibility to the NRHP. However, as part of this inventory it is necessary to evaluate each cultural resources *site* or structure found for eligibility to the NRHP based upon the requirements set forth in *36CFR 60.4*. A copy of the study with recommendations can be found at the Bureau of Reclamation, Upper Colorado Region Archaeologist office in Salt Lake City, Utah.

LAND MANAGEMENT

Land Ownership

Land ownership is mixed around Scofield Reservoir with private, state and federal land holdings. The present land ownership pattern of the project area began in 1926 when a rock-filled earthen dam was built by the Price River Water Conservation District (PRWCD). At that time, the PRWCD acquired lands or flood easements for use of private lands that would be inundated by the reservoir. On some lands that were acquired or on which flood easements obtained, the private landowner retains use when the lands are not inundated by water.

In 1943, a contract was signed between the United States, the PRWCD and the Carbon Water Conservancy District to construct a new dam at Scofield Reservoir. Rights and lands acquired at Scofield by the PRWCD were transferred in 1945 to Reclamation as part of the agreement to build the dam. The land ownership status established by the PRWCD was conveyed to Reclamation. By 1946 the dam was raised and Reclamation had acquired additional lands. The planning boundary is displayed on Map 1.1. The six categories of land ownership within the RMP are:

- Fee Title in USA (Reclamation-controlled, State Parks-managed).
- Fee Title in USA, private grazing and other uses except when inundated by water (private control when not inundated).
- Utah Department of Natural Resources (State Parks controlled).
- Flood easement only (private control when not inundated).
- Lands under license from USA to Scofield Special Service District (Special Service District control).
- Private land (private control).

This plan will provide management direction for activities on Reclamation and State Park controlled lands. However, due to the proximity of public and private land, the analysis will discuss issues on private land as they affect public land management. Conversely, there will be analysis of the impact of public users on private lands.

Access, Circulation, and Traffic

The peak monthly usage of Scofield State Park is 30,402 visitors and 10,134 vehicles. The data analyzed indicates that the average vehicle occupancy at the park is three people per vehicle.

Ramps

Scofield State Park maintains two boat ramps. One boat ramp is located at the Madsen Bay Campground, and the other at Mountain View Campground. The ramps function fairly well during most time periods, but they do become congested during peak holiday weekends.

Docks

State Parks maintains three docking areas two near the boat ramps at Madsen Bay and Mountain View, and one at the Lakeside management area on the east side. The dock at the day-use area accommodates people with disabilities. Mountain View has 6-8 courtesy slips and 9 rental slips, with 6 courtesy slips at

Madsen Bay. More rental slips are needed because most of the public shoreline is rocky and it is hard to find a place to beach a boat.

Access to the docks from the shore is adequate at both Mountain View and Madsen Bay. The dock at the day-use area on the east side has the best access for physically challenged users.

Parking, Safety, and Shoreline Access

Safety Along Highway 96

Parking along the highway is a frequent occurrence due to the lack of day-use parking and the close proximity of the shore with SR-96. Anglers are the primary source of vehicles parking along the highway. There are some turnouts, however, all of them are unimproved and become muddy and messy when it rains. Other problems with the unimproved turnouts include:

- Pedestrians crossing SR-96,
- Vehicles causing sight obstructions, and
- Trespassing onto private property

Due to the limited day-use parking facilities, many reservoir patrons park along the side of SR-96 and walk down to the shore. Many times pedestrians enter between parked cars onto the highway, potentially creating a hazardous condition.

Day-Use Parking

Day-use parking is provided at Madsen Bay, Mountain View Campgrounds, and Lakeside. When the Madsen Bay lot becomes full, many patrons park along the road leading to the primitive camping/Boy Scout camp. The Madsen Bay lot accommodates both single vehicles and vehicles with trailers.

Mountain View Campground has a small, paved day-use parking lot. It can accommodate a few vehicles with trailers, but most patrons use it for single vehicle parking. In addition, many patrons with boats park along side the campground's access road because there is limited day-use parking. Lakeside has a native surface parking lot and becomes very muddy when wet.

A day-use parking lot has been constructed on the west side of SR-96 near the entrance to Madsen Bay in conjunction with the Scenic Byway interpretive site. The lot offers parking and restroom facilities to day-use patrons. The parking lot provides access to interpretive exhibits associated with orientation to the region and conservation of resources.

Shoreline Access

Because the shoreline of Scofield Reservoir is shared by both private and public uses, there are some problems with trespassing onto private areas. Many private landowners have posted no trespassing signs, but some of the public has not heeded these signs. Park rangers often receive calls concerning trespassing. Parking is not restricted on the highway near frequent trespassing areas. Enforcement on this issue has been difficult, due to the lack of available officers and due to other pressing problems the park rangers, county sheriffs and UDWR conservation officers need to address.

Environmental Justice

Executive Order 12898 established environmental justice as a Federal agency priority to ensure that minority and low-income groups are not disproportionally affected by Federal actions. The Scofield Reservoir is located in Carbon and Utah Counties. The population of Carbon County is 20,966 people of which 3,713 are minorities (17.7%) with 15.1 % of the population living below the poverty level. Utah County has a population of 335,635 people of which 24,884 are minorities (7.4%) with 10.8% of the total population living below the poverty level. Since the proposed project does not involve major facility construction, population relocation, health hazards, hazardous waste, property takings or substantial economic impacts, the proposed project would not have an adverse human health or environmental effect on minority and low-income populations as defined by environmental justice policies and directives. None of the alternatives would disproportionately affect any low-income or minority communities.

ENDNOTES

1. Even though no surveyed visitor indicated any personal watercraft (PWC) use, 13 respondents listed PWCs as a problem at Scofield. This discrepancy most likely resulted in PWC users not returning their surveys. (Multiple activity responses were allowed making it unlikely that PWC users also brought boats and therefore merely listed boating as their activity.) Because an overwhelming number of respondents (93 percent) listed fishing as their primary activity, the unreturned PWC user surveys would not have seriously skewed the survey results.

2. The Mountain View area water line broke prior to the start of surveying and remained broken through the first weekend of survey distribution. This may account for many of the complaints related to restroom conditions, water levels, water quality, and conditions of park facilities since nearly half of surveys collected were from this period.

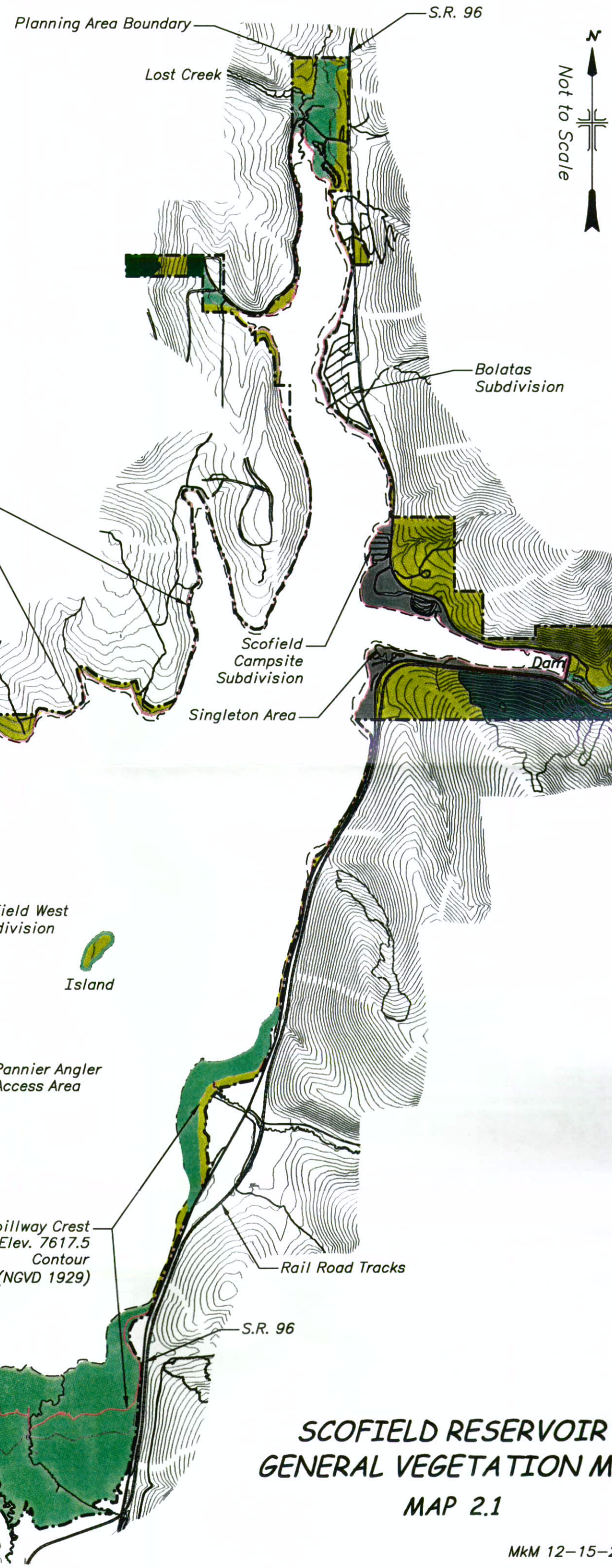
Notes:

1. *Elevation 7617.5 was established from USGS Datum BM No. 45 RS at initial Dam construction.*

2. *The planning boundary follows 7630 Ullrich and McGonagle survey (7634.6 USGS NGVD 1929) as denoted in specific deeds and property boundaries of Fee Parcels.*

Legend

- Aspen Woodlands
- Wetland/Riparian
- Urban/Developed
- Sagebrush/Steppe



SCOFIELD RESERVOIR
GENERAL VEGETATION MAP
MAP 2.1

MkM 12-15-2000

3

Chapter 3
Management Direction

INTRODUCTION

This chapter provides long-range management direction for Scofield Reservoir and surrounding lands in response to public issues and management concerns. Implementation of management directives is key to translating Resource Management Plan (RMP) goals and objectives to actual on the ground application and practice, ultimately resulting in the desired future condition. All uses and activities of the area covered by the RMP, including permits, contracts, and other instruments, must be consistent with current Reclamation policy as well as the screening criteria and management direction noted below.

Screening Criteria

The following criteria have been developed to use as a standard when evaluating existing/proposed uses and activities within the RMP area. As such, it is important that an activity or use:

- Does not change the operation of the reservoir outside the existing operational criteria;
- Does not adversely affect water quality;
- Complies with federal, state, and county planning, zoning, and building requirements;
- Does not adversely impact endangered species;
- Meets public health/safety standards and regulations;
- Complies with laws, regulations, and policies of the natural environment;
- Is reasonable and financially feasible;
- Can be implemented; and
- Is contained within the designated boundary displayed on Map 1.1 and is consistent with restrictions and status of project lands.

Management Direction

Management directives for the RMP area have been developed at two levels:

- Area Wide Management Directions
- Specific Area Management Directions

GOALS AND OBJECTIVES

The following goals and objectives are expressed in general terms and describe the desired future condition of Scofield Reservoir. For summary and tracking purposes, the goals and objectives are grouped into five main categories: Partnerships, Water Resources, Recreation and Visual Resources, Natural and Cultural Resources, and Land Management. As noted in the RMP Management Direction matrix beginning on page 3-7, each goal and objective will be pursued through specific management directives, standards, and monitoring activities.

PARTNERSHIPS

Goal: Encourage and support partnerships and agreements that complement and pursue RMP goals and objectives.

Objectives: Pursue and support partnerships with other interested parties to facilitate best management of the resources and provision of appropriate associated activities. Potential partners include: the Carbon Water Conservancy District (CWCD), Scofield Town, Scofield Special Services District, local landowners, local mining industry, the railroad, College of Eastern Utah, Utah Department of Environmental Quality, Utah Department of Transportation, the Utah Division of Parks and Recreation, the U.S. Fish and Wildlife Service, the Utah Division of Wildlife Resources, the U.S. Forest Service and the Carbon County Sheriff Department.

Work with local communities to evaluate the impacts of existing and proposed activities. Support the implementation of projects and programs that are consistent with RMP goals/objectives and benefit local communities.

Support partnerships with governmental entities and local conservation groups to promote public awareness of the area's vegetative, water, and game/non-game wildlife values.

Coordinate resource management and habitat enhancement activities and projects with private, local, state, and federal organizations and agencies.

Encourage partnerships designed to educate the public on the purpose of Scofield Reservoir, the importance of watershed

protection, and the public's role in improving/maintaining water quality.

Provide the public with opportunities to learn about the area's natural, cultural, and historical resources.

Provide the public with opportunities to learn about proper recreation etiquette and safety.

WATER RESOURCES

Goals: Participate in management efforts to maintain the water quality of Scofield Reservoir.

Protect/improve Scofield Reservoir water for storage, quality, and delivery.

Objectives: Encourage uses and activities that improve/maintain reservoir water quality.

Manage to effectively control pollution sources.

RECREATION AND VISUAL RESOURCES

Goals: Maintain/enhance the quality and diversity of recreational experiences available at Scofield.

Objectives: Evaluate the impact of recreation activities on Scofield Reservoir and surrounding lands.

Protect/enhance the visual resources of the area.

Provide a variety of recreational opportunities without compromising the quality of the recreation experience.

Provide accessible facilities and recreational sites for persons with disabilities.

Manage recreation at a level appropriate to the desired setting and experience.

Provide adequate facilities and management directives to appropriately balance providing recreation activities with protecting area's resources.

Provide for public health and safety.

NATURAL AND CULTURAL RESOURCES

Goals: Protect resources essential to fish and wildlife habitats and populations.

Protect sensitive resources and the natural environment.

Objectives: Protect threatened and endangered species and minimize impacts to sensitive resources.

Protect fish and wildlife habitat to the extent practicable within the operational constraints of the reservoir.

Protect/enhance the quality of the fisheries and fish habitat within the framework of existing laws and management authority.

Protect or enhance existing wetlands.

Allow further studies to determine if wetlands can be used to reduce non-point source pollution.

Control erosion where practicable.

Protect or enhance air quality.

Protect the area's cultural and paleontological resources.

Identify areas and resources unsuitable for development.

Implement integrated pest management strategies.

LAND MANAGEMENT

Goal: Within the reservoir's operating criteria, identify appropriate and compatible land uses that benefit the public.

Objectives: Clarify and resolve land ownership, property boundary, and resource management issues and responsibilities.

Identify areas and management strategies suitable for project purposes, access, roads, trails, utilities, and other land uses and activities.

DESIRED FUTURE CONDITION

This section describes the desired future condition for Scofield Reservoir and its surrounding lands following implementation of this Resource Management Plan. The desired future condition reflects the water-related purposes for which the reservoir was created, and the traditional and ongoing uses of the area for public purposes. Managing entities balance objectives associated with maintaining water quality and delivery, protecting wildlife habitat, and preserving cultural and natural resources, with the public's desire for a visually appealing, accessible, high quality recreation experience.

The primary purposes of Scofield Reservoir are to supply irrigation water to downstream users and to protect transportation facilities, mining operations, and power producing facilities in Price Canyon, and protect downstream communities in Carbon County from floods. In spring and early summer the reservoir accentuates the beauty of the Pleasant Valley setting and provides important recreation opportunities for residents and visitors to the area.

The reservoir provides a variety of high quality, sustainable, family-oriented recreation opportunities that are accessible to users of all abilities and that complement the family fishery niche. These include picnicking, camping, swimming, boating, and year-round angling opportunities in a variety of settings. Angler access to streams adjacent to the reservoir is provided. Adjoining property owners, including the Boy Scout Camp and the Bolotas, Scofield Campsite, and Scofield West Subdivisions, enjoy recreation opportunities based on their historical use of the area.

High quality recreation experiences occur due to appropriate land management and placement of facilities that enhance the visual quality of the area while minimizing conflicts between users. Public camp and picnic facilities complement the family fishery niche and are clustered at Madsen Bay, Singleton's, the old Carbon County Camp area, Lakeside, and Mountain View recreation areas. Staging facilities for angling are safe, sanitary, and exist in appropriate locations. Landscaping visually absorbs manmade structures and enhances wildlife conditions. User conflicts and water quality impacts are minimized through control of land based facilities, including recreation watercraft and reservoir access at designated land-based parking and ramp facilities.

Appropriate areas are identified for activities and facilities that are consistent with the reservoir's primary purposes and with the desires of users and involved entities. Reclamation boundaries are well marked and trespass, land ownership, access, and land use conflicts are resolved. Public health, safety, and welfare are protected through management techniques designed to

facilitate desired uses in an environment of mutually-compatible activities. Facilities are safe, accessible, well maintained, and in a state of good repair.

Best management practices are implemented to protect water quality, vegetation, and sensitive resources. The spread of weeds, pests, and aquatic nuisances are controlled by appropriate methods. Land access around and to the reservoir occurs only by designated roads, trails, and other access points. Aquatic habitat is protected in surrounding streams including Lost Creek, Fish Creek, and Pondtown Creek. Activities in sensitive areas such as wetlands, wildlife habitat, streams, and below the high water line are regulated. Previously disturbed areas are rehabilitated.

Reclamation partnerships with local, state, and federal entities encourage adequate and appropriate management of resources, including water, recreation, visual, natural, and cultural resources. The public is involved in the evaluation and implementation of existing and proposed activities. Through cooperative relationships, interpretive facilities and exhibits are developed and tie into regional interpretive themes. Facilities and exhibits increase public understanding of the purposes behind the construction and operation of the reservoir and describe its role in the community. They also explain how to use the area safely, describe the benefits of maintaining good water quality, and offer tips on using the lands and waters of Scofield Reservoir responsibly. Cultural and paleontological resources are protected and interpreted to increase public appreciation of the historic character of the area.

AREA WIDE MANAGEMENT DIRECTION

PARTNERSHIPS

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
OPERATIONS PARTNERSHIPS			
Project Purposes Fully protect the purposes for which the Scofield project lands were acquired or withdrawn. Evaluate proposed use activities against original purposes, contracts, and agreements.	Carbon Water Conservancy District (CWCD) to care for, operate, and maintain the Scofield Reservoir construction works. Triparte Contract among the U.S. Government, CWCD, and Price River Water Conservation District (PRWCD) for construction of Scofield Dam. Contract No. IIr-1406 10/11/43. Repayment Contract between the U.S. Government and CWCD for reconstruction of Scofield Dam. Contract No. IIr-1415 02/28/44. Contract between the U.S. Government and the State of Utah, acting through Fish and Game (Utah Division of Wildlife Resources), regarding the use of inactive reservoir capacity. Contract No. IIr-1420 05/26/44. Agreement among the U.S. Government, CWCD, and PRWCD amending Contract No. IIr-1406 04/05/56. Contract among the U.S. Government, Price City, and CWCD allowing for storage of water in Scofield Reservoir. Contract No. 4-06-400-1818 05/21/61.	Evaluate proposed use activities against original purposes, contracts, and agreements. Document in Reservoir Management Reviews.	Reclamation, CWCD, State of Utah, and other interested parties. Documents on file with Reclamation, Provo Area Office, Provo, Utah.

AREA WIDE MANAGEMENT DIRECTION

PARTNERSHIPS

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
	Contract between the U.S. Government and Sanpete County Water Conservancy District (SCWCD) relating to assignment of water rights (Gooseberry Project) Contract No. 6-07-01-00006 07/02/75. Agreement among the SCWCD, the CWCD, and the Price River Water Users Association concerning the Gooseberry Narrows Project. 06/08/84. Memorandum of Agreement between the U.S. Government and the State of Utah for Administration, Development, Operation, and Maintenance of Recreation at Scofield Reservoir. Contract No. I-LM-40-00380 11/22/94. Contract between the U.S. Government and CWCD for Safety of Dams (SOD) work on Scofield Dam Contract No. 96-07-40-R2030 03/12/96. Amendment No. 1 between the U.S. Government and CWCD for SOD modification on Scofield Dam Contract No. 96-07-40-R2030 04/30/98.		

AREA WIDE MANAGEMENT DIRECTION

PARTNERSHIPS

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Project Uses and Appurtenances Allow partnership management where project purposes and RMP direction can be met.	Provide for housing facilities where appropriate. 25 year License Agreement for Construction of a Cabin, Contract No. 8-07-40-L0694. Active until 2003. Establish power transmission rights-of-way where appropriate. 50 year License Agreement to Reconstruct a 138/46 kV Transmission Line, Contract No. 7-07-41-L0190. Active until 2037. Provide for private access where appropriate. 25 year License Agreement to utilize an existing access road below dam for access to private property, Contract No. 8-07-41-L0550. Active until 2013. 25 year License Agreement to utilize an existing access road below dam for access to private property, Contract No. 6-07-41-L0550. Active until 2013.	Evaluate activity proposals against project purposes, contracts, and agreements. Document in Reservoir Management Reviews.	Documents on file with Reclamation, Provo Area Office, Provo, Utah.

AREA WIDE MANAGEMENT DIRECTION

PARTNERSHIPS

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
	25 year License Agreement to utilize an existing access road below dam for access to private property, Contract No. 6-07-41-L0560. Active until 2013. Provide for sewer facilities and drain fields where appropriate. 50 year License Agreement to construct, operate, and maintain a subsurface drain field, sewer line, and pump station, Contract No. 9-07-41-L0100. Active until 2013. 50 year License Agreement to construct, operate, and maintain a subsurface drain field at two sites and sewer lines at three sites, Contract No. 7-07-41-L0490. Active until 2012. 50 year License Agreement to construct, operate and maintain a subsurface drain field on Scofield Reservoir flowage easement, Contract No. 7-07-41-L0590. Active until 2012.		Documents on file with Reclamation, Provo Area Office, Provo, Utah.

FIRE PREVENTION PARTNERSHIPS

Regulations Ensure appropriate fire management regulations and procedures are in place and enforced in developed and dispersed areas.	Develop fire prevention programs for the areas.	Observe fuel conditions and apply appropriate action (by contract/permitted management entity).	Contract/permitted management entity.

AREA WIDE MANAGEMENT DIRECTION

PARTNERSHIPS

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
	Construct fire breaks and/or manipulate vegetation as necessary to reduce the risk and spread of wildfires. Revegetate burned areas promptly with an appropriate seed mixture to reestablish vegetation and prevent erosion Restrict fires to fireplaces, grills, stoves, or lanterns. Post restrictions. State Parks Regulations: R651-613 and R651-613-1.	Monitor burned areas annually for revegetation success (by the contract/permitted entity).	Coordinate with Utah State Parks, Reclamation, CWCD, UDWR, and adjacent landowners.
FISH AND WILDLIFE PARTNERSHIPS			
Fish and Wildlife Management Utah Division of Wildlife Resources (UDWR) is the wildlife authority for the State of Utah and is charged with the responsibility to protect, propagate, manage, conserve, and distribute protected wildlife throughout the state.	Management activities are subject to the broad policy-making authority of the Utah State Wildlife Board. Activities regulated by UDWR are specified in Title 23 of the Utah Code, or addressed in rules or proclamations as provided by Utah Code. UDWR has primary responsibility for enforcement of fish and wildlife related laws. However any peace officer of the state has the same authority to enforce these laws.	Enforce and field review.	UDWR and appropriate law enforcement.

AREA WIDE MANAGEMENT DIRECTION

PARTNERSHIPS

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Fish/Wildlife Use Manage for fish and wildlife use as appropriate.		Track in Reservoir Management Reviews.	Reclamation, UDWR, and CWCD.
GENERAL PARTNERSHIPS, PRIVATE, COUNTY, STATE, FEDERAL, ETC.			
Governmental and Conservation Groups Form partnerships with governmental entities and local conservation groups to provide public awareness of and protect water quality, cultural resources, vegetation, and wildlife values.		Document progress/need in Reservoir Management Reviews.	Reclamation, CWCD, State Parks, UDWR, Utah County, Carbon County, local communities, and other interested parties.
Local Communities Work with local communities to determine what activities they believe either benefit or adversely affect them. Strive to implement projects and programs beneficial to local communities that are also consistent with the RMP.		Document progress/need in Reservoir Management Reviews.	Reclamation, CWCD, State Parks, UDWR, Utah County, Carbon County, and local communities.
New Partnerships As appropriate, pursue partnerships with parties such as Utah and Carbon counties, local communities, Utah Division of Parks and Recreation, Utah Department of Transportation, Utah Division of Wildlife Resources, Scofield Special Services District, etc. to facilitate best management of the resources while providing benefits to partners.	Structure partnership agreements to attract, encourage, and sustain cooperative and effective management while enhancing visitor services and protecting public resources.	Document progress/need in Reservoir Management Reviews.	Reclamation, CWCD, Utah County, Carbon County, State Parks, UDOT, UDWR, local communities, and other interested parties.

AREA WIDE MANAGEMENT DIRECTION

PARTNERSHIPS

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Private, State, and Federal Sectors Pursue natural resource management activities with private, state, and federal entities to reduce environmental impacts and maximize benefits to the public. Pursue cooperative private/State Parks/Reclamation initiatives and/or concession agreements with private enterprises to achieve needed recreation development in designated recreation management areas.			Reclamation, CWCD, Utah County, Carbon County, State Parks, UDOT, UDWR, local communities, and other interested parties.
Encourage volunteerism to enhance management.	Invite private, non-profit, church and other organizations to assist with activities such as area clean-ups, plantings, trail maintenance, resource interpretation, and camp hosting.	Report volunteer efforts by State Parks to Reclamation annually.	Counties, school district, churches, and various organizations.
INFORMATION MANAGEMENT AND PARTNERSHIPS			
Interpretive Partnerships Coordinate interpretive efforts with appropriate entities.			Reclamation, CWCD, State Parks, UDWR, UDOT, Utah County, Carbon County, and other interested parties.
Interpretive Programs Describe, as appropriate, high interest or unique geological, paleontological, biological, archeological, historical features or management concerns for public information and, as appropriate, develop interpretive information for these sites.	Design interpretive service programs where it will help resolve management problems, reduce management costs, obtain visitor feedback, increase public understanding of project management, enhance visitor use, and provide safe use of the area. Program elements should include: 1. Facility use guidelines and regulations.	Determine visitor profile and interpretive themes/media in Reservoir Management Reviews.	Reclamation, CWCD, State Parks, UDWR, College of Eastern Utah, and other interested parties.

AREA WIDE MANAGEMENT DIRECTION

PARTNERSHIPS

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
	2. Water and land use etiquette and safety regulations. 3. Project purposes, characteristics, limitations, capacities, and public benefits. 4. Opportunity guides and maps. 5. Reservoir boating and sailing conditions and hazards. 6. Developed and dispersed recreation use regulations. 7. Environmental interpretation and education on water quality and water conservation, wildlife, wetlands, cultural resources, and aquatic nuisance species. 8. Off highway vehicle access status, guides, and maps. 9. Waste management, fire prevention, sanitation, and use of fuels and chemicals.		

AREA WIDE MANAGEMENT DIRECTION

PARTNERSHIPS

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Signage Establish clear, consistent signage to orient the public and identify available opportunities at use areas and facilities.	Use Upper Colorado Region, Regional Sign Guide and the Utah Department of Natural Resources, Division of State Parks and Recreation Sign Handbook. Provide signs at key locations for effective visitor orientation such as at entrances, boat ramps, picnic areas, and camping areas. Coordinate warning, traffic control, interpretive, and informational signs. Post boundary signs at logical locations.	Document compliance/needs in Reservoir Management Reviews.	Reclamation, CWCD, UDOT, State Parks, UDWR, Carbon County, Utah County, and other interested parties.
LAW ENFORCEMENT AND SAFETY PARTNERSHIPS			
Appropriate Law Enforcement Share/coordinate interagency law enforcement (civil, wildlife resources, and recreation public use regulations) between Utah and Carbon counties, UDWR, and Utah State Parks.	Maintain law and order to protect the health and safety of persons using the area. Control litter, discourage vandalism, and perform search and rescue operations as appropriate. Notify the County sheriffs, and Reclamation immediately, when a death or life threatening situation occurs, of criminal acts, of project structure failures, of resource contamination (oil or chemical spills), or when natural phenomenons (landslides and fires) occur.	Report safety hazards and other enforcement difficulties annually to involved entities.	State Parks, UDWR, and Utah and Carbon County sheriffs.

AREA WIDE MANAGEMENT DIRECTION

PARTNERSHIPS

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
	Responsibility assigned Utah Division of Parks and Recreation under Utah Tile 73, Chapter 18.		
Discharge of Firearms Prohibit discharge of firearms, bow and arrow, or air and gas weapons across, into, or from recreation areas except when authorized at specific locations during hunting seasons.	State Parks Regulation R651-612 UDWR Big Game Proclamation.	Enforce.	State Parks, UDWR, and the Utah and Carbon County Sheriffs.
Emergency Communications Provide emergency communication and coordinate with local law enforcement.		Enforce.	Reclamation, CWCD, UDWR, State Parks, Carbon and Utah Counties.
Hunting in Developed Areas Prohibit hunting as prescribed by state law.	Utah State Parks Regulation R651-603-5 UDWR Big Game Proclamation.	Enforce.	State Parks.
RECREATION MANAGEMENT PARTNERSHIPS			
Recreation Management Encourage other qualified agencies to assume recreation management responsibilities.	Accommodate public recreation as per public law 89-72 and Title 28 of PL 102-575. Current management is as a State Park within the Utah State Park system. Managed by contract No. 1-LM-40-00380.	Comply with original contracts and agreements. Evaluate prior to issuance of new agreements.	Document on file with Reclamation, Provo Area Office, Provo UT. 1992 SCORP.

AREA WIDE MANAGEMENT DIRECTION

PARTNERSHIPS

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
WATER QUALITY PARTNERSHIPS			
Water Quality Coordinated Management Support the establishment of an interagency water quality group to review and make recommendations to reduce undesirable water quality impacts in the watershed.			Utah Department of Environmental Quality (UDEQ), State Parks, UDWR, Carbon and Utah Counties, US Forest Service, US Fish and Wildlife Service, Reclamation, CWCD, and other interested parties.

AREA WIDE MANAGEMENT DIRECTION

WATER RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
WATER OPERATIONS			
Care, Operation, and Maintenance Continue administration for construction works and factors affecting water integrity.	Operate by the: Annual Operating Plan, Standing Operating Procedures, Emergency Action Plan, and Designer's Operating Criteria.	Review plans and agreements annually or more often as needed.	UDEQ, State Parks, UDWR, Carbon and Utah Counties, US Forest Service, US Fish and Wildlife Service, Reclamation, CWCD, and other interested parties. Documents on file with Reclamation, Provo Area Office, Provo, Utah.
Reservoir Water Level Fluctuation Inform State Parks, Reclamation, and UDWR when sudden, major reservoir level fluctuations are planned.			CWCD and Reclamation.
WATER QUALITY			
Best Management Practices Implement best management practices relative to water quality in all resource activities.	Comply with the State of Utah drinking water source protection rule. Meet or exceed state and federal water quality standards for domestic purposes with prior treatment, recreation, wildlife, fish and agricultural uses where possible. Coordinate with county, CWCD, and Reclamation to assure best management practices are being implemented.	Observe algae blooms and related fish kills by UDWR and State Parks. UDWR document and report incidences to CWCD and Reclamation.	CWCD, Reclamation, UDEQ, Utah Divisions of Water Quality and Drinking Water, State parks, UDOT, UDWR, Carbon and Utah Counties, and local communities.

AREA WIDE MANAGEMENT DIRECTION

WATER RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
	Implement a public education program to interpret the benefits of water quality and to discourage acts that pollute. Coordinate with UDOT to assure that controls to limit the impacts from highway spills are implemented, specifically hazardous materials spills.	Comply with existing standards.	
Facilities Construct facilities to meet State of Utah and county standards. Protect reservoir water quality from the impact of development.	Provide adequate restrooms and trash receptacles. Locate them to facilitate public use. Control erosion and pollutant loading at the source.	Comply with existing standards in facilities development. Inspect fuel storage tanks. Document during Reservoir Management Reviews.	State of Utah, Reclamation, UDWR, and Carbon and Utah counties
Pathogens Manage to protect water quality.	Manage Reclamation lands and waters to maintain clean water standards.	Comply with set standards or procedures. Document compliance in Reservoir Management Reviews or as needed.	CWCD and Reclamation.
Water Development and Conservation Develop/redevelop water and sanitation facilities needed for recreation purposes.		Comply with current water quality and sanitation standards and reporting requirements. Document in Reservoir Management Reviews or more often as needed.	State Parks, CWCD, Reclamation, and Federal, State, and Counties' water and sanitation entities.

AREA WIDE MANAGEMENT DIRECTION

WATER RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Water Quality Protection Maintain or improve water quality.	Manage water quality where possible to be compatible with the following State beneficial use designations: 1C, 2A, 2B, 3A, and 4. Limit or restrict other uses as necessary to protect water quality. Do not approach or exceed Maximum Contaminate Levels (MCL) established by USEPA Safe Drinking Water Act rules and regulations.	Prescribe and conduct water quality and biological monitoring of the reservoir and its tributaries and releases.	CWCD, Reclamation, and the Utah Department of Environmental Quality.
WATERSHED PROTECTION			
Watershed Protection Encourage management practices in the reservoir watersheds that maintain or improve reservoir water quality. Encourage neighboring jurisdictions to construct and maintain facilities to protect and improve water quality before it enters the reservoir.		Comply with current water quality standards. Document in Reservoir Management Reviews.	Reclamation, CCWCD, US Forest Service, State of Utah, State Parks, Carbon and Utah counties, and surrounding property owners.

AREA WIDE MANAGEMENT DIRECTION

RECREATION/VISUAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
CONCESSIONS/SPECIAL USES			
Applications Act on recreation special use applications according to the following priorities: 1. Public service operations catering to the general public and maintaining the family fishing niche. 2. Group type operations. 3. Private type operations.	An application for permit may be denied if the authorizing officer determines that: 1. The proposed use would be inconsistent or incompatible with the purpose(s) for which the lands are managed, or with other uses, or, 2. The proposed use would not be in the public interest, or 3. The applicant is not qualified, or 4. The use would be inconsistent with applicable Federal and State laws, or 5. The applicant does not or cannot demonstrate technical or financial capability.	Comply with special use agreements. Document in Reservoir Management Reviews.	Reclamation and State Parks.
Private Initiatives Pursue cooperative private/Reclamation initiatives and/or concessionaire agreements with private enterprise to achieve needed recreation development. Allow the private sector to provide recreation oriented operation/ maintenance, administration, and/or vendor services, where appropriate.		Comply with contracts, agreements, and existing planning document direction. Document in Recreation Management Reviews.	State Parks, CWCD, and Reclamation.

AREA WIDE MANAGEMENT DIRECTION

RECREATION/VISUAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
RECREATION DEVELOPMENT			
Construction Priority Generally place priority for construction/reconstruction on restoration of existing facilities presently below standards.		Assess ranking order. Monitor in Reservoir Management Reviews.	
Development Requirements Comply with applicable Federal, State, and local laws, rules, and regulations in the development of facilities, including sanitation facilities. Develop facilities based on compatibility with authorized reservoir project purposes, long-term management and funding capability, management goals and objectives, and environmental protection factors. See Specific Area Management Direction.	Guidelines and principles contained in PL 89-72 as amended by Title 28 102-575 and other laws and agreements as applicable.	Comply in design and construction.	Reclamation, State Parks, CWCD, UDWR, and Utah and Carbon counties.
Facility Replacement Replace facilities when rehabilitation costs are 50 percent or more of replacement costs or when existing facilities cease to be compatible with site design or ROS classification.	Refer to specific area management for ROS Classification.	Evaluate facility condition. Document in Reservoir Management Reviews or more often if needed.	State Parks, CWCD and Reclamation.
Landscaping Allow shade tree planting above the reservoir high water mark only.		Document compliance in Reservoir Management Reviews.	Reclamation, State Parks, and CWCD.

AREA WIDE MANAGEMENT DIRECTION

RECREATION/VISUAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Private Development Allow recreation development by non-Federal (including associated third party) partners as approved in writing by Reclamation, and when consistent with existing agreements and planning documents.		Comply with contracts, agreements, and planning documents. Document in Reservoir Management Reviews.	Reclamation and State Parks.
Private Exclusive Facilities Do not allow private exclusive recreation use facilities by Reclamation, its managing partners, or private entities. Phase out existing recreation facilities deemed to be exclusive use when lands are needed for greater public purposes.		Enforce.	Reclamation and State Parks.
ROS Classification Provide recreation facilities appropriate to the ROS Classification. Facilities may include water, power, sanitation, electricity, roads, camp spurs, pavilions, etc. See Specific Area Management Direction.		Comply with contracts, agreements, and planning documents. Document in Reservoir Management Reviews.	Reclamation and State Parks.
Trails Construct pedestrian, bike, fishing, and access trails. Include appropriate sanitation stations and trash receptacles. See Specific Area Management Direction.		Comply with contracts, agreements, and planning documents. Document in Reservoir Management Reviews.	Reclamation, State Parks, and private land owners.

AREA WIDE MANAGEMENT DIRECTION

RECREATION/VISUAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
RECREATION MANAGEMENT			
Activities Manage for a year-round spectrum of recreation experiences while meeting the adopted ROS class. See Specific Area Management Direction.	USDA Forest Service ROS System; Chapter 60, Project Planning ROS Users Guide; and Chapter 63, ROS Setting Indicator and Analysis Technique Guidelines.	Determine user profile and preferences at planning intervals (by State Parks). Prepare annual recreation and wildlife summaries (by State Parks) for: Reclamation's "Annual Report," "Federal Recreation Fee Report," and to respond to Congressional and public inquiries.	State Parks, Reclamation, and UDWR.
Health and Safety Ensure appropriate law enforcement, waste, and fire management regulations and facilities are in place and enforced in recreation areas.		Enforce.	State Parks, UDWR, Utah and Carbon Counties.
Maintenance in General Provide facility maintenance to ensure an acceptable level of public safety, health, sanitation, and to protect natural resources.	Manage by an operation and maintenance plan that prescribes maintenance schedules and tasks.	Perform annual facility condition inventories (by State Parks) and coordinate with Reclamation on conditions and needs. Document in Reservoir Management Reviews. Presence of trash, litter, damage to structures, erosion, excessive bare ground, and presence of noxious weeds are indicators of maintenance need and Code-A-Site category.	State Parks and other interested parties.

AREA WIDE MANAGEMENT DIRECTION

RECREATION/VISUAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Management by Others Encourage other qualified entities to assume recreation management responsibility.		Comply with existing contracts and Recreation Management Memorandum of Agreement.	Reclamation.
Management Agreement Manage recreation consistent with this Scofield Reservoir Resource Management Plan and Recreation Agreement.	Federal Water Project Recreation Act (Public Law 89-72) and current amendments. Use a Memorandum of Agreement (MOA) as the mechanism to formalize relationships and responsibilities.	Comply with agreements and plans. Document in Reservoir Management Reviews.	Reclamation, CWCD, and State of Utah.
Parking Below the High Water Mark Generally prohibit public motorized land vehicles from driving or parking on beaches or below the high water mark, except for watercraft launching at approved sites and oversnow vehicles operating in winter.		Interpret and enforce.	State Parks, Carbon and Utah County Sheriffs, and UDWR.
Reservoir Water Quality Maintenance Restrict or terminate recreation uses which threaten or exceed Maximum Contaminate Levels (MCL) for products, such as volatile and synthetic organic compounds.	USEPA Safe Drinking Water Act rules and regulations.	Prescribe and conduct water quality and biological monitoring of the reservoir, its tributaries and releases.	Utah Department of Environmental Quality, CWCD, Reclamation, and UDWR.
Special Events Give precedence to normal park activities/operations when scheduling special events.	Review of special events requests by the recreation manager.	Comply before scheduling.	State Parks.

AREA WIDE MANAGEMENT DIRECTION

RECREATION/VISUAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Use Capacity Manage recreation use to not exceed design capacity. Limit camping or recreation use as necessary to protect water quality, riparian, aquatic, or other sensitive resources and to maintain the quality of the desired recreation experience. Restrict use in and/or rehabilitate recreation sites where unacceptable environmental damage is occurring. Rehabilitate camp or picnic sites that are in Code-A-Site category Extreme. Code-A-Site categories are defined in the Glossary.	USDA Forest Service Research Paper PNW-209, Dated 1976.	Comply with capacity limits and safety. Document in Reservoir Management Reviews or more often as needed.	State Parks and Reclamation.
User Conflicts Minimize conflicts and promote user safety.	Comply with State Parks and Recreation guidelines.	Interpret and enforce.	State Parks.
User Fees Charge appropriate user fees based on cost effective year-round service. Provide cost effective service.	Comply with State Parks Board, State Parks guidelines, and provisions of the recreation MOA between Reclamation, CWCD and State Parks.	Monitor compliance annually.	Utah State Parks and Recreation Board approved fee structure and State Parks.
Watercraft Launching Restrict watercraft launching which requires motorized tow vehicles to designated boat ramps and permitted areas only. See Specific Area Management Direction.		Assess launching location. Document in Reservoir Management Reviews or more often if needed.	State Parks, CWCD, and Reclamation.

AREA WIDE MANAGEMENT DIRECTION

RECREATION/VISUAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Watercraft Limit Develop a watercraft limit for the reservoir as public safety and the recreation family fishing niche becomes compromised. General limits at Reclamation reservoirs state-wide are based on available parking or approximately 10 surface acres per craft at one time, whichever is lower. Numbers are further reduced as necessary to control user conflicts and promote health and safety.	***Physical/Biological:*** Protect water quality at the fluctuating reservoir source. ***Managerial:*** Provide cost-effective recreation administration by managing through the Utah State Boating Act, rather than providing single purpose water use areas for individual recreation activities. Under Utah Title 73, Chapter 18, Utah Division of Parks and Recreation governs the operation, equipment, and numbering of vessels....on the waters of this state. "Waters of this state" means any waters within the territorial limits of this state. ***Social:*** Provide multi-purpose opportunities with low to moderate potential for conflicts with windcraft use, personal water craft use, fishing, motor boating and other water related activities.	Enforce.	State Parks.
RECREATION PLANNING			
Inventory System Distinguish between developed and undeveloped (dispersed) use areas and management. Utilize a nationally approved Recreation Opportunity Spectrum (ROS) system appropriate to the scale of the project.	USDA, Forest Service ROS System; Chapter 25, ROS Users Guide.	Prepare an annual recreation and wildlife summary (by State Parks) for: Reclamation's "Annual Report", "Federal Recreation Fee Report," and to respond to Congressional and public inquiries.	Reclamation, State Parks and UDWR. Inventory map on file at Reclamation, Provo Area Office.

AREA WIDE MANAGEMENT DIRECTION

RECREATION/VISUAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Inventory the recreation resource and evaluate it as an integrated part of the planning and implementation process at detail ROS mapping scales which address: 1. Physical setting, 2. Social setting, and 3. Managerial setting. General ROS Classes are defined in the Glossary, and include: 1. Primitive 2. Semi-Primitive, Non-motorized 3. Semi-Primitive, Motorized 4. Roaded Natural Appearing 5. Rural 6. Urban	Urban (managed as Semi-Primitive): The influence on dispersed area setting tends to be urban, but is managed to protect natural area values. See Specific Area Management Direction (Madsen Bay and Primary Jurisdiction Zone.)		
Motorized Vehicle Use Allow motorized vehicle use where appropriate. Refer to Specific Management Areas.	Generally, Reclamation lands are closed to motorized use, unless specifically opened.	Review proposals.	Reclamation, State Parks, and CWCD.
VISUAL ENHANCEMENT			
Development Achieve landscape enhancement through addition, deletion, or alteration of landscape elements. Examples of these include: 1. Addition of vegetation species to introduce unique form, line, color, or texture to existing plant communities. 2. Vegetation manipulation to open up vistas or screen out undesirable views. 3. Addition of structures which enhance the natural landscape.	USDA, Forest Service Visual Management System, Volume 2, Ch. 2 Utilities Ch. 3 Range Ch. 4 Roads Ch. 6 Fire Ch. 8 Recreation	Field inspect.	Reclamation, State Parks, and other interested parties.

AREA WIDE MANAGEMENT DIRECTION

RECREATION/VISUAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
VISUAL MANAGEMENT AND DEVELOPMENT			
Development Design and implement management activities to blend with or complement the characteristic landscape at the adopted Visual Quality Objective Level. See Specific Area Management Direction. The Visual Quality Objectives are defined in the Glossary.	The USDA, Forest Service Visual Management System, Volume 2, Ch. 1 The Visual Management System, Ch. 2 Utilities Ch. 3 Range Ch. 4 Roads Ch. 6 Fire Ch. 8 Recreation	Comply with visual condition. Document in Reservoir Management Reviews.	Reclamation, State Parks, CWCD, and other interested parties.
Duration of Impact The maximum time limit after construction activities have ceased for project rehabilitation to meet the adopted VQO is: Preservation — Immediately Retention — 2 years Partial Retention — 2 years Modification — 5 years Max. Modification — 5 years	USDA, Forest Service Visual Management System, Volume 2, Ch. 1 The Visual Management System	Comply with recovery duration time limit. Document in Reservoir Management Reviews.	Reclamation
Exceptions The dam and active gravel pits, due to their strong contrasts with the natural appearing environment.			

AREA WIDE MANAGEMENT DIRECTION

RECREATION/VISUAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
VISUAL PLANNING			
Inventory Inventory the visual resource and integrate it as part of the planning and implementation process at detail mapping scales which address: 1. Variety Classes: the landscape's visual attractiveness, 2. Sensitivity Levels: the public's visual expectation at various viewing distances and; 3. Visual Quality Objective: the visual prescription for definitive land areas.	USDA, Forest Service Visual Management System, Volume 2, Ch. 1 The Visual Management System.		Reclamation. Inventory Map on file at Reclamation's Provo Area Office.
Huntington/Eccles Scenic Byway Consider Huntington Eccles Scenic Byway objectives on visual quality.		Comply with RMP adopted VQO's.	Reclamation.
VISUAL REHABILITATION			
Rehabilitation Rehabilitate facilities and areas which do not meet the adopted Visual Quality Objectives (VQO). See Specific Area Management Direction.	USDA, Forest Service Visual Management System, Volume 2, Ch. 2 Utilities Ch. 3 Range Ch. 4 Road Ch. 6 Fire Ch. 8 Recreation	Comply with desired visual condition. Document at project completion and in Reservoir Management Reviews.	Reclamation.

AREA WIDE MANAGEMENT DIRECTION

RECREATION/VISUAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Priorities Set rehabilitation priorities for existing conditions as follows: 1. Relative importance of the site and amount of deviation from the adopted VQO. Foreground areas have the first priority, middle ground areas have second priority, and background areas have third priority. 2. Length of time it will take natural processes to reduce the visual impacts so that they meet the adopted VQO. 3. Benefits to other resource management objectives gained through rehabilitation.		Field inspection.	Reclamation and other interested parties.

AREA WIDE MANAGEMENT DIRECTION

NATURAL/CULTURAL/PALEONTOLOGICAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
AIR QUALITY			
Air Quality Meet Federal Air Quality standards and state air quality regulations during construction and management activities.	Implement methods to control smoke and dust. Obtain agricultural burn permits and do not exceed appropriate clearing indexes where control burning is implemented.	Enforce.	Utah State Department of Environmental Quality.
CULTURAL/PALEONTOLOGICAL			
Inventories Perform Class 1, 2, or 3 surveys to determine areas of high and low potential for cultural resources.	36 CFR 800	Perform site-specific (Class 3) surveys and consult with SHPO before project approval.	Reclamation and Utah State Historical Preservation Office.
Listed Sites Protect, find an adaptive use for, and/or interpret cultural and paleontological resources which are listed on the national Register of Historic Places, The National Register of Historic Landmarks, or which may be determined to be eligible for the national registers. Refer to Area Wide Information Management Partnership section for further information.	36 CFR 800	Determine damage/destruction due to unauthorized and uncontrollable natural agents. Document in Reservoir Management Reviews.	Reclamation and Utah State Historical Preservation Office.
Management Protect and foster public use and enjoyment of cultural and paleontological resources:	Executive Order 11593 43 CFR 3, 7	Determine damage/destruction due to unauthorized and uncontrollable natural agents. Document in Reservoir Management Reviews.	Reclamation.

AREA WIDE MANAGEMENT DIRECTION

NATURAL/CULTURAL/PALEONTOLOGICAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
A. Conduct appropriate studies to provide information necessary for an adequate review of the effect a proposed undertaking may have on cultural values. B. Give adequate consideration to modifications or alterations to proposed undertakings that could avoid, mitigate, or minimize adverse effects. C. Collect and record information from sites where appropriate. D. Issue antiquities permits to qualifying academic institutions or other approved organizations for the study and research of sites. E. Interpret sites as appropriate, and foster public appreciation of these resources.	36 CFR 800		
Nomination Nominate or recommend cultural or paleontological sites to the National Register of Historic Places or National Natural Landmarks in the following priority: A. Sites representing multiple themes; B. Sites representing those which are not currently on the National Register within the State; or C. Sites representing themes which are currently represented by single sites.	36 CFR 60 36 CFR 800	Nominate as appropriate. Document in Reservoir Management Reviews.	Reclamation.

AREA WIDE MANAGEMENT DIRECTION

NATURAL/CULTURAL/PALEONTOLOGICAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
GEOLOGY/MINERALS/SOILS			
Appropriate Minerals Management Assure that mineral development is permissible and compatible with project purposes and that mineral activities do not adversely affect planned or current uses.	***Leasables:*** Coordinate with BLM, (authority for review and issuance of federal minerals permits). Act of 2-25-90 (30 USC 181 et. Seq.). An Interagency agreement between Reclamation and BLM, 3-25-1983. Coordinate with Utah Division of Oil, Gas and Mining, (authority for review and issuance of private minerals permits). ***Locatables:*** Withdrawn lands are withdrawn from minerals entry by: Commissioner's order of 8-22-1952 and PLO-3676, 6-10-1965. Coordinate with the Utah Division of Oil, Gas and Mining, (authority for review and issuance of private minerals permits). Written permission from the State Park for mineral removal is required by: Utah Title 63, Chapter 11. ***Salables:*** Reclamation retains authority for review and issuance or permits. Written permission from State Parks for mineral removal is required by: Utah Title 63, Chapter 11.	Assure compliance where Reclamation has control. Document in Reservoir Management Reviews.	Reclamation, State Parks, and other interested parties.
Geologic Hazards Avoid geologic hazards, where possible, during construction and/or in ground disturbing activities.	Analyze site specific geological hazards prior to locating permanent facilities.	Comply in design and construction.	Reclamation.

AREA WIDE MANAGEMENT DIRECTION

NATURAL/CULTURAL/PALEONTOLOGICAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Gravel Pits Continue use of existing gravel pits as necessary for facility maintenance and rehabilitation.	Minimize disturbance from gravel operations to recreation visitors where possible. Return mined out gravel pits to a natural appearing contour, top soil, and revegetate to minimize weed infestation, soil loss, and visual effects.	When project ceases, determine on-site compliance and document in Reservoir Management Reviews.	Reclamation.
Soil and Moisture Conservation Prepare and execute programs for the conservation of soil and moisture.		Document compliance during Reservoir Management Reviews or more often as needed.	Reclamation.
Soil Protection Minimize adverse impacts to the soil resource, including accelerated erosion, compaction, contamination, and displacement.	Protect and conserve topsoil when conducting surface disturbing activities. Provide adequate drainage and revegetation on areas disturbed during construction or use activities and stabilize the areas to control soil erosion. Rehabilitate disturbed areas that are eroding excessively and/or contributing significant sediment to the reservoir or streams.	Document compliance at project completion, and during Reservoir Management Reviews.	Reclamation, State Parks, UDWR, CWCD, and other interested parties.

AREA WIDE MANAGEMENT DIRECTION

NATURAL/CULTURAL/PALEONTOLOGICAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
FISHERIES/HABITAT MANAGEMENT			
Fisheries/Habitat Management Maintain or enhance the habitat quality of the fishery.	Enforce fishing regulations according to the Utah Fish and Game Code. Construct habitat enhancement structures where compatible with water operations management and safety of the public. Enhance and protect such areas as Lost Creek, Fish Creek, and Pondtown Creek within the planning boundary. Generally maintain a natural area along each side of streams to enhance spawning and vegetation and reduce impacts from development.	Report unexpected fish kills to UDWR. Prepare annual recreation and wildlife summaries for: Reclamation's "Annual Report", "Federal Recreation Fee Report", and to respond to Congressional and public inquiries.	UDWR.
INTEGRATED PEST MANAGEMENT			
Pest/Aquatic Nuisance Management Control and reduce the spread first and then work on local established populations.	Coordinate with State of Utah, Utah and Carbon counties Pest Control and other interested parties to regulate undesirable or invasive pests.	Conduct field inspections of depredations by insects and the presence of disease and aquatic nuisances. Document in Reservoir Management Reviews.	Reclamation, State Parks, local weed control officials, permittees, concessionaires, proponents, and other interested parties.
Weeds/Noxious Weeds Control and reduce noxious weeds and poisonous plants using integrated pest management techniques and strategies, including the use of herbicides, biological control agents, and/or mechanical or hand treatments.	Require those authorized to conduct soil disturbing activities to control noxious and/or invading weeds on the disturbed area during the use or construction period.	Conduct annual field inspections.	Reclamation, State Parks, County and local weed control officials, permittees, concessionaires, proponents, and other interested parties.

AREA WIDE MANAGEMENT DIRECTION

NATURAL/CULTURAL/PALEONTOLOGICAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
	Apply pesticides only after approval by Reclamation. Apply restricted use pesticides under the direction of certified applicators. Follow label instructions.		
VEGETATION MANAGEMENT			
Enhance Wildlife Habitat Enhance wildlife habitat where appropriate.		Evaluate habitat condition in project planning and rehabilitation.	Reclamation and other interested parties.
Livestock Grazing Allow domestic livestock grazing where applicable. Generally, grazing is not allowed on Reclamation lands.	Prohibit grazing of recreation areas. Encourage practices that protect or enhance water quality, such as fencing.	Enforce.	Reclamation and State Parks.
Revegetate Disturbed Areas Revegetate disturbed or damaged areas or sites.	Close or restrict roads as needed. Rehabilitate closed roads to approximate original contour, drain, seed and sign. Gate and/or sign restricted roads.	Comply in project planning and during implementation. Document in Reservoir Management Reviews.	Reclamation, State Parks, and other interested parties.
Surface Disturbing Activities Minimize surface disturbing activities that alter vegetative cover.	Restrict use or close sites where erosion or environmental damage is occurring.	Document vegetative condition during Reservoir Management Reviews.	Reclamation, State Parks, and other interested parties.
Vegetative Condition Maintain healthy, diverse plant communities.		Comply in the use of treatment methods. Document in Reservoir Management Reviews.	Reclamation, State Parks, and other vegetative managing entities.

AREA WIDE MANAGEMENT DIRECTION

NATURAL/CULTURAL/PALEONTOLOGICAL RESOURCES

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Wetlands and Flood Plains Provide effective protection and management of wetlands and flood plains.	Prior to implementation of surface disturbing activity delineate and evaluate riparian and/or wetlands that may be impacted.	Determine impacts to wetlands and if required, obtain U.S. Army Corps of Engineers 404 permit for wetlands disturbance.	Executive Orders 11988 and 11990.
WILDLIFE MANAGEMENT			
Sensitive Species Manage habitat of sensitive species to keep them from becoming threatened or endangered.	Coordinate with USFWS.	Comply in planning and management. Document in Reservoir Management Reviews.	Reclamation, UDWR, USFWS, and State Parks.
Threatened and Endangered Species Manage habitat for recovery of endangered and threatened species. Where activities or uses may limit threatened and endangered species or their habitats, initiate consultation procedures. Include the results of consultation in determining the viability of the activity or use.	Coordinate with the U.S. Fish and Wildlife Service to provide effective protection and management of threatened and endangered species.	Comply in planning and management. Document in Reservoir Management Reviews.	Reclamation, USFWS, UDWR, and other interested parties.

AREA WIDE MANAGEMENT DIRECTION

LAND MANAGEMENT

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
FIRE SUPPRESSION			
Fire Suppression Employ best wildfire prevention techniques. Control wildfires at all intensity levels.		Control. Document in Reservoir Management Reviews or more often if needed.	Reclamation and State Parks.
LANDS			
Boundary Fences Construct fences in conformance with acceptable standards. Afford passage and migration of wildlife where appropriate.	USDI BLM 1995 BLM Fencing Manual Handbook H-1741-1. Contact livestock owners when their animals are in trespass. Take appropriate action.	Inspect fence conditions annually. Identify maintenance and/or repair needs. Document in Reservoir Management Reviews.	Managing entity.
Boundary Location Locate, mark, and post land lines according to the following priorities: A. Lines needed to meet planned activities; B. Lines needed to protect lands from encroachment, and C. All other lines.		Report attainment. Document in Reservoir Management Reviews.	Reclamation.

AREA WIDE MANAGEMENT DIRECTION

LAND MANAGEMENT

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Land/Easement Acquisition Identify and evaluate lands and/or easements necessary to pursue Reclamation purposes according to the following priorities: A. Where lands or easements are needed to meet project or resource management goals and objectives. B. Lands which provide habitat for threatened and endangered species of animals and plants. C. Lands having historical or cultural resources, outstanding scenic values or critical ecosystems, when these resources are threatened by change of use.		Record in the Foundation Information for Real Property Management (FIRMS) or current land management system. Document in Reservoir Management Reviews.	Reclamation, CWCD, and other interested parties.
Land Acquisition/Use Block or purchase lands for Reclamation purposes on a willing seller basis.		Record in the FIRMS or current land management system. Document in Reservoir Management Reviews.	Reclamation, CWCD, and State Parks.
Land Disposal Dispose of lands which are found to be no longer needed for project purposes.	Disposal based on Federal Property and Administrative Services Act of 1949 and 41 CFR 101-47.	Record in the FIRMS or current land management system. Document in Reservoir Management Reviews.	Reclamation, CWCD, and State Parks.
Land Withdrawals and Fee Title Lands Retain existing withdrawals and lands needed for project purposes. Relinquish existing withdrawals which are no longer needed for project purposes.	Section 204 of the Federal Land Policy and Management Act of 1976 (43 USC 1714).	Conduct informal withdrawal reviews to evaluate the continuation of Reclamation withdrawals (20 year intervals generally). Record relinquishments in the FIRMS or current land management system. Document in Reservoir Management Reviews.	Reclamation, CWCD, BLM, and State Parks.

AREA WIDE MANAGEMENT DIRECTION

LAND MANAGEMENT

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Non-Recreation Special Use Management Act on special-use applications according to the following priorities: 1. Land and use activity requests relating to public safety, health and welfare, for example, highways, power lines, and public service improvements. 2. Land and use activities that benefit only private users, for example, road permits, rights-of-way for power line telephones, and waterlines.	Section 10 of the Reclamation Project Act of 1939 and 43 CFR 429. Discretionary consideration to deny a permit could include the following: (1) The proposed use would be inconsistent or incompatible with the purpose(s) for which the lands are managed, or with other uses, or (2) The proposed use would not be in the public interest, or (3) The applicant is not qualified, or (4) The use would be inconsistent with applicable Federal and/or State laws, or (5) The applicant does not or cannot demonstrate technical or financial capability.	Review special use permits, leases, licenses, easements, applications, amendments, transfers, and administration for compliance.	Reclamation, CWCD, State Parks, and other interested parties.
Off-Site Influences to Recreation Sites Approve special-use applications for areas adjacent to recreation sites when the proposed use is compatible with project purposes and use of the recreation site.	Section 10 of the Reclamation Project Act of 1939 and 43 CFR 429.	Evaluate recreation setting, experience, and management objectives.	Reclamation, State Parks, and other interested parties.

AREA WIDE MANAGEMENT DIRECTION

LAND MANAGEMENT

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Pollution Control and Abatement Verify that all activities requiring a Spill Prevention Control and Counter Measure Plan are in accordance with Environmental Protection Agency and Corps of Engineers guidelines.	Report oil and chemical spills to the EPA National Response Center in Denver, Colorado; the Utah Emergency Response Center, SLC, Utah; Utah and Carbon Counties Sheriff, and Reclamation as directed by the Emergency Action Plan.	Comply with the Emergency Action Plan.	Reclamation.
Resource Activities Comply with the intent of project purposes in the design and implementation of resource development activities.	Verify crossing agreements, out grants, unauthorized uses, health and safety hazards. Identify lands not needed for project purposes.	Update Land Use Inventories annually. Document in Reservoir Management Reviews.	Reclamation, CWCD, State Parks, UDWR, and other interested parties.
Utility Lines Encourage burying utility lines, except when: A. Visual quality objectives of the area can be met using an overhead line. B. Burial is not feasible due to soil erosion, geologic hazard, or unfavorable geologic conditions. C. Greater long-term site disturbance would result. D. It is not technically feasible or economically reasonable.		Conduct on-site inspections.	Reclamation, State Parks, and other interested parties.

ROADS/TRAILS

Private Purpose Roads Put roads under special-use permit or easement that are needed for private uses, and are not needed for public travel or administration.	Section 10 of the Reclamation Project Act of 1939 and 43 CFR 429.	Record in FIRMS or current land management system. Document in Reservoir Management Reviews.	Reclamation, State Parks, and other interested parties.

AREA WIDE MANAGEMENT DIRECTION

LAND MANAGEMENT

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Roads Across Private Lands Where appropriate, acquire rights-of-way for roads and trails that cross private land.		Record in the FIRMS or current land management system. Document in Reservoir Management Reviews.	Reclamation, State Parks, and other interested parties.
Road Maintenance and Use Pursue agreements with private or public entities to provide on-going maintenance of roads and parking areas. Restrict vehicular traffic to designated improved roads, except for authorized uses. Close roads when unacceptable environmental or road damage is occurring. Maintain structures, bridges, cattle guards, etc., to be structurally sound and safe for use. Coordinate with UDOT to assure safe ingress and egress.		Document in Reservoir Management Reviews. Comply with agreements/permits. Document road condition. Conduct on-site inspections.	Reclamation, State Parks, and UDOT.
Road Rehabilitation Convert roads not needed for authorized activities to trails, or rehabilitate the road to approximate predisturbed conditions.		Record in FIRMS or current land management system. Document at Reservoir Management Reviews.	Reclamation, CWCD, and State Parks.
Special Purpose Roads/Trails Encourage the development of roads and trails, when constructed or reconstructed for special purposes, to meet existing and potential needs.		Comply with existing contracts and agreements.	

AREA WIDE MANAGEMENT DIRECTION

LAND MANAGEMENT

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Specific Purpose Roads Construct or reconstruct local roads and trails to provide access for specific resource activities such as campgrounds, trailheads, wildlife management, and leases. Fit the road to the topography and minimize the amount of surface disturbance. See Specific Area Management Direction.		Comply with existing contracts and agreements.	Reclamation, CWCD, State Parks, and other interested parties.
Trail Maintenance and Use Maintain trails for designated uses and close trails to inappropriate uses.		Determine trail condition and travel status. Document in Reservoir Management Reviews.	Reclamation, State Parks, and other interested parties.
TRAVEL/ACCESS			
Automobile/Motorized Vehicle Travel Prohibit vehicles from traveling and parking outside areas developed specifically for travel or parking purposes. Pursue opportunities to develop safe parking associated with State Highway 96.			Reclamation, UDOT, State Parks, and other interested parties.
Disability Access Construct accessible facilities which meet the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and the Uniform Federal Accessibility Standards (UFAS).		Comply with ADAAG and UFAS. Document in Reservoir Management Reviews.	Reclamation and State Parks.

AREA WIDE MANAGEMENT DIRECTION

LAND MANAGEMENT

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACTS AND REFERENCES
Land Trespass Where practicable, resolve land ownership and trespass issues.	Identify land owners, involved management entities, roles, and issues and encourage coordination and cooperation among all involved entities.	Monitor in reservoir reviews.	Reclamation, and other interested parties.
Off-Highway Vehicles OHV Use Designations: Close reclamation lands to off-highway vehicle use, except for areas or trails specifically opened. Classify specific areas or trails as to type of vehicle(s) use. Where practicable, regulate Off-Highway Vehicle use on Reclamation lands consistent with adjoining public and private land use. Accomplish OHV enforcement through Federal, State, County, or local law enforcement agencies.	Where open, comply with Utah State OHV Law Title 41, Section 22.	Evaluate roads, areas and trails as necessary and document in Reservoir Management Reviews.	Reclamation, State Parks, and UDWR.
Visitor Access Provide controlled access. (See Specific Management Areas.)			State Parks and Reclamation.

SPECIFIC AREA MANAGEMENT DIRECTION

MADSEN BAY MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
GENERAL MANAGEMENT AND PARTNERSHIPS			
Area Management Allow uses which protect water quality/ delivery and complement developed recreation objectives. Emphasize recreation management and administration for group and single-family day use, overnight camping, and watercraft access to the reservoir. Strive to operate at a full service level.		Comply with water and related project purposes while managing primarily for land-oriented day and overnight developed recreation use. See monitoring requirements below.	State Parks, CWCD, and Reclamation.
WATER RESOURCES			
Water Development and Conservation Develop/redevelop water and sanitation facilities needed for recreation purposes. Apply water conservation techniques in the development of restrooms, drinking water, and irrigation facilities.		Comply with current water quality and sanitation standards and reporting requirements. Document in Reservoir Management Reviews or more often as needed.	State Parks, Federal, State, and County water and sanitation entities.

SPECIFIC AREA MANAGEMENT DIRECTION

MADSEN BAY MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
RECREATION/VISUAL RESOURCES			
Appropriate ROS Management-Developed Areas Manage for a land based Urban Recreation Opportunity Spectrum experience (Development Scale 5) at developed recreation areas. Continue to manage for uses such as fishing, camping, picnicking, hiking, and watercraft launching and docking.	***Urban Recreation Opportunity Spectrum Class and Development Scale 5*** Allow a high degree of site modification. Allow formalized and contemporary architecture. Provide facilities for the comfort and convenience of the users. Facilities may include flush toilets, showers, and electrical hookups. Synthetic materials may be used. Develop formal walks or surfaced trails to minimize impacts to the natural environment. Provide access from SR-96. Allow up to five or more family units per acre. Allow plant materials foreign to the environment, including mowed lawns and clipped shrubs. Allow formal interpretive services.	Evaluate recreation condition and development scale. Document in Reservoir Management Reviews.	State Parks and other interested parties.
Appropriate ROS Management - Lost Creek Dispersed Area Manage for a land based Urban/Semi-Primitive Non-Motorized recreation opportunity at the wetland/riparian dispersed recreation area. Manage visitor use to protect or enhance soils, plants, and animals, and to provide a low incidence of contact with other individuals and groups. Interpret natural features where appropriate.	***Urban/Semi-Primitive Non-Motorized ROS Class and Development Scale 2*** Minimize site modifications. Provide improvements for protection of the site rather than comfort of the user. Use a minimum of public controls and little obvious visitor regimentation. Restrict public motorized access. Provide informal interpretative services.	Evaluate recreation condition and development scale. Document in Reservoir Management Reviews.	State Parks and other interested parties.

SPECIFIC AREA MANAGEMENT DIRECTION

MADSEN BAY MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
Facilities Development Develop appropriate facilities where the present facilities are not meeting the demand and where it meets the highest net public benefit. Provide facilities and access for site protection, efficient maintenance, and user convenience. Generally provide: • Entrance parking lot, visitor contact station, and Scenic Byway interpretive signage. • Administrative and maintenance facilities, including a maintenance building. • Upgrade existing campground of approximately 36 camping units with water, restrooms, trails, showers, paved roads. and campground spurs. • Develop the old Carbon County Campground area into a new campground with water, restrooms, sewer, and utility hookups. • Develop a group use area in the field north of the entrance station. • Maintain the boat ramp, courtesy dock, and restrooms. Pave the parking lot. • Provide new boat rental slips. • Develop an interpretive trail at the Lost Creek dispersed area.		Comply in planning, design, and construction. Conduct reviews. Assess development scale. Document in Reservoir Management Reviews.	State Parks.

SPECIFIC AREA MANAGEMENT DIRECTION

MADSEN BAY MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
Landscaping Manage vegetation to enhance visual quality and recreation opportunities on existing and proposed sites.		Evaluate vegetation benefits. Document in Reservoir Management Reviews.	State Parks.
Overnight Camping Allow overnight camping.		Document in Reservoir Management Reviews.	State Parks.
Visual Management As viewed from on-site, manage for a Modification Visual Quality Objective, except in the Lost Creek area manage for a Partial Retention Visual Quality Objective.	***Modification Visual Quality Objective*** Allow development or facilities which visually dominate the natural landscape, but harmonize with or complement it. Allow up to five years after project completion for revegetation to meet this objective. ***Partial Retention Visual Quality Objective (Lost Creek Dispersed Area)*** Allow development or facilities which appear subordinate to the natural landscape. Allow up to two years after project completion for revegetation to meet this objective.	Evaluate visual condition. Document in Reservoir Management Reviews.	State Parks.
Wakeless/ No Ski Zone Maintain wakeless areas to protect boat ramp and docks.		Enforce.	State Parks.
Watercraft Launching Access Restrict watercraft launching. Limit motorized tow vehicle assistance to the boat ramps at Madsen Bay or other permitted areas.		Assess launching locations. Document in Reservoir Management Reviews or more often if needed.	State Parks, Reclamation, and CWCD.

SPECIFIC AREA MANAGEMENT DIRECTION

MADSEN BAY MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
NATURAL/CULTURAL/HISTORIC/PALEONTOLOGICAL RESOURCES			
Site Rehabilitation Restrict use on and rehabilitate areas where unacceptable environmental damage is occurring.	Rehabilitate sites or areas that reach Code-A-Site category Extreme.	Evaluate site condition. Document in Reservoir Management Reviews.	State Parks.
LANDS			
Roads and Trails Design, construct, maintain, and close roads and trails to assure they are compatible with recreation site objectives.		Evaluate development standard and condition. Document in Reservoir Management Review or more often if needed.	State Parks.

SPECIFIC AREA MANAGEMENT DIRECTION

LAKESIDE MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
GENERAL MANAGEMENT AND PARTNERSHIPS			
Area Management Allow uses which complement developed group day use recreation objectives and which protect reservoir water quality/delivery.		Comply with water and related project purposes while managing primarily for land-oriented, day-use, developed recreation. See monitoring requirements below.	State Parks and Reclamation.
WATER RESOURCES			
Water Development and Conservation Develop water and sanitation facilities needed for recreation purposes. Apply water conservation techniques in the development of restrooms, drinking water, and irrigation facilities.		Comply with current water quality and sanitation standards and reporting requirements. Document in Reservoir Management Reviews or more often as needed.	State Parks, Reclamation, and Federal, State, and Carbon County water and sanitation entities.
RECREATION/VISUAL RESOURCES			
Appropriate ROS Management Manage for a land based Urban recreation opportunity experience (Development Scale 5). Provide group use area with a boat dock and/or fishing pier.	***Urban ROS Class and Development Scale 5*** Allow highly developed accessible recreation facilities, mostly designed for the comfort and convenience of the users. Convenience facilities may include drinking water and flush toilets. Encourage the use of formal walks and surfaced trails to allow universal access and protect the natural resources. Allow plant materials that may be foreign to the environment. Allow formal and contemporary architecture. Provide access to SR-96.	Evaluate recreation condition and development scale. Document in Reservoir Management Reviews.	State Parks and Reclamation.

SPECIFIC AREA MANAGEMENT DIRECTION

LAKESIDE MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
Facilities Development Develop appropriate recreation facilities where the present facilities are not meeting the demand and where it meets the highest net public benefit. Provide facilities and access for resource protection, efficient maintenance, and user convenience. Improve existing facilities including paving the parking lot and access road. Relocate handicap-accessible docks to reduce siltation problems.	Provide vegetative screening along the first two northeast lots of the Scofield Campsite Subdivision. Provide no picnic tables between the restroom access walk and the vegetative screen. Provide group day-use recreation with an emphasis on providing opportunities for individuals with disabilities.	Assess development scale. Document in Reservoir Management Reviews.	State Parks and Reclamation.
Landscaping Manage vegetation to screen Scofield Campsite Subdivision, enhance visual quality and wildlife use, and accommodate recreation use.	Provide vegetation screening along the first two northeast lots of Scofield Campsite Subdivision.	Evaluate vegetation benefits. Document in Reservoir Management Reviews.	State Parks and Reclamation.
Overnight Camping Prohibit overnight camping.		Enforce. Document in Reservoir Management Reviews.	State Parks and Reclamation.
Visual Management Manage for a Modification Visual Quality Objective as viewed from on-site.	***Modification Visual Quality Objective*** Allow development or facilities which visually dominate the natural landscape, but harmonize with or complement it. Allow up to five years after project completion for revegetation to meet this objective.	Evaluate visual condition. Document in Reservoir Management Reviews.	State Parks and Reclamation.

SPECIFIC AREA MANAGEMENT DIRECTION

LAKESIDE MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
NATURAL/CULTURAL/HISTORIC/PALEONTOLOGICAL RESOURCES			
Site Rehabilitation Restrict use on and/or rehabilitate areas, including recreation areas, where unacceptable environmental damage is occurring.	Rehabilitate sites or areas that reach Code-A-Site category Extreme.	Evaluate site condition. Document in Reservoir Management Reviews.	State Parks and Reclamation.
LANDS			
Easements/ROW Secure a Reclamation sewer line easement for the existing restroom connection to Scofield Campsite sewer system across the northeastern lot of the Scofield Campsite Subdivision. Allow development of a water storage reservoir to serve the Scofield Campsite Subdivision. Locate this reservoir to maximize the use of remaining lands for future purposes.	Conditions for the easement are: 1. Operate day use recreation only; 2. Vegetatively screen the two north-eastern lot lines, and; 3. Do not allow picnic tables between the walk to the restroom and the two lot lines.	Document in next Reservoir Management Review.	Reclamation and State Parks.
Roads and Trails Design, construct, maintain, and close roads and trails to be compatible with developed recreation sites and use objectives.		Evaluate development standard and condition. Document in Reservoir Management Review or more often if needed.	State Parks and Reclamation.

SPECIFIC AREA MANAGEMENT DIRECTION

MOUNTAIN VIEW MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
GENERAL MANAGEMENT AND PARTNERSHIPS			
Area Management Allow uses which protect water quality/ delivery and complement developed recreation objectives. Emphasize recreation management and administration for group and single-family day use, overnight camping, and watercraft access to the reservoir. Strive to operate at a full service level with a visitor contact station.		Comply with water and related project purposes while managing primarily for land-oriented day and overnight developed recreation use. See monitoring requirements below.	State Parks and Reclamation.
WATER RESOURCES			
Water Development and Conservation Develop/redevelop water and sanitation facilities needed for recreation purposes. Apply water conservation techniques in the development of restrooms, drinking water, and irrigation facilities.		Comply with current water quality and sanitation standards and reporting requirements. Document in Reservoir Management Reviews or more often as needed.	State Parks, Reclamation, and Federal, State, and County water and sanitation entities.

SPECIFIC AREA MANAGEMENT DIRECTION

MOUNTAIN VIEW MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
RECREATION/VISUAL RESOURCES			
Appropriate ROS Management-Developed Areas Manage for a land based Urban Recreation Opportunity Spectrum experience (Development Scale 5) at developed recreation areas.	***Urban Recreation Opportunity Spectrum Class and Development Scale 5*** Allow a high degree of site modification. Allow formalized and contemporary architecture. Provide facilities for the comfort and convenience of the users. Facilities may include flush toilets, showers, and electrical hookups. Synthetic materials may be used. Develop formal walks or surfaced trails to minimize impacts to the natural environment. Provide access to SR-96. Allow up to five or more family units per acre. Allow plant materials foreign to the environment, including mowed lawns and clipped shrubs. Allow formal interpretive services.	Evaluate recreation condition and development scale. Document in Reservoir Management Reviews.	State Parks and Reclamation.
Facilities Development Develop appropriate facilities where the present facilities are not meeting the demand and where it meets the highest net public benefit. Provide facilities and access for site protection, efficient maintenance, and user convenience.		Comply in planning, design, and construction. Conduct reviews. Assess development scale. Document in Reservoir Management Reviews.	State Parks, Price River Water Users Association, and Reclamation.

SPECIFIC AREA MANAGEMENT DIRECTION

MOUNTAIN VIEW MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
Generally provide: • Boat ramp, parking (30 vehicles/trailer combinations), fish cleaning station, and sanitation dump station. • Administrative and maintenance facilities for State Parks and UDWR headquarters. Relocate State Parks facilities to Madsen Bay when feasible. • Entrance contact station, office, roads, and parking. • Develop campground east of SR-96 with camping units, water, restrooms, roads, trails, and showers. • Renovate existing developed campground of 34 camping units, water, restrooms, roads, trails, and showers. • Provide group and single family day use area with picnic tables and pavilions. • Replace existing boat slips.			
Landscaping Manage vegetation to enhance visual quality and recreation opportunities on existing and proposed sites.	Plant trees to screen State Park and UDWR headquarters as viewed from off-site.	Evaluate vegetation benefits. Document in Reservoir Management Reviews.	State Parks and Reclamation.
Overnight Camping Allow overnight camping.		Document in Reservoir Management Reviews.	State Parks and Reclamation.

SPECIFIC AREA MANAGEMENT DIRECTION

MOUNTAIN VIEW MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
Visual Management Manage for a Modification Visual Quality Objective as viewed from on-site.	***Modification Visual Quality Objective*** Allow development or facilities which visually dominate the natural landscape, but harmonize with or complement it. Allow up to five years after project completion for revegetation to meet this objective. See Landscaping, above.	Evaluate visual condition. Document in Reservoir Management Reviews.	State Parks and Reclamation.
Wakeless/ No Ski Zone Maintain wakeless areas to protect boat ramp and docks.		Enforce.	State Parks and Reclamation.
Watercraft Launching Access Restrict watercraft launching within the Mountain View Management Area. Generally require those that need motorized tow vehicle assistance to use the Mountain View boat ramp.		Assess launching locations. Document in Reservoir Management Reviews or more often if needed.	State Parks and Reclamation.
NATURAL/CULTURAL/HISTORIC/PALEONTOLOGICAL RESOURCES			
Site Rehabilitation Restrict use on and rehabilitate areas where unacceptable environmental damage is occurring.	Rehabilitate sites or areas that reach Code-A-Site category Extreme.	Evaluate site condition. Document in Reservoir Management Reviews.	State Parks and Reclamation.
LANDS			
Easements/ROW Allow development of a water storage reservoir to serve the Scofield Campsite Subdivision. Locate this reservoir to maximize the use of remaining lands for future purposes.			Reclamation.

SPECIFIC AREA MANAGEMENT DIRECTION

MOUNTAIN VIEW MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
Roads and Trails Design, construct, maintain, or close roads and trails to assure they are compatible with developed recreation site objectives.		Evaluate development standard and condition. Document in Reservoir Management Review or more often if needed.	State Parks and Reclamation.

SPECIFIC AREA MANAGEMENT DIRECTION

DAM AND PRIMARY JURISDICTION ZONE MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
GENERAL MANAGEMENT AND PARTNERSHIPS			
Area Management Manage to benefit water operations and to protect the dam for safety purposes. Restrict use of the area to those permitted by the Carbon Water Conservancy District and Reclamation. Allow angler day uses in appropriate areas which are compatible with protection of water quality and delivery, and with the operation and safety of the dam.	Provide public access to the Price River. Restrict angler parking to day use.	Comply and manage for water and related project purposes. See monitoring requirements below.	CWCD and Reclamation.
WATER RESOURCES			
Water Operations Operate according to contracts with CWCD.		Review plans and agreements annually or more often if needed.	See Area Wide Management Direction.

SPECIFIC AREA MANAGEMENT DIRECTION

DAM AND PRIMARY JURISDICTION ZONE MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
RECREATION/VISUAL RESOURCES			
Appropriate ROS Management Manage the area around the dam for a Rural recreation opportunity experience (Development Scale 4), providing day use angling opportunities. Manage the area across the river and downstream from the dam for a Rural/Semi-Primitive Non-Motorized experience.	***Rural ROS Class and Development Scale 4*** Provide dam safety facilities. Improve roads and parking areas, and provide pedestrian and traffic control where appropriate. Allow natural appearance plant materials. ***Rural/Semi-Primitive Non-Motorized ROS Class and Development Scale 2*** Minimally develop restroom and parking facilities which are compatible with angling activities. Develop facilities to protect the site rather than for comfort of the user.	Evaluate dam safety. Document in Reservoir Management Reviews.	State Parks and Reclamation.
Facilities Development Limit recreation development in the area to river access trail, bridge, restrooms, and parking needed for day use angling.		Assess development scale. Document in Reservoir Management Reviews.	CWCD and Reclamation.
Visual Management Manage for a Modification Visual Quality Objective as viewed from on-site. Manage the dam for a Maximum Modification Visual Quality Objective.	***Modification Visual Quality Objective*** Allow development or facilities which visually dominate the natural landscape, but harmonize with or complement it. Allow up to five years after project completion for revegetation to meet this objective. The dam is an exception to the Modification Visual Quality Objective.	Evaluate visual condition. Document in Reservoir Management Reviews.	CWCD and Reclamation.

SPECIFIC AREA MANAGEMENT DIRECTION

DAM AND PRIMARY JURISDICTION ZONE MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
NATURAL/CULTURAL/HISTORIC/PALEONTOLOGICAL RESOURCES			
Site Rehabilitation Restrict use on and/or rehabilitate areas where unacceptable environmental damage is occurring.	Rehabilitate sites or areas that reach Code-A-Site category Extreme (sites that will continue to deteriorate unless rehabilitation measures are applied).	Evaluate site condition. Document in Reservoir Management Reviews.	CWCD and Reclamation.
LANDS			
Roads and Trails Design, construct, maintain, and close roads and trails to assure they are compatible with dam operations.		Evaluate condition. Document in Reservoir Management Review or more often if needed.	State Parks and Reclamation.

SPECIFIC AREA MANAGEMENT DIRECTION

EAST SIDE AND SINGLETON'S MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
GENERAL MANAGEMENT AND PARTNERSHIPS			
Area Management Allow uses which protect water quality/delivery and which are compatible with day-use objectives. At Singleton's, emphasize management for day-use and access for fishing. Remove abandoned structures. Manage to protect health and safety.			State Parks and Reclamation.
RECREATION/VISUAL RESOURCES			
Appropriate ROS Management Manage for a land based Rural recreation opportunity experience (Development Scale 4). Provide parking and sanitation facilities.	***Rural ROS Class and Development Scale 4*** Allow recreation facilities mostly designed for the comfort and convenience of the users. The facilities may include drinking water and flush toilets. As needed, encourage the use of formal walks and surfaced trails to protect the natural resources. Allow plant materials at developed sites that may be foreign to the environment. Allow formal and contemporary architecture.	Evaluate recreation condition and development scale. Document in Reservoir Management Reviews.	State Parks, CWCD, and Reclamation.
Facilities Development Develop sanitation and parking facilities where appropriate. Develop future recreation facilities east of SR-96 near Mountain View Campground as the need arises.		Assess development scale. Document in Reservoir Management Reviews.	State Parks, CWCD, and Reclamation. Reclamation and State Parks.

SPECIFIC AREA MANAGEMENT DIRECTION

EAST SIDE AND SINGLETON'S MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
Landscaping Manage vegetation to enhance visual and natural quality and accommodate recreation use.		Evaluate vegetation benefits. Document in Reservoir Management Reviews.	State Parks, CWCD, and Reclamation.
Overnight Camping Prohibit overnight camping.		Enforce. Document in Reservoir Management Reviews.	State Parks, CWCD, and Reclamation.
Visual Management Manage for a Partial Retention Visual Quality Objective as viewed from on-site.	***Partial Retention Visual Quality Objective*** Outside of developed sites, allow development/activities which appear subordinate to the natural landscape. Allow up to two years after project completion for revegetation to meet this objective.	Evaluate visual condition. Document in Reservoir Management Reviews.	State Parks, CWCD, and Reclamation.
NATURAL/CULTURAL/HISTORIC/PALEONTOLOGICAL RESOURCES			
Site Rehabilitation Restrict use on and/or rehabilitate areas where unacceptable environmental damage is occurring.	Close/rest areas and sites that cannot be maintained in Code-A-Site categories Moderate to Heavy. Remove abandoned structures in the Singleton's Area.	Evaluate site condition. Document in Reservoir Management Reviews.	State Parks, CWCD, and Reclamation.
Soil and Water Resource Improvements Restore soil disturbances caused by human use to soil loss tolerance levels commensurate with the natural ecological processes of the area.		Evaluate soil conditions. Document in Reservoir Management Reviews.	State Parks, CWCD, and Reclamation.

SPECIFIC AREA MANAGEMENT DIRECTION

EAST SIDE AND SINGLETON'S MANAGEMENT AREA

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
Wildlife Winter Range Protection Restrict activities/construction during big game occupancy of winter range.		Enforce. Document in Reservoir Management Reviews.	State Parks, CWCD, UDWR, and Reclamation.
LANDS			
Trails Construct or reconstruct and maintain trails when needed to provide fishing and recreation access.		Evaluate trail standard and condition. Document in Reservoir Management Reviews.	State Parks, CWCD, and Reclamation.

SPECIFIC AREA MANAGEMENT DIRECTION

WEST SIDE MANAGEMENT AREA (FISH CREEK COVE, THE ISLAND AND SPUR BAY)

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
GENERAL MANAGEMENT AND PARTNERSHIPS			
Area Management Allow uses which protect water quality and delivery, reduce trespass, and are compatible with recreation day-use objectives. Emphasize land management for day-use fishing and picnicking. Locate and mark property boundaries. Coordinate with neighboring land owners to reduce trespass and encourage use of non-federal lands for public access, parking, and placement of sanitation facilities. Manage to protect health and safety and operate at a reduced service recreation level.		Comply with water and related project purposes while managing primarily for day-use recreation. See monitoring requirements below.	State Parks, Reclamation, CWCD, UDWR, and Carbon and Utah Counties.
WATER RESOURCES			
Water Quality Protection and Development Protect reservoir water quality while applying water conservation techniques in area activities and development of restrooms and/or drinking water.		Comply with current water quality and sanitation standards and reporting requirements. Document in Reservoir Management Reviews or more often as needed.	State Parks, Reclamation, CWCD, Division of Water Resources, UDWR, Carbon and Utah Counties, and Scofield Special Services District.

SPECIFIC AREA MANAGEMENT DIRECTION

WEST SIDE MANAGEMENT AREA (FISH CREEK COVE, THE ISLAND AND SPUR BAY)

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
RECREATIONAL/VISUAL RESOURCES			
Appropriate ROS Management Generally manage for a Rural recreation opportunity (Development Scale 4). Manage to allow prevalent contact (sights and sounds) with other individuals and groups.	***Rural ROS Class and Development Scale 4*** Provide for day-use recreation with convenient and comfortable facilities. Drinking water, flush restrooms, and power are appropriate, but not expected until proven practical/possible to provide. At Fish Creek Cove, after gravel operations have ceased, explore opportunities for public fishing access and sanitation facilities where compatible with other involved entities. ***Semi-Primitive ROS Class and Development Scale 2*** Manage Reclamation's half of the island compatible with the privately owned half, for natural resource protection and for limited primitive use by Boy Scouts of America.	Evaluate ROS Condition and Development Scale. Document in Reservoir Management reviews or more often as needed.	State Parks and Reclamation.

SPECIFIC AREA MANAGEMENT DIRECTION

WEST SIDE MANAGEMENT AREA (FISH CREEK COVE, THE ISLAND AND SPUR BAY)

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
Facilities Development Develop appropriate recreation facilities where the present facilities, or lack of facilities, are not meeting the demand and where they meet the highest net public benefit. Provide facilities and access for site protection, efficient maintenance, and user convenience. Generally provide fishing access, parking, and associated sanitation facilities.		Evaluate Facility Condition. Document in Reservoir Management Reviews or more often as needed.	State Parks and Reclamation.
Landscaping Manage vegetation to enhance the existing natural landscape.		Evaluate Vegetative Condition. Document in Reservoir Management Reviews.	State Parks, UDWR, and Reclamation.
Overnight Camping Prohibit overnight camping.		Enforce. Document in Reservoir Management Reviews.	State Parks, UDWR, and Reclamation.
Visual Management Generally manage for a Partial Retention Visual Quality Objective (on-site and off-site), except manage the gravel operation for a Modification Visual Quality Objective.	***Partial Retention VQO*** Allow development which generally appears subordinate to the natural landscape. Allow up to two years after project completion for Revegetation to meet this objective. ***Modification VQO*** Allow development which visually dominates the natural landscape, but harmonizes with or complements it. Allow up to five years after project completion for revegetation to meet this objective.	Evaluate Visual Condition. Document in Reservoir Management Reviews.	State Parks, Reclamation, and UDWR.

SPECIFIC AREA MANAGEMENT DIRECTION

WEST SIDE MANAGEMENT AREA (FISH CREEK COVE, THE ISLAND AND SPUR BAY)

MANAGEMENT DIRECTION	STANDARD OR GUIDE	MONITORING	CONTACT AND REFERENCE
NATURAL/CULTURAL/HISTORIC/PALEONTOLOGICAL RESOURCES			
Site Rehabilitation Restrict use on and/or rehabilitate areas where unacceptable environmental damage is occurring.	***Category Heavy and Extreme*** Close or rehabilitate sites or areas that cannot be maintained in Code-A-Site categories Heavy and Extreme.	Evaluate Site Condition. Document in Reservoir Management Reviews.	State Parks, UDWR, and Reclamation.
Waterfowl Seasonal Avoidance Restrict activities and construction during sensitive nesting and migration periods.		Enforce. Document in Reservoir Management Reviews.	State Parks, UDWR, and Reclamation.
LANDS			
Easements/Rights-of-Way Simplify existing easements/rights-of-way associated with the Frandsen land, such as access to USGS stream gauge.			Reclamation.
Roads and Trails Construct, maintain, or close roads and trails to assure they are compatible with management objectives of this area.		Evaluate Development Standard and Condition. Document in Reservoir Management Reviews or more often as needed.	State Parks, UDWR, CWCD, and Reclamation.
Trespass Resolve trespass issues by locating and marking land boundaries.		Resolve. Document in Reservoir Management Reviews.	State Parks, UDWR, CWCD, and Reclamation.

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Chapter 4
Plan Implementation

INTRODUCTION

During implementation of this Resource Management Plan (RMP), Reclamation and its partners will be guided by existing and future laws, regulations, policies, and guidelines. This RMP is designed to supplement, not replace, direction from these sources.

The Resource Management Plan will protect and maintain the congressionally authorized Scofield Project purposes, such as ensuring water integrity, to provide direction for contracts, permits, leases and license agreements and to meet the requirements of the Reclamation Act of June 17, 1902 (32 Stat.388, 43 U.S.C. 391), and acts amendatory thereof and supplementary thereto: Federal Water Project Recreation Act (PL 89-72, 79 Stat.213, 16 U.S.C. 460); Reclamation Recreation Management Act of 1992, (PL 102-575, Title 28, 16 U.S.C. 460L); Fish and Wildlife Coordination Act (PL 85-624, U.S.C. 661, 662); Endangered Species Act (PL 93-205, 16 U.S.C. 1531 et seq.); National Historic Preservation Act of 1966 (80 Stat. 915, 16 U.S.C. 470) as amended; National Environmental Policy Act of 1969 (PL 91-190, Stat. 852); Clean Water Act (P.L. 95-217 33 U.S.C. 466 et seq.); National Safe Drinking Water Act (P.L. 93-523 S.433); and acts amendatory thereof and supplementary thereto; and other applicable environmental, cultural resources, fish and wildlife, mineral, disabilities, conservation, real property, and pesticide statutes, executive orders, Code of Federal Regulations, and Departmental policy.

Coordination and cooperation with administering entities is necessary for successful implementation of the RMP. Entities include: Carbon County, Utah County, Scofield Town and other local governments, Carbon Water Conservancy District, State Parks, Utah Division of Wildlife Resources, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, permittees, users, interested public, and others.

PLAN REVISION AND AMENDMENT

If needed, a decision to amend the Resource Management Plan will be determined by Reclamation as issues arise. Factors which could affect a plan revision include:

- Plan implementation that substantially alters the goals of the plan;

- Changes necessitated by changed social, physical and environmental, or economic conditions; and
- Uses which require authorization from permits, contracts, and cooperative agreements which are not consistent with the plan.

It is expected that a comprehensive RMP revision would occur within the next 10 to 15 years. Plan monitoring should occur every three to five years or more often as needed.

PLAN COMPONENTS FOR IMPLEMENTATION

Plan components that do not require new or additional funding are scheduled for immediate implementation. Since this RMP identifies such items as capital and facility improvements for budgeting purposes, improvements that require additional appropriations of funds will occur over a period of years as funds become available.

Table 4.1 Implementation Schedule

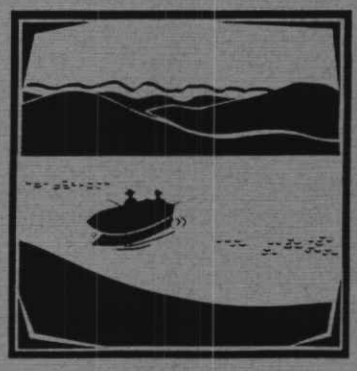
Management Direction (Chapter 3)	Implementation	Target Year
PARTNERSHIPS		
Project Purposes (page 3-7)	Evaluate proposed use activities against original purposes, contracts, and agreements.	2001 and Continuing
New Partnerships & Local Communities (page 3-12)	Develop and implement partnerships to attract, encourage, and promote best administration of resources, cost effective service benefitting resources, and services to recreation, wildlife, and natural areas.	2001 and Continuing
Private, State, and Federal Sectors (page 3-13)	Pursue activities with private, state, and federal entities to promote safety, reduce environmental impacts, and maximize benefits to the public and Reclamation.	2001 and Continuing
Interpretive Programs (page 3-13)	Promote interpretive and educational programs to resolve management problems, reduce management costs, obtain visitor feedback, increase public understanding of project management, and enhance visitor use and safety.	2001 and Continuing

Signage (page 3-15)	Provide signs at key locations for effective visitor orientation. Key locations include entrance points, boat ramps, picnic areas, and camping areas.	2001 and Continuing
	Coordinate warning, traffic control, interpretive, and informational signs.	
	Post boundary signs at logical locations.	
Recreation Management (page 3-16)	Update memorandums for recreation management as appropriate.	As needed, if one contract including all State Parks is developed
WATER RESOURCES		
Best Management Practices (page 3-18)	Implement a public education program to interpret the benefits of water quality and to discourage acts that pollute.	2001 and Continuing
Facilities (page 3-19)	Construct facilities, both drinking water and sanitation, to meet State of Utah and Carbon and Utah County standards.	As specific projects are proposed and funds become available
Water Quality Protection (page 3-20)	Maintain or improve water quality as possible.	2001 and Continuing
RECREATION/VISUAL RESOURCES		
Parking Below the High Water Mark (page 3-25)	Generally prohibit public motorized land vehicles from driving or parking on beaches or below the high water mark.	2001 and Continuing
Scenic Byways (page 3-30)	Consider Huntington-Eccles Canyons Scenic Byway objectives on visual quality.	2001 and Continuing
Watercraft Limit (page 3-27)	Manage watercraft capacity through the State Boating Act and State of Utah Strategic Boating Plan as needed to protect safety and the family fishing experience.	2001 and Continuing
Madsen Bay Management (page 3-46)	Manage for group and single-family day use, overnight camping, and watercraft access to the reservoir.	2001 and Continuing

Madsen Bay Facilities Development (page 3-48)	Construct/rehabilitate recreation facilities.	As specific projects are proposed and funds become available
Lakeside Management (page 3-51)	Manage for a group use area experience.	2001 and Continuing
Lakeside Facilities Development (page 3-52)	Construct/rehabilitate recreation facilities.	As specific projects are proposed and funds become available
Mountain View Management (page 3-54)	Manage for group and single-family day use, overnight camping, and watercraft access to the reservoir.	2001 and Continuing
Mountain View Facilities Development (page 3-55)	Construct/rehabilitate recreation facilities.	As specific projects are proposed and funds become available
East Side Management (page 3-62)	Generally manage for day use and fishing access.	2001 and Continuing
East Side Facilities Development (page 3-62)	Construct/rehabilitate recreation facilities.	As specific projects are proposed and funds become available
West Side Management (page 3-65)	Manage for day use fishing and picnicking.	2001 and Continuing
West Side Facilities Development (page 3-67)	Construct/rehabilitate recreation facilities.	As specific projects are proposed and funds become available
NATURAL/CULTURAL/PALEONTOLOGICAL RESOURCES		
Cultural Resources (page 3-32)	Initiate consultation procedures where activities or uses may adversely affect cultural resources.	As activities are identified

Pest/Aquatic Management (page 3-36)	Coordinate with State of Utah, Carbon and Utah Counties, and other appropriate entities to regulate undesirable or invasive pests.	2001 and Continuing
	Develop an Integrated Pest Management Plan.	2006
Weeds/Noxious Weeds (page 3-36)	Control and reduce invading and noxious weeds and poisonous plants.	2001 and Continuing
	Develop an Integrated Pest Management Plan.	2006
Revegetate Disturbed Areas (page 3-37)	Revegetate disturbed or damaged areas or sites.	2001 and Continuing
Site Rehabilitation (page 3-63)	Restrict use on and/or rehabilitate areas with unacceptable environmental damage.	2001 and Continuing
	Remove abandoned structures including those in the Singleton's area.	
Threatened and Endangered Species (page 3-38)	Initiate consultation procedures where activities or uses may adversely affect threatened and endangered species or their habitats.	As activities are identified
LAND MANAGEMENT RESOURCES		
Boundary Fences (page 3-39)	Construct appropriate fences.	2001 and Continuing
Boundary Location (page 3-39)	Locate, mark, and post land lines.	2001 and Continuing
Easements/ROW (pages 3-53 & 3-68)	Address easements for water and sewer purposes for Scofield Campsite Subdivision.	2001 and Continuing
	Address easements for stream gage access, roads, and other purposes on the west side of the reservoir.	
Land Trespass (page 3-45)	Resolve land ownership and trespass issues.	2001 and Continuing

Dam and Primary Jurisdiction Zone Management (page 3-59)	Manage to protect water management facilities and operations.	2001 and Continuing
	Provide public use facilities and allow uses compatible with water operation purposes.	
Dam and Primary Jurisdiction Zone Site Rehabilitation (page 3-61)	Restrict use on and/or rehabilitate areas with unacceptable environmental damage.	2001 and Continuing



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Chapter 5
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Chapter 6
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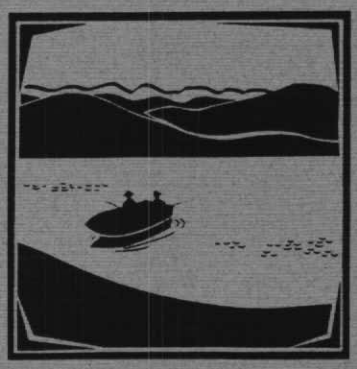
Native American Consultation

Initial consultation with the Ute Tribe in the Uinta Basin was conducted by Sagebrush on behalf of Reclamation. The current plan area is located within the boundaries of the Timpanogots Ute and Skull Valley Gosiute traditional use areas (Thomas, Pendleton, and Cappannari 1986:281; Janetski 1990:23). The Skull Valley Gosiute have previously indicated that they have no tribal interests in areas outside of Tooele County, Utah, so no contact was made with this tribe concerning traditional cultural properties (TCP's) within the area of Scofield Reservoir (Signa Larralde, *pers. comm.* 1994). Contact was made with Betsy Chapoose, Director of the Cultural Rights and Protection Department, Ute Indian Tribe, Fort Duchesne by letter on July 26, 1996 in order to assess the presence of culturally sensitive sites and to identify any concerns their Tribe may have with the current project. Shortly after receipt of the letters, Ms. Chapoose contacted Sagebrush by telephone and stated that the Ute Tribe would be interested in commenting on the project. To initiate this comment she requested that a copy of the completed cultural resources technical report (that is to become a part of the Scofield Reservoir Resource Management Plan) be sent to the Tribe. On August 5, 1997, Reclamation met with Betsy Chapoose and Clifford Duncan of the Ute Tribe at Scofield Reservoir to view the RMP area and to discuss any concerns about cultural resources. No specific concerns were raised during the visit (Larralde, 1997).



7

Chapter 7
Glossary

GLOSSARY

/	Per
<	Less-than
%	Percent
AADT	Annual Average Daily Traffic. The total volume of traffic for the year divided by the number of days in the year.
Acre-foot	A measure of water quantity. One acre of water one foot deep or 325,851 gallons.
ADT	Average Daily Traffic. The total volume during a given time period, in whole days greater than one day and less than one year, divided by the number of days in that time period.
Affected Environment	Parts of the environment that would be affected by a change in operation of management.
Algae	Simple plants containing chlorophyll; most live submerged in water.
Algal blooms	Rapid and flourishing growth algae.
Alternatives	Different ways of addressing the issues, concerns and management activities identified during scoping. These serve to provide the decision maker and the public a clear basis for choices among the management options.
Anoxic Water	Water which has been depleted of oxygen and is deadly to fish.
Animal Unit Month (AUM)	The amount of feed or forage necessary to sustain one cow or its equivalent for one month.
Baseline	The beginning measuring point.
BLM	Bureau of Land Management

Browse	(1) Tender parts of woody vegetation that are eaten as food by animals. (2) To consume. Browsing is distinct from grazing because it refers to eating woody material, whereas grazing is usually restricted to nonwoody plants.
Candidate species	Animal or plant species that are being considered for federal designation as either threatened or endangered.
cfs	Cubic feet per second; a measure of streamflow volume. One cubic foot is 7.48 gallons. A flow of 1 cfs produces 448.8 gallons per minute.
Character type	Large physiographic area of land that has common characteristics of landforms, rock formations, water forms and vegetative patterns.
Code-A-Site	A system for classifying and monitoring impacts generally at dispersed recreational sites. Impact categories include: Light, Moderate, Heavy and Extreme. See specific listings in Glossary.
CWCD	Carbon Water Conservancy District
Decadent	Of an age past maturity and approaching mortality.
Demographics	The statistical characteristics of a human population.
Developed recreation	Recreation that requires facilities, resulting in the concentrated use of an area, such as campgrounds.
Dispersed recreation	Recreation use that requires few, if any, improvements and may occur over a wide area.
Domestic animal	Any various animals, such as cat, dog, horse, sheep, cow, or pig domesticated so as to live and breed in a tame condition.
Emergent	Vegetation that is rooted below the water surface and extends above the surface.
Endangered Species	Species that are in danger of extinction in all or a significant portion of their range. Secretary of Interior makes the determination.
EPA	Environmental Protection Agency

Erosion	The wearing away of the land surface by running water, wind, ice or other geologic agents, or resulting from human or animal activities.
Eutrophication	Increase of mineral and organic nutrient in a body of water that depletes dissolved oxygen and may result in the suffocation of fish.
Extreme	A category of impact under the Code-A-Site classification system characterized by an absence of ground cover vegetation and where deterioration will continue to occur without further use. Erosion is beginning and impacts will spread to the surrounding area unless rehabilitation measures are applied.
Flood plain	A nearly level plain of sand, silt or clay that borders a stream and is subject to flooding unless protected artificially.
Forage	All food available for grazing animals.
Forb	Any herbaceous (non-woody) plant having broad leaves and therefore excluding grasses and grasslike plants. Herbaceous plants form the lowest layer of vegetation in most plant communities.
Game species	Huntable wildlife.
GOPB	Governor's Office of Planning and Budget
GPM	Gallons per minute
Grazing	The act of animals feeding on fresh grass and herbaceous plants.
Habitat	Place or type of site in which an animal or plant naturally or normally occurs.
Heavy	A category of impact under the Code-A-Site classification system characterized by a substantially impacted site that would recover without further use. Most ground cover is absent, some tree roots are exposed, and trails radiate from the site.
Herbaceous	Resembling an herb, a green, leafy plant that does not produce persistent woody tissue.
Herbicide	Any substance used to kill an unwanted plant.

Hydric	Hydric soils are saturated, flooded or ponded for a period during the growing season sufficient to develop anaerobic conditions favoring hydrophytic vegetation.
Hydrophytic	Vegetation or plants that tolerate and thrive in wet soils.
Indicator species	A species whose presence in a certain location or situation at a given population level indicates a particular environmental condition. Their population changes are believed to indicate effects of management activities on a number of other species or water quality.
Jurisdictional wetlands	Jurisdictional wetlands are defined as those seasonally or permanently wet areas that come under the domain or authority of the USACE for purposes of regulatory permitting on the basis of meeting wetland criteria as described in the 1987 Federal Manual.
Light	A category of impact under the Code-A-Site classification system characterized by completely intact vegetation, but where natural processes may be somewhat retarded by use.
MCL	Maximum contaminant level
Maximum Modification	Visual Quality Objective indicating that human activities would dominant the natural landscape and may not blend with it when viewed from up to 5 miles away.
MOA	Memorandum of Agreement
mg/l	Micrograms per liter – Equivalent of one part per million.
Mitigation	Avoiding or minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating or restoring the affected environment; reducing or eliminating the impact by preservation and maintenance operations during the life of the action.

Moderate	A category of impact under the Code-A-Site classification system characterized by relatively intact vegetation with some spots of denuded ground cover. Impact is limited to the immediate site and there are no exposed tree roots.
Modification	A Visual Quality Objective indicating human activity may dominate the natural landscape, but should still blend with it.
National Environmental Policy Act (NEPA)	The National Environmental Policy Act (NEPA) is the basic national charter for protection of the environment. There are two main objectives of NEPA: (1) to ensure that agencies consider every significant aspect of the environmental impact of a proposed action, and (2) to inform the public of potential impacts to the human environment and involve it in the NEPA decision-making process.
Non-jurisdictional wetlands	Wetlands that do not fall under the jurisdiction of the USACE on the basis of meeting wetland criteria as described in the 1987 Federal Manual.
OHV (Off-highway vehicle)	Utah State law defines an OHV as any snowmobile, all-terrain type I vehicle, all-terrain type II vehicle, or motorcycle.
PAOT	An acronym for "people at one time" per acre.
Partial Retention	A Visual Quality Objective indicating that human activities would appear subordinate to the natural environment, and should blend with it.
Per capita income	The total income of a group divided by the number of people in the group.
Personal watercraft	A motorboat that is less than 16 feet in length, propelled by a water jet pump, and designed to be operated by a person sitting, standing or kneeling on the vessel, rather than sitting or standing inside the vessel.
pH	A measure of the relative concentration of hydrogen ions in a solution; this value indicates the acidity or alkalinity of the solution.
ppm	Parts per million

Preservation	A Visual Quality Objective allowing ecological changes only.
Prey	An animal or animals taken as food by another animal.
Primitive	A classification of the Recreation Opportunity Spectrum (ROS) characterized by an essentially unmodified natural environment with minimal sights and sounds of man. There is a low concentration of users and evidence of use is minimal.
PRWCD	Price River Water Conservancy District
PWC	A motorboat that is less than 16 feet in length, propelled by a water jet pump, and designed to be operated by a person sitting, standing or kneeling on the vessel, rather than sitting or standing inside the vessel.
Raptors	Birds of prey such as, hawks, eagles, owls, falcons, harriers, kites.
Reclamation	United States Bureau of Reclamation.
Recreation Opportunity Spectrum (ROS)	A land classification system developed by the Forest Service that categorizes lands into six classes. The classes range on a continuum from primitive to urban and vary in their setting and type of recreation available. Classifications include: Primitive, Semi-Primitive, Roaded, Rural, and Urban. See specific listings in Glossary.
Retention	A Visual Quality Objective indicating that human activities are not evident to the casual visitor.
Riparian	Land areas adjacent to streams or lakes that are usually only seasonally flooded. Unlike seeps, bogs or marshes they are not constantly wet, but are dependent on the soil moisture from the stream or lake for maintaining the vegetation that is usually composed of trees and shrubs.
RMP	Resource Management Plan

Roaded Natural	A classification of the Recreation Opportunity Spectrum (ROS) characterized by predominantly natural-appearing environments with moderate sights and sounds of man. Interaction between users may be low to moderate, but with strong evidence of other users.
ROW	Rights-of-way
Run-off	The precipitation discharge in stream channels from a drainage area. The water that flows off the land surface without sinking is called surface runoff; that which enters the ground before reaching surface streams is called ground-water runoff.
Rural	A classification of the Recreation Opportunity Spectrum (ROS) characterizing an area where the landscape has been considerably altered by the works of man with prevalent sights and sounds of man. Interaction between users maybe high.
Semi-primitive	A classification of the Recreation Opportunity Spectrum (ROS) characterized by a predominantly natural-appearing environment with minimal sights and sounds of man. There is a low concentration of users but often evidence of use.
Sensitive species	A plant or animal species, subspecies or variety for which a Federal agency has determined there is a concern for the species viability, as evidenced by a significant current or predicted downward trend in the population or habitat.
Sensitivity level	Level of concern by user of visual quality.
Spillway	Overflow channel of a dam.
State Parks	Utah Division of Parks and Recreation
STORET	The name of the State of Utah Division of Water Quality system for storing the resulting data generated from the analysis of water samples.
SWTR	Surface Water Treatment Rule

Texture	Refers to the nature of materials used for exteriors of buildings and facilities and their visual relationship to the surrounding environment. For instance, naturally colored wood, log or natural stone facing and cedar shake roofing materials would be more likely to blend in with the naturally occurring textures of a forested setting than would smooth or shiny surfaces.
Threatened Species	A species that is not currently in danger of extinction, but is likely to be in the foreseeable future. This status is determined by the Secretary of Interior.
Trip	A single or one-direction vehicle movement with either the origin or destination (exiting or entering) inside the study area.
UDOT	Utah Department of Transportation.
Urban	A classification of the Recreation Opportunity spectrum (ROS) characterized by an area of urbanized environment with dominant structures and extensive sites and sounds of man. Interaction between users is high.
UDWR	Utah Division of Wildlife Resources
USACE	United States Army Corps of Engineers
USBR	United States Bureau of Reclamation
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Services
USU	Utah State University
Variety Class	A particular level of visual variety or diversity of landscape character.
Viewshed	A landscape unit seen from a key viewing area.
Visual Resource	The composite of basic terrain, geologic features, water features, vegetative patterns and land-use effects that typify a land unit and influence the visual appeal the unit may have for visitors.

Visual Quality Objectives (VQO)	An indicator that refers to the visual condition or the desired visual level for a specific area. The code indicates the degree to which activities are noticeable in the natural environment, for example, whether human activities will dominate, be subordinate or be evident in the natural environment. Visual conditions/levels include: Preservation, Retention, Partial Retention, Modification, and Maximum Modification. See specific listings in Glossary.
Water Rights	A legal right to take water and put it to use.
Wetland	Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.