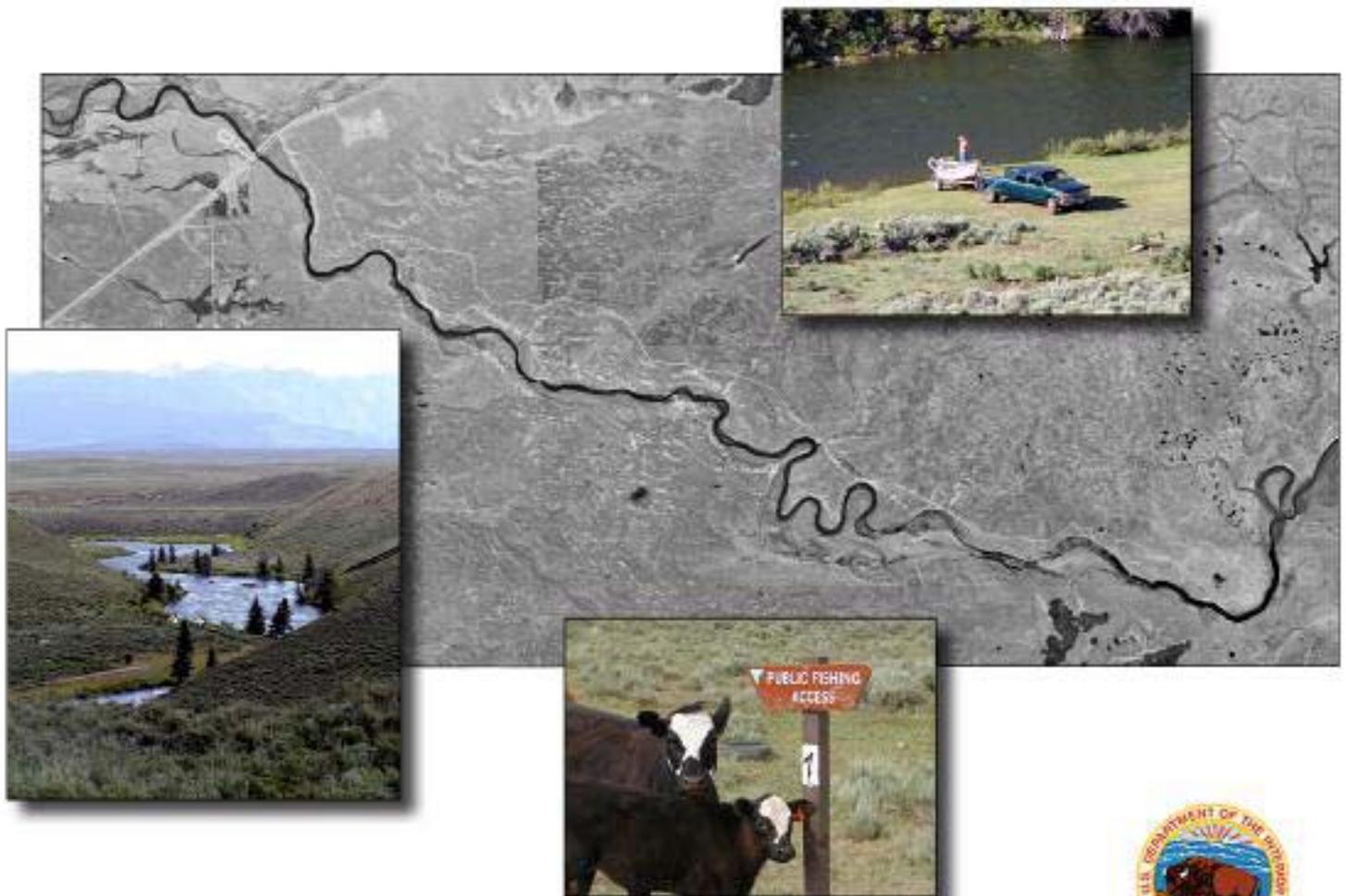


Upper Green River SRMA Recreation Project Plan Environmental Assessment

December 2003

Pinedale Wyoming Field Office
WY-100-EA03-300



U.S. Department of the Interior
Bureau of Land Management
Pinedale Field Office
Pinedale, Wyoming



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Upper Green River SRMA Recreation Project Plan For the Road and Recreation Site Deferred Maintenance Project

ENVIRONMENTAL ASSESSMENT PINEDALE FIELD OFFICE

ENVIRONMENTAL ASSESSMENT

EA Number: **WY-100-EA03-300**

CHAPTER 1 - PURPOSE AND NEED

Introduction

The purpose of the Upper Green River Special Recreation Management Area (SRMA) Recreation Project Plan (RPP) is to establish a functional twenty-year plan for the physical improvements and management for the BLM administered land along nine miles of the Upper Green River corridor northeast of US Highway 189/191. The RPP includes an assessment of current issues, visitor use, visitor profile, and needed facilities. The project area is a multiple-use area involving recreation and livestock grazing. The recreational uses include, camping, fishing, floating, hunting, equestrian, all-terrain vehicle use and mountain biking.

The Upper Green River SRMA is experiencing increasing use from both private and commercial recreation activities. Increased use is related to the increasing popularity of the area for recreational purposes, increasing population of principal western inter-mountain population centers, growth of the local communities, and resource enhancements implemented along the Upper Green River through a cooperative effort between the BLM and the Wyoming Game & Fish Department (WGFD).

The goal of the RPP is to protect and preserve the natural resources of the SRMA while maintaining the quality of the existing recreational experience of the Upper Green River; assure that the health, safety and welfare of the users are protected; Americans with Disabilities Act requirements and standards are adhered to; surface and ground water resources are protected; adequate facilities are provided to meet use demand; and improve public information to better inform users on facility use and environmental, cultural and historical interpretation/education.

Avoiding the appearance of recreation facility over-development is considered to be key to preserving the existing recreational experience. This opinion was voiced by BLM personnel, participating government agencies and members of the general public during the scoping process conducted for the preparation of the Recreation Project Plan. However, a consensus among the participants established that some level of new facility development was needed to accommodate increasing use and maintain compatibility between private recreational users, commercial recreation enterprises, livestock grazing, and wildlife and resource sensitivities. Sustaining the water quality in the Upper Green River is a concern as use in the SRMA increases. Increased use would most likely lead to ground surface compaction in high use areas which may cause reduced vegetative cover and increase erosion/sedimentation.

Conformance to the Resource Management Plan

The Upper Green River SRMA RPP is in conformance to the 1987 Pinedale Field Office Resource Management Plan (RMP) Record of Decision. This EA tiers to the RMP Environmental Impact Statement (EIS). The RPP adheres to the guidelines, policies and management actions established for recreation management and visual resource management classification and requirements, as described by the

RMP.

Relationship to Statutes, Regulations or Other Plans

The proposed action may be subject to the following statutes, regulations and management prescriptions:

- Federal Land Policy and Management Act of 1976, as amended
- Wild and Scenic Rivers Act of 1968, as amended
- The Wild and Scenic Rivers Interim Management Prescriptions contained in the final report, Pinedale Field Office Review of Potential Wild and Scenic Rivers in the Pinedale Resource Management Plan Planning Area, dated December 2, 2002. Executive Order 11988 (Floodplain Management).
- National Historic Preservation Act of 1966, as amended through 2000.
- Executive Order 11990 Protection of Wetlands.
- Upper Green River Habitat Management Plan

Public Process

In order to develop alternative plans for the Upper Green River SRMA, a four day public scoping process was conducted to assess current issues, visitor use, user profiles, future needs and to allow the general public to express their concerns regarding the management of the area. Twenty one meetings were held with area stakeholders, special interest groups and the general public, including federal and state agencies, local governments, permit users (livestock grazing and commercial fishing guides), local residents, environmental interests, recreationists, businesses, contiguous property interests and local elected officials.

Two alternative management strategies were generated during the meetings. These two plans, the “proposed action” and the “no action”, were presented at a public open house held at the end of the four day scoping process. Stakeholder participants and the general public were invited to review the alternatives and provide additional comment. Results from this meeting were posted on the Bureau of Land Management (BLM) Pinedale Field Office website to provide additional opportunity for public input. The selected recreation project plan as well as the alternatives are consistent with the input received from the public scoping process.

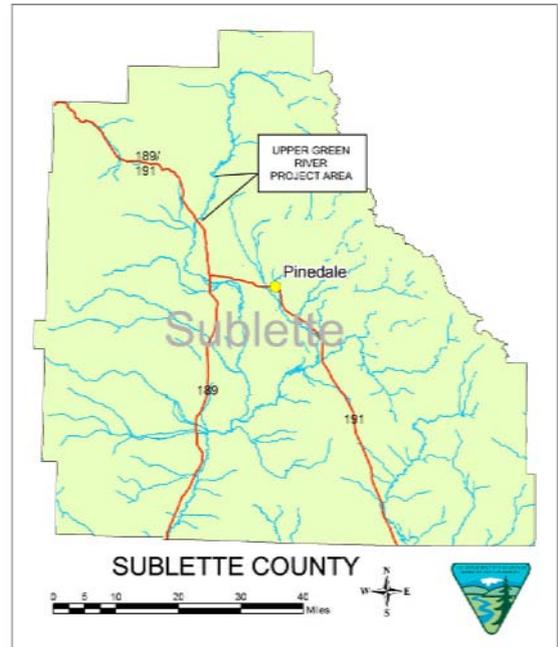
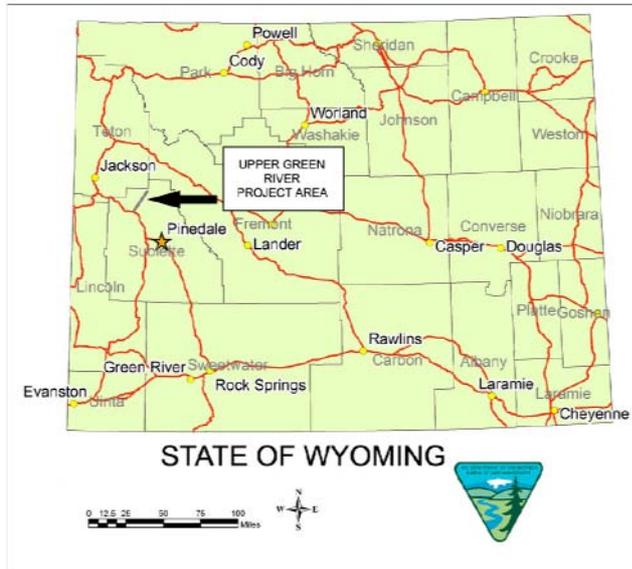
In addition to the public scoping process, the Pinedale Field Office Outdoor Recreation Planner conducted a user survey that was partially complete and available during the preparation of the RPP. The data was helpful in understanding visitor profile and use.

CHAPTER 2 – ALTERNATIVES

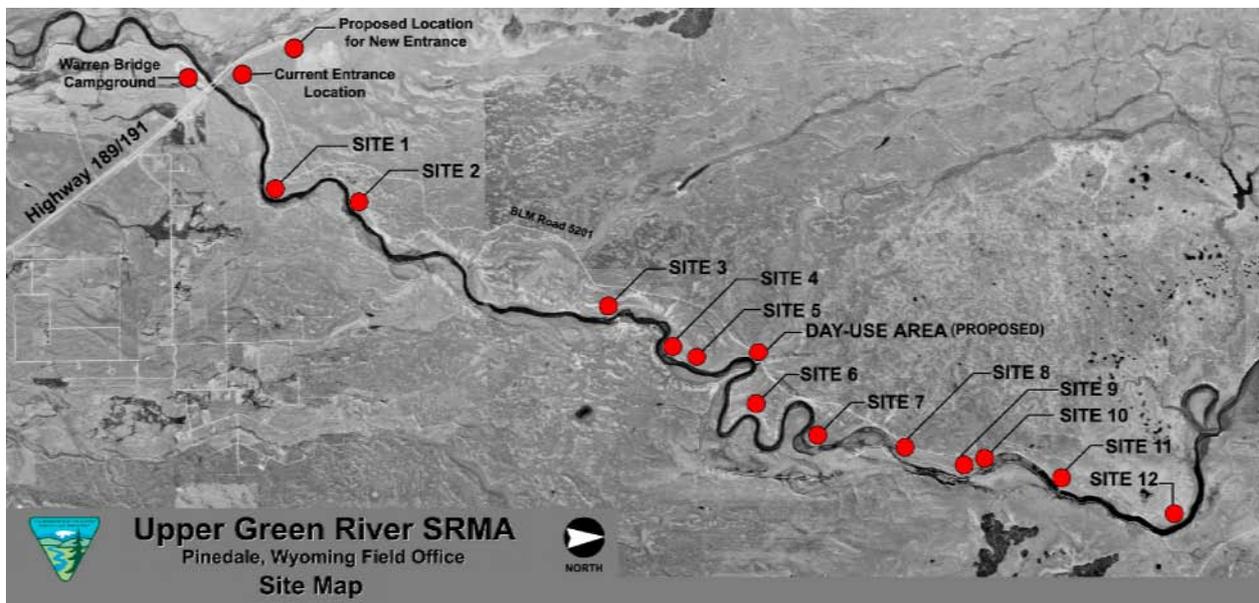
Introduction

Two alternatives were developed from the public scoping process. The two alternatives are the Proposed Action and the No Action. However, during the development of the RPP, some alternatives were considered, but were dismissed after preliminary investigation. These alternatives are described under the following heading: Alternatives Considered, but not Analyzed in Detail.

Project Location



Upper Green River SRMA Site Map



Alternatives Considered, but not Analyzed in Detail

Several alternative actions were proposed but were dismissed after preliminary investigation. These actions included the following:

Develop hardened boat ramps at all twelve river access sites. This scenario was dismissed after it was determined that the current and projected use level throughout the Upper Green River SRMA did not warrant the development of boat launch ramps at twelve separate river access areas. The feasibility of such an action from an environmental and economic perspective also contributed to the dismissal of this scenario. The Proposed Action would coordinate the construction of the boat launch areas in order to distribute them along the river at sites where use levels warrant and accessibility is favorable.

Re-construct individual access spur roads at selected sites due to steep grades. This scenario was dismissed due to the fact that the level of surface disturbance, engineering and funds required to perform this task would out-weigh the benefits of improved access. The Proposed Action would inform users at several locations (information kiosk, signs on BLM road 5201) that these spur roads are recommended for four wheel drive vehicles only.

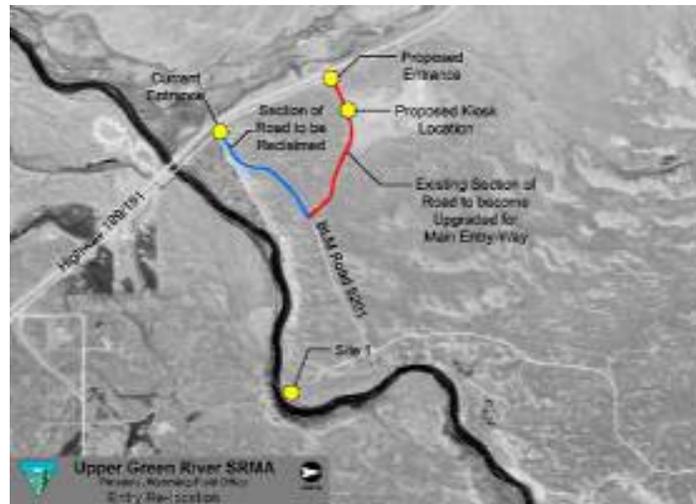
Widen BLM Road 5201 to accommodate increased traffic. This scenario was dismissed due to the fact that the public was opposed to this action and the capacity of the road was determined to be adequate if pull-outs were provided at intervals along the roadway.

Proposed Action

Adopt and implement the Upper Green River SRMA Recreation Project Plan. Under this plan the following improvements would be made: roadway drainage improvements; relocation of the highway and main access road (BLM Road 5201) intersection; development of an information kiosk area near the highway and main access road intersection; replacement and relocation of pit toilets with vault toilet facilities; replacement of fire rings; addition of picnic tables, fire rings and vault toilets; select rerouting of access spur roads away from the riverbank and riparian areas; thin the sage brush in areas allowing for camping activity to shift away from the riparian; improvement of five river access boat ramps; creation of one new day-use only river access boat ramp; provide for ADA compliant accessibility to toilet facilities and picnic areas; development of a two scenic overlooks, one for independent interpretation opportunity and the other for organized group interpretation and educational activities; improvement of a 9.5 mile trail leading from the Warren Bridge Campground through the SRMA to its terminus at Site 12.

Total surface disturbance for the proposed action, excluding the main road re-surfacing, would be approximately 16.5 acres, or .32% of the total SRMA area. This total surface disturbance area includes the following approximate numbers: 3.3 acres for 8 day-use parking areas, .17 acres for 5 boat ramps, 2.8 acres of new spur road construction, 2.6 acres of spur road reclamation, 4.1 acres for 9 group campsites 1.7 acres for 15 individual/tent campsites, .4 acres for an information kiosk and turnaround, .4 acres for an amphitheater and associated parking, and .2 acres for vault toilets. Refer to the "Site Improvement Matrix" for a detailed synopsis of the proposed actions.

Road Re-location Map



No Action

No further development or improvements would be made at the Upper Green River SRMA. The road drainage and ingress/egress safety issues at the intersection with US Highway 191 would remain unresolved. Main access road drainage and erosion issues would remain unresolved. The existing pit toilet facilities would remain. Campsites and day use areas would remain informal. Boat launch facilities would remain unimproved. No additional information about the area or interpretive opportunities would be provided to visitors.

CHAPTER 3 - AFFECTED ENVIRONMENT

It has been determined that the proposed action would not affect the following resources:

- Air Quality
- Areas of Critical Environmental Concern
- Farm Lands
- Forestry
- Mineral Resources
- Wilderness
- Environmental Justice

The following resources may be affected:

Cultural Resources

The project site is located along the Green River where it is likely that cultural and Native American resources may be present in the Upper Green River SRMA, although no such sites have been classified to date. If such sites were to be discovered, they would be protected based on specific sensitivity and mitigation criteria, as described in the Pinedale Resource Management Plan.

Floodplain

The topography of the Upper Green River basin in this portion of the river limits the land area of the floodplain. Steep walls that rise from between 10 and 70 feet and forms the upper terrace of the river, which defines the greater river channel through most of the SRMA. The Green River is characterized by high frequency low magnitude flooding, which is less likely to initiate channel degradation.

Hazardous or Solid Wastes

There are no hazardous wastes currently present in the Upper Green River SRMA. The pit toilets currently located at the river access sites pose some concern for leakage of human wastes. The SRMA is a pack-in/pack-out area, with no trash pick-up provided. Users can deposit solid waste at the Warren Bridge campground located near the entrance to the Upper Green River SRMA. Users have historically respected the pack-in/pack-out policy and there is currently a minimal solid waste (litter) pollution problem.

Drinking and Ground Water

No drinking water is provided in the Upper Green River SRMA. Ground water is believed to be unaffected due to the fact that there is no mining or other major surface disturbance occurring in the area. Ground water may be affected in the long term by agricultural and residential development in the area, as well as existing substandard toilets at recreation sites.

Riparian Areas

Riparian vegetation, consisting mainly of willows and sedges, forms thin strips along the banks of the Green River. A great percentage of the riparian vegetation was lost due to tie-hacking activity that occurred in the area during the mid to late nineteenth century. The BLM and livestock grazing permittees have cooperated in developing livestock management practices that have resulted in riparian vegetation regeneration.

Wild & Scenic Rivers

The portion of the Green River that flows through the SRMA has been determined to be eligible and suitable for designation as a Wild & Scenic River. Final suitability and subsequent management prescriptions will be made through revisions to the Pinedale Resource Management Plan, a process that is currently underway (December, 2003). This reach of river has remarkable values in the areas of scenic, recreational, historical and wildlife. This river segment meets the eligibility criteria and suitable factors as identified in the Wild & Scenic Rivers Act. The two classifications for this portion of the Green River may be eligible for are "scenic" and "recreation." Interim management practices (IMP) have been prescribed for this river segment while the proposed designations are reviewed by the public. According to the IMP: *"Larger-scale public-facilities, such as moderate campgrounds, interpretive centers, or administrative headquarters may be allowed in the waterway corridor, as long as such facilities are screened from the river. Smaller-scale public-facilities, such as picnic areas, boat launching areas, and fishing access sites do not necessarily need to be screened from the river as long as they harmonize with the surrounding area and are not considered as an intrusion of the "largely primitive nature of the scenic corridor."*

Visual Resources

The Upper Green River SRMA is a Visual Resource Inventory Class II area. The objective of a class II area is to retain the existing character of the landscape. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant landscape.

Livestock Grazing

There are two grazing allotments for cattle within the Upper Green River SRMA: the Spade individual allotment and the Buyer Horse Creek individual allotment. The Spade individual allotment encompasses 2,393 acres and operates at a level of 688 Animal Unit Months (AUM) from June 1st through July 2nd, The Buyer Horse Creek individual allotment encompasses 1,726 acres and operates at a level of 351 AUMs from May 27th through July 11th. There are large tracts of private land that bisect the BLM lands. The private lands are generally used for livestock grazing and are fenced from the public land.

Controlled burns have been implemented on the upper terraces in order to enrich the livestock forage and encourage livestock to remain on the upper terraces and out of river valley. While some livestock still frequent the river valley, the percentage of use has decline significantly, reducing pressure on the riparian areas and demonstrating merit to this method of livestock management.

Soils

Soils mapping for the area has not been completed by the Natural Resources Conservation Service at this time, but advance and partial information pertaining to this area is available. Soils on the upper terraces within the southwest portion of the SRMA are generally well-drained, gravelly, cobbly and sandy loams transitioning to clay loam to clayey type soils along the last northeastern two linear miles of BLM Road 5201. In the floodplain the soils are generally deep, variable in texture and derived from alluvium.

Although usually productive, some areas of saline-alkaline affected soils limit vegetation production. The soils are categorized as follows:

- 27A Gelkie fine sandy loam, 0 to 3 percent slopes - Upper terrace and River valley
- 27C Gelkie fine sandy loam, 3 to 10 percent slopes - Upper terrace and River valley
- 27D Gelkie fine sandy loam, 10 to 30 percent slopes - Upper terrace and River valley
- 28A Burntlake very stony sandy loam 0 to 3 percent slopes - Upper terrace
- 30C Sublette fine sandy loam, stony surface, 0 to 10 percent slopes - River valley
- 49B Heath loam, 0 to 6 percent slopes - Upper terrace and River valley
- 49C Heath clay loam, 3 to 10 percent slopes - Upper terrace and River valley
- 90A Foxcreek loam, 0 to 3 percent slopes - Upper terrace
- 1020 Leavitt loam, 3 to 10 percent slopes - Upper terrace
- 1025 Dinnen fine sandy loam, 3 to 10 percent slopes - River valley
- 1130 Millerlake loam, 1 to 6 percent slopes - River valley
- 1134A Maurice gravelly fine sandy loam, 0 to 3 percent - River valley

Majority of constraints identified is related to percent slopes, frost action and shrink-swell limitations associated with clayey soils.

Vegetation

The Upper Green River SRMA lies within the Intermountain region of the West. The vegetation here is predominantly Sagebrush-Grassland. There are also small areas of aspen and conifer in mixed and pure stands. Riparian vegetation, consisting mainly of willows and sedges forms thin strips along the banks of the Green River. A great percentage of the riparian vegetation was lost due to tie-hacking activity that occurred in the area during the mid to late nineteenth century. Most of the riparian vegetation that exists today is the result of a successful restoration effort by the BLM and local livestock ranchers.

Noise

Current human-caused noise levels can be characterized as minimal. Vehicles traveling on BLM road 5201 and the access spur roads are the main source of human-caused noise. This noise is barely audible above the sounds generated by the surrounding environment, such as the flowing of the Green River and wind movement. Occasionally, four wheelers may generate some excessive vehicular noise. Firearm discharge during hunting season and target shooting in the area and may also generate higher noise levels.

Wildlife

A wide diversity of animals inhabit the sagebrush lands within the Upper Green River SRMA. Within this species range, there are a number that are unique to the sagebrush lands of the American West. Some of the animals that are native to sagebrush lands and are found in the area include: the sage thrasher, pronghorn antelope, pigmy rabbit, sagebrush vole, sage sparrow, brewer's sparrow and the sage grouse. There are documented sage grouse leks, or breeding grounds, in proximity to the Upper Green River

SRMA.

Many migratory waterfowl and shorebirds inhabit the area from March-October. These species include the Canada goose, many species of dabbling and diving ducks, sandhill cranes and trumpeter swans; the largest North American wildfowl. The trumpeter swan is currently registered on the threatened and endangered species list and is extremely rare.

Chief predators to nesting waterfowl in the area include coyotes, red fox, raccoons, skunks and ravens. Several species of raptor use the Upper Green River SRMA for hunting and/or nesting. These birds include red-tailed hawks, osprey, bald eagles, golden eagles, goshawks, sharp-shinned hawks, marsh hawks, great-horned owls, American Kestrels, and Swanson's hawks. Ospreys are of high public interest as their nesting and feeding habits are easily observed due to osprey feeding along the river corridor and numerous nests along the highways on artificial platforms.

The area is also home to several species of big game, including elk, mule deer and moose. The Upper Green River SRMA lies within major migration routes for deer, elk and antelope. Grey Wolves now frequently use this area of the Green River Valley.

The dominant sport fish in the area are rainbow, cutthroat, and brown trout. The fish habitat along the Upper Green River SRMA was also negatively affected by tie-hacking operations and recently there has been an effort to enhance the fishery.

Other wildlife species in the area include beavers, minks, muskrats, river otters, frogs, toads, salamanders and song birds.

Prior to the initiation of construction within the Upper Green River SRMA, wildlife surveys would be conducted to ensure that no sage grouse leks or nesting sites are threatened by the proposed improvements. Surveys shall also be performed to ensure that no threatened or endangered species, nor raptor-nesting sites would be disturbed. In the event that such species or habitat is considered threatened by the proposed improvements, appropriate steps shall be taken to minimize or mitigate the impacts.

CHAPTER 4 - ENVIRONMENTAL CONSEQUENCES

Proposed Action

The proposed actions are designed to provide for quality and diversified visitor experience, mitigate existing or potential resource degradation, and meet BLM accessibility standards. The proposed action recommends 16 acres of disturbance in order to construct the proposed improvements (excluding improvements to BLM Road 5201), which are anticipated to have beneficial impact on the qualities of the human environment.

Cultural Resources

Native American sites are known to exist within the Upper Green River SRMA; however, there are no known sites within the immediate area of the existing improvements and where human activity presently occurs. Nevertheless, given that cultural sites are known to exist within the SRMA, conducting a cultural clearance survey is recommended before any earthwork or vegetation clearing begins. Recreation plans at specific sites may need to be amended or mitigated, if artifacts are found within the areas where improvements are proposed to occur.

Floodplain

Campsite Areas. The proposed action locates all new campsite areas and relocates most existing campsites outside the flood plain. Informal campsites will not be moved at sites 8, 9, 10, and 11. These sites receive little over-night use and provide limited and rustic camping opportunities.

Most areas within the flood plain that are currently being used as campsites would be signed as "Day-use Only" areas and would not be accessible by vehicle. These actions would reduce direct and indirect extended-stay user impact on the flood plain.

Day-use, Boat Ramps and Parking. Boat launches would be located within the flood plain. Improvements to existing informal boat launches would occur at Sites 1 and 2. A secondary boat ramp would be constructed at Site 1, upstream from the in-stream diversion. Two new boat ramps would be constructed at Site 12, one below the irrigation canal diversion and a second above the diversion which would replace and relocate the existing boat launch at this Site.. A new boat ramp would be constructed at a new day-use site located between sites 5 and 6.

The boat ramp improvements would include plating with rip rap to provide a scour resistant surface that allows efficient vehicle access for launching or removing a river vessel. The purpose of these boat ramps is to reduce the direct impact on the riparian area from degradation by providing designated locations for users to launch their boats, minimizing the existing behavior of informal and opportunistic launching at inappropriate locations. The improvements would protect the riverbanks from scouring, soil erosion or collapsing due to high river flows or unmanaged human activities on or near the riverbank. The act of constructing new boat ramps or improving existing ones would directly impact the floodplain temporarily through the use of heavy equipment, minor excavation and installation of materials. However, the improved boat ramps would reduce direct user impact to the greater floodplain area in the long-term by consolidating river-vessel access points.

Parking areas would be provided in conjunction with boat ramps and day-use areas. Additional impacts to the flood plain due to parking lot delineation would be minimal as many of the proposed locations for the parking areas are currently being used for this purpose. Improvements include using imported boulders to restrict vehicle access to day-use areas, thereby reducing the total area currently accessible by vehicle. Restricting vehicle access would eliminate unmanaged vehicle movement in the flood plain and reduce direct impact to the floodplain, such as surface compaction in riparian areas. At a select number of sites some riparian vegetation would be removed to accommodate vehicle movement, but this is anticipated to be offset by the re-growth of riparian vegetation in areas formally impacted by unmanaged vehicle movement within the flood plain.

Surface treatments within the parking areas would remain unchanged from their current condition until hardening is warranted.

Road Construction. Road improvements proposed for the length of BLM road 5201 include relocating the access with US Highway 191, crowning the road, the addition of drainage culverts and re-surfacing with gravel. These upgrades would resolve the drainage and erosion issues and improve the safety of the travel way by reducing hazardous muddy conditions. The water quality of the drainage off the roadway would be improved due to reduced erosion rates on the road surface and improved management of the surface run-off. Water quality impacts to the Green River due to silt carried by road run-off would be improved. Temporary impacts caused by road construction, such as a short-term increase in sediment flow into the Green River and noise/air pollution caused by construction equipment, would be offset by long-term benefits.

The main access point to the Upper Green River SRMA at the intersection of BLM road 5201 and US Highway 191 would be relocated approximately 1/4 mile north to a location where a secondary access point currently exists. This access would provide safer site distances for ingress and egress from the area. The new road would follow an existing two-track route to where it currently intersects with the BLM Road 5201. Impacts caused by this re-location would be minimized by using an already established two-track route. The intersection of the new entrance road and the highway would be expanded to 16 feet within the WYDOT right-of-way, reverting to a tow track road on BLM land. Expansion of the two-track would result in increased surface

disturbance when widening from an eight foot two-track to a 16-foot resource road. Surface disturbance would be mitigated through effective drainage control, cut and fill re-vegetation and reclamation of the existing entrance being abandoned near the river riparian zone.

At the current main access point, the roadbed encroaches into the Green River riparian zone. By re-routing the main access point and reclaiming the old roadbed, the roadway would be removed from the riparian zone allowing for more flood plain capacity and an increased vegetation buffer to the Green River.

Spur roads that encroach on the riparian zone would be re-aligned in most cases. By moving the spur roads away from the riparian zone, impacts such as vegetation loss due to unrestricted vehicle access, soil compaction, erosion, and sedimentation would be reduced. Soil erosion caused by flood conditions would also be diminished due to a reduction of exposed ground in the floodplain. Temporary impacts caused by road construction, such as a short-term increase in sediment flow into the Green River and noise/air pollution caused by construction equipment, would be offset by long-term benefits

Hazardous or Solid Wastes

No hazardous wastes would be generated by the proposed action. Human waste would be contained within new vault toilets, which would replace the existing pit toilets. Replacement of the existing pit toilets would mitigate concerns of potential ground water contamination associated with non-contained effluent migration. The waste would be pumped from the vault toilets as a part of the established ongoing maintenance program. The Upper Green River SRMA is designated as a pack in/pack out area and consequently solid waste containers are not provided. Users have been self-policing in keeping the area clean. There is also a camp host located at the Warren Bridge Campground that monitors the sites, collecting and disposing of trash left behind by an occasional violator.

A waste station is provided at the Warren Bridge Campground for RVs and others for the disposal of human solid wastes.

Drinking and Ground Water

Drinking water facilities are not currently, nor would be provided. There is currently no indication of ground water contamination. By replacing the pit toilets with new sealed-vault toilets ground water quality impact concerns associated with non-contained effluent migration would be eliminated. There is no anticipated negative impact to ground water as a result of the proposed action.

Riparian Areas

Camping Areas. Relocating the RV and tent camping use to outside a 100 feet setback from the riverbank would reduce direct user impact on the riparian area. Walk-in day use picnicking and recreating would be allowed to continue in the areas currently used for camping. By restricting vehicle access to these areas, surface compaction and visual impact would be reduced. Day-use parking would be provided in a designated area located outside the riparian zone. Rock/boulder barriers would be placed into the landscape in order to prohibit vehicle access and camping from encroaching into the riparian areas. The barriers would be installed to fit into the natural character of the landscape, mitigating visual impacts usually associated with standard constructed barriers.

The riparian area is showing evidence of vegetative regeneration. Willows are re-colonizing the riverbanks as a result of improved livestock management practices and upland range enhancements. Relocating camping activities to outside a 100 feet setback from the riverbank and restricting unmanaged vehicular access within the riparian zone would further reduce direct user impact to this area, further promoting the natural process of vegetative re-colonization of the riparian zone.

Trails. The route of the proposed foot trail connecting Warren Bridge Campground to Site 12 encroaches on the riparian zone in select areas. This route provides recreation access to the river

between the access sites. The proposed trail route uses many currently existing livestock/game trails, abandoned irrigation ditches, portions of existing spur roads and remnants of reclaimed spur roads. Therefore, the construction of the trail is anticipated to have minimal additional impact to the riparian area. In the long-term, foot-traffic impact to the riparian area would be reduced because the trail would provide a designated route for users, minimizing the proliferation of unplanned trails and the riverbank impact associated with unmanaged access.

Road Construction. The main access point to the Upper Green River SRMA at the intersection of BLM road 5201 and US Highway 191 would be relocated approximately 1/4 mile north to a location where a secondary access point currently exists. This access would provide safer site distances for ingress and egress from the area. An information kiosk is also recommended for this site. The new road would follow an existing two-track road to where it intersects with the existing access road.

At the current main access point, the roadbed encroaches into the Green River riparian zone. By re-routing the main access point and reclaiming the old roadbed the roadway would be removed from the riparian area allowing for more flood plain capacity and an increased vegetation buffer to the Green River.

Select spur roads that encroach on the riparian zone would be re-aligned and their old alignments reclaimed. Sediment discharge into the river from these roads would be eliminated once they are relocated. The old roadbeds would be reclaimed by ripping, placing boulders and seeding with a native seed mix. By re-vegetating exposed soils, wind and water erosion in these areas would be minimized.

The proposed actions are anticipated to have no negative impact on the riparian areas.

Wild & Scenic Rivers

The proposed actions of the Recreation Project Plan do not impact the Wild & Scenic Rivers designation as The design of recreation facilities will comply with the interim management prescriptions.

Campsite Areas. The proposed action moves select campsites, access roads, new picnic tables, new fire rings and vault toilets back from the river. A majority of the proposed facilities have less visual impact when viewed from the river. In some cases, the new campsites and day-use areas may still be visible from the river, although these new facilities would remain subordinate to the landscape. In some instances, the visual impact would remain unchanged in regards to the new vault toilets as they would be located within the same view-plain as the existing pit toilets. At site 12, a new vault toilet would impact the viewing-plain from the river. The vault toilet is a replacement of a pit toilet already removed from the surface. The subsurface remains from the pit toilet are still present on the site and should be removed. In order to minimize the visual impact of the vault toilets, building color will be selected to harmonize with the surrounding landscape.

Day-use, Boat Ramps and Parking Areas. The visual impact of the proposed boat ramp improvements would be mitigated through the use of natural materials in their construction. Methods include reinforcing the riverbank with native boulders and stabilizing the ramp with cobble and gravels. The boat ramp improvements would be discernable from the river, but would have less visual impact than traditional hardened boat ramp treatments, such as concrete.

Road Construction. The proposed action would relocate the main access road into the SRMA out of the viewing plain from the river, which is compatible with the values and objectives of the Wild & Scenic interim management practices.

Spur roads that encroach on the riparian zone would be re-aligned and placed further away from the river. This action would further enhance the wild and scenic value by making roads less visible from the river. Another effect of relocating outside the riparian and away from the

riverbank would be to discourage camping and parking near the riverbank, which would enhance the scenic quality of the area as experienced from the river and from the riverbank.

Visual Resources

Campsite Areas. The proposed action relocates campsites, access roads, picnic tables, fire rings and vault toilets back from the river. The character of the proposed campsite clearings would harmonize with the line, form, color and texture found in the surrounding landscape. The proposed vault toilets would replace the existing pit toilets, and would be relocated further back from the river. The color of the vault toilets would be selected to match colors found in the natural landscape. Impacts to form, line and texture caused by the vault toilets would be minimal due to the fact that the toilets are replacing those already existing on the site. The line and form of the new vault toilet buildings may actually improve the visual contrast due to the fact that they are wider and appear less vertical than the existing pit toilet buildings. The wider appearance of the vault toilet buildings better complements the forms found in the surrounding landscape. The overall visual quality of the area would be improved by the relocation and reshaping of the campsites, and the replacement of the existing pit toilets with vault toilets that conforms to the color and form of the surrounding landscape.

Day-use, Boat Ramps and Parking Areas. The visual impact of the proposed boat ramp improvements would be mitigated through the use of natural materials in their construction. Methods include reinforcing the riverbank with native boulders and stabilizing the ramp with cobble and gravel. These improvements would harmonize with the line, form, color and texture of the surrounding landscape. The boat ramp improvements would be discernable, but would be subservient to the greater landscape and would be a minor visual change within the immediate vicinity of the ramp; generally 20 yards or less. The boat ramp improvements would not detract from the overall visual quality of the area.

Road Construction. The proposed action would relocate the main entrance into the SRMA and resurface the entire length of the roadway. The gravel material used in the resurfacing would contrast in color with the surrounding landscape, but would not attract the attention of the casual observer to any greater extent than as already viewed in its present state.

Spur roads that encroach on the riparian zone would be re-aligned and placed further away from the river. This action would have no impact on visual resources within the river access sites, and would reduce the visual impacts to river floaters by removing the roads from their view.

Livestock Grazing

Camping Areas. The proposed actions would not impact the existing allotment plans or allocated animal unit months (AUMs). The BLM conducted controlled burns in the sage uplands at elevations above the river access recreation sites. The combination of the water filled natural pot holes and grassy control burn areas has been effective in influencing a desirable percentage of the livestock to remain out of the recreation areas.

The proposed action of creating clearings in sage uplands to provide grassy camping areas may attract livestock. The proposed clearings lay outside a 100-foot setback from the riverbank. The proximity of the grassy clearings to the river may attract cattle, competing with the recreational intent of the campsites. Changes in livestock behavior should be monitored. If it is found that the livestock use of the riparian zone increases due to the proposed action, then adjustments may be necessary in order to maintain compatibility with the allotment grazing plan. Such adjustments may include the addition of livestock or electric fencing or the physical relocation of the livestock through rancher intervention. If the livestock is fenced, precautions should be made to ensure that the fences do not prevent the livestock's access to water.

Soils

Camping Areas. Vehicular navigation and camping in the proposed upland sage clearings may compact the soils. In the more frequently used campsites, soil compaction may directly impact vegetation cover resulting in bare ground conditions. If the soils become compacted and bare ground conditions are observed, then mitigation measures may be necessary to minimize this impact.

Day-Use, Boat Ramps and Parking Areas. Compaction of soils may occur at the day-use parking areas. Impacts to the surface in parking areas may increase as available square footage for this activity is being restricted to a designated area. Over time and with increased use, soils that are not experiencing over-compaction with the present level of use may begin to become compacted, reducing vegetative cover and density. Reduction in vegetative cover may lead to soil erosion, which in turn may lead to reduced water quality in the Green River. Surface conditions in day-use parking areas should be monitored. If visible signs of soil compaction and vegetative loss are observed, then surface treatment mitigation measures may need to be employed.

Trails. A majority of the proposed foot-trail would utilize existing livestock/wildlife trails, abandoned irrigation ditches, portions of existing spur roads and remnants of reclaimed spur roads. This strategy would minimize surface disturbance. However, there is the need for constructing some new trail length in order to connect the existing segments. In order to establish trail benches on slopes above the river, new trail construction would expose bare soil due to uphill excavating and downhill filling. The long-term impact of this construction on soil erosion would be mitigated by re-vegetating exposed ground conditions.

Short-term soil impact would occur with the construction of new trail length. In the long-term, foot-traffic impact to soils would be reduced because the trail would provide a designated route for users, minimizing the proliferation of unplanned trails and a greater level of surface disturbance associated with unmanaged trail blazing. Use levels are presently light and are anticipated to remain light.

Road Construction. The main access point to the Upper Green River SRMA at the intersection of BLM Road 5201 and US Highway 191 would be relocated approximately 1/4 mile north to a location where a secondary access point currently exists. This secondary access point currently serves a former BLM road material borrow site. The new access road would follow an existing two-track road to where it currently intersects with BLM Road 5201. Therefore, incorporating this improvement within already disturbed areas would minimize surface and soil impact.

BLM road 5201 would be improved with drainage, culvert and surface upgrades. Impacts to soils would be temporary and improvements would benefit the surrounding soil in the long-term.

Select spur roads that encroach on the riparian zone would be re-aligned and their old alignments reclaimed. Sediment discharge into the river from these roads would be eliminated once they are relocated. The old roadbeds would be reclaimed by ripping, placing boulders and seeding with a native seed mix. By re-vegetating exposed soils, wind and water erosion in these areas would be minimized. Short-term soil impact may occur during road construction and reclamation, but the changes in road alignment would have greater long-term benefits with regards to soil conservation.

Information Kiosk. The information kiosk would be located near the new main access point. The area designated for the kiosk is already impacted with surface disturbance related to past road material mining activities. Additional soil impacts to this area would be minimal. Site improvements associated with the construction of the kiosk and turn-around area would improve the area in the long-term by concentrating vehicular traffic to maintained roads, allowing the surrounding area to rejuvenate.

Vegetation

Day-Use and Boat Launch Areas. Select vegetation within the riparian zone may be removed in order to construct or improve the boat launch facilities. Siting of boat ramps was carefully selected to avoid impacting mature riparian and riverbank vegetation. Boat ramps were located generally where users are already accessing the river for this purpose and ground vegetation consists of grasses.

The ground surface treatment where vehicular movement would be provided for boat ramp negotiation would be left as a natural grass covered area, as it is now. Over time, grass cover may begin to become sparser from wear and soil compaction. Impact to ground vegetation would need to be monitored annually. If bare ground conditions begin to occur, then the situation may need to be mitigated to avoid soil erosion and discharge into the Green River.

Camping Areas. The proposed action recommends the clearing of upland sage in order to provide camping opportunities away from the riverbank and riparian zone. This action is recommended for Sites 1, 2, 4, 5, 6 and 7. The campsite clearings are designed to mimic similar conditions found in the area and would not impact the continuity of sageland matrix. Ground treatments within campsite clearings would be natural surface, such as grass/forb vegetation. These improvements are recommended on an as needed basis, dependent on increase level of use and demand within a given area. The proposed action recommends initially replacing the number of existing campsites.

Ground impact would be minimal with some stone removal and perhaps some minor grading. Over time, as RVs and other vehicles access and navigate within the campsite areas, surface wear may be observed. If bare ground a condition develops, some of the camping areas may need to be rested for vegetation to recover. If bare ground conditions are not able to re-vegetate, then alternative surfacing may be required in select locations to control erosion.

Trails. Minimum vegetation impact would occur with the construction of the proposed trail. The purpose of the trail is to have a designated path to keep unauthorized trails from forming. Therefore, while trail construction would impact limited amounts of vegetation, this action is intended to minimize the potential impacts associated with allowing users to continue to create unauthorized trails. Trail construction is minimized by utilizing existing livestock / game trails , abandoned irrigation ditches portions of spur roads and remnants of reclaimed spur roads.

Road Construction. The main access point to the Upper Green River SRMA at the intersection of BLM Road 5201 and US Highway 191 would be relocated approximately 1/4 mile north to a location where a secondary access point currently exists. This secondary access point currently serves a former BLM borrow site. The new road would follow an existing two-track road to where it intersects with BLM road 5201. Vegetation impact would be minimized by incorporating these improvements within already disturbed areas. The information kiosk would be located within the area disturbed previously for borrowing of fill material.

BLM road 5201 would be improved with drainage, culvert and surface upgrades. Vegetation may be impacted if the road is widened in some locations.

Noise

Noise would be generated during periods of construction. Improvements can be scheduled to minimize impact to the recreating public. There are residential subdivisions south of the project area, but they are far enough away to not be impacted by construction noise.

Wildlife

Wildlife would not be negatively impacted by the proposed action. By relocating camping activity away from the riverbank, the riparian vegetation cover would increase, which would be more favorable for wildlife. There is concern to not move camping too far back into the sage upland to avoid disturbance to

sage grouse that inhabit the area. The relocation of campsites is in relative close proximity to the existing facilities, minimizing expansion of human activity and avoiding disturbance to the sage grouse inhabitants.

Before initiating construction within the Upper Green River SRMA, wildlife surveys would be conducted to ensure that no sage grouse leks or nesting sites are threatened by the proposed improvements. Surveys would also be performed to ensure that no threatened or endangered species, nor raptor-nesting sites would be disturbed. In the event that such species or habitat is considered threatened by the proposed improvements, appropriate steps shall be taken to minimize or mitigate the impacts. Construction activity may impose a temporary, short-term impact on wildlife.

No Action Alternative

Cultural Resources

No anticipated impact.

Floodplain

Campsite areas. Because campsites located within the floodplain would not be relocated, the current practice of unmanaged vehicle access to these areas would continue. As use of these sites increases, soil compaction may increase that would have consequential impacts to the floodplain.

Boat Ramps. The informal boat ramps would remain in the floodplain. Boat ramps would remain unimproved and un-protected from scour, which may have consequential impacts to the floodplain.

Parking Areas. There would be no change in the current parking management strategy. Parking/day-use and camping would remain within the floodplain. Increased use over time would lead to bare ground conditions, impacting the floodplain. Parking areas would most likely begin to expand as more users visit the site. This would lead to additional floodplain impact.

Road Construction. The main entrance would not be relocated, continuing the current condition of reduced flood plain capacity and a diminished water quality buffer to the Green River. No Action would sustain existing safety concerns associated with the potential of users becoming stranded due to impassible conditions, as well as, impede emergency response to any given site within the SRMA.

Hazardous and Solid Wastes Leakage from pit toilets may impact ground water. The Upper Green River SRMA is a pack-in/pack-out area. Users have been, and are anticipated to remain, compliant with this management strategy. Because current parking areas are located close to the River, vehicle fluid leakage may impact water quality.

Drinking and Ground Water. No drinking water is provided in the Upper Green River SRMA. Leakage from outdated pit toilets may impact ground water.

Riparian Areas

Campsite Areas. Because campsites located next to the riparian area would not be relocated, the current practice of unmanaged vehicle access to these areas would continue. As use of these sites increases, riparian vegetation damage and loss would also increase, reversing the natural re-vegetation process that has started to advance. The result would be a loss of riparian vegetation. Continued vehicle access to these areas may impact riparian health via automotive fluid leakage and contamination.

Boat Ramps. Boat ramps would remain unimproved and unmanaged. The current trend on the Green River is to launch boats opportunistically. Once boat ramps become damaged or difficult to use (due to wear and tear, water damage etc.), users would simply move to the next convenient

location along the riverbank. This would lead to the direct loss of riparian vegetation. As abandoned boat launches become re-colonized by riparian vegetation, the difference in soil compaction in these areas may impact riverbank plant composition. As new boat launch locations are pioneered, vehicle access to these new areas would further impact both upland and lowland vegetation.

Parking Areas. There would be no change in the current parking management strategy. Parking, day-use and camping would remain within the floodplain. Increased use over time would lead to bare ground conditions increasing the erosion potential within the riparian.

Road Construction. The main entrance would not be relocated, continuing the current condition. The potential for restoring impacted riparian is not an opportunity with this alternative. No Action would sustain existing safety concerns associated with the potential of users becoming stranded due to impassible conditions, as well as, impede emergency response to any given site within the SRMA.

Wild and Scenic Rivers

Human activity and large vehicle camping near the riverbanks would continue with this alternative impacting the scenic quality as viewed from the river.

Visual Resources

The impacts due to unmanaged activities in the riparian zone may lead to surface compaction, loss of vegetation and other signs of over-use. As these impacts become more evident to the casual observer, the visual quality of the area would be impacted. Camping and parking would continue to concentrate within the riparian areas and near the riverbank perpetuating or increasing the visual presence as viewed from the river and riverbank.

Livestock Grazing

No anticipated impact

Soils

Camping/Parking Areas. As use increases, vehicular navigation and user activity in the current parking and camping areas may compact the soils. In the more frequently used river access sites, soil compaction may directly impact vegetation cover, resulting in bare ground conditions.

Road Construction. The condition of BLM Road 5201 would continue to deteriorate. The continuance of the current erosion conditions and poor surface drainage would lead to soil loss and transportation. In wet weather, the slippery and unsafe road surface conditions would remain. Muddy surface conditions would continue the transportation and deposition of soil to the riparian zone by vehicle tires.

Vegetation

As use increases, vegetation within high-use areas, such as parking/camping areas would be impacted. Parking/camping areas would most likely begin to expand as more users visit the site, leading to vegetation loss (upland sagebrush and lowland willow) in sensitive areas and soil erosion due to exposed ground conditions.

Noise

No anticipated impacts.

Wildlife

Loss of wildlife habitat would be associated with impacts to riparian vegetation, upland vegetation, water quality, and soils, (see **Floodplain, Riparian Areas, Soils, and Vegetation**)

Mitigation Measures and Residual Impacts

Cultural Resources – A cultural site survey should be performed before any vegetation removal or excavation occurs. If archeological sites are located and found to be near proposed improvements, then arrangements need to be made to either relocate the proposed improvements or implement other means of protecting the sites.

Vegetation and Soils – the proposed method for preparing campsite opportunities involves the clearing of shrub-like vegetation, but attempts to sustain ground cover vegetation. The level of use as it relates to ground cover vegetation conditions would need to be monitored and temporary closure of specific sites may be necessary in order to rest the site and keep the ground surface from becoming over-compacted. Depending on use levels, some sites may eventually require hardened surfaces to avoid bare ground conditions and to minimize soil erosion potential.

Revegetation – Disturbed areas would require revegetation with native species. This would be accomplished through seeding and mulching. These areas include edges of re-graded or new roads, closed roads that have had the ground surface re-graded or scarified and other areas of disturbance. Seed mix should include the following species and Pure Live Seed (PLS) rates:

Common Name	Scientific Name	Lbs/acre
Streambank wheatgrass	<i>Elymus lanceolatus</i>	5 lbs.
Slender wheatgrass	<i>Elymus trachycaulus trachycaulus</i>	4 lbs.
Rocky Mountain fescue	<i>Festuca saximontana</i>	4 lbs.
Idaho fescue	<i>Festuca idahoensis</i>	3 lbs.
Bluebunch wheatgrass	<i>Pseudoroegneria spicata</i>	2 lbs.
Sandberg's bluegrass	<i>Poa sandbergii</i>	2 lbs.
Mountain sage	<i>Artemisia tridentata vaseyana</i>	1 lb.
Fringed sage	<i>Artemisia frigida</i>	1 lb.
Green rabbitbrush	<i>Chrysothamnus viscidiflorus</i>	1 lbs.
Sulphur buckwheat	<i>Eriogonum umbellatum</i>	1 lb.
Pussytoes	<i>Antennaria rosea</i>	2 lb.
Cutleaf Daisy	<i>Erigeron compositus</i>	0.5 lb.

For revegetation of camp site areas:

Rocky Mountain fescue	<i>Festuca saximontana</i>	3 lbs.
Idaho fescue	<i>Festuca idahoensis</i>	3 lbs.
Bluebunch wheatgrass	<i>Pseudoroegneria spicata</i>	2 lbs.
Sandberg's bluegrass	<i>Poa sandbergii</i>	2 lbs.
Fringed sage	<i>Artemisia frigida</i>	3 lb.
Sulphur buckwheat	<i>Eriogonum umbellatum</i>	3 lb.
Pussytoes	<i>Antennaria rosea</i>	4 lb.
Cutleaf Daisy	<i>Erigeron compositus</i>	1.5 lb.

Seed should be hand mechanically broadcasted, not hydro-seeded, and raked into prepared soil surface. Seeded areas are to be mulched with 3 tons of certified weed-free straw per acre and hydro-tacked. Seeding should take place in Autumn, between September 15 and October 30.

Weed Control – Chemical and mechanical methods of weed management would be necessary, especially in areas of temporary disturbance due to construction of proposed improvements. Management methods need to be implemented 2 times in spring (May/June) and then again in Autumn (September). Also, areas of heavy use would need to be monitored and should be included in the ongoing management program of the Upper Green River SRMA.

Cumulative Impacts

There are no other proposed plans, projects or actions known for the Upper Green River SRMA that will create additional environmental impacts to those evaluated within this E.A.

CHAPTER 5 - PERSONS AND AGENCIES CONSULTED

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