

# CHAPTER 1: PURPOSE AND NEED FOR ACTION

## 1.1 Introduction to Proposed Action

The Wyoming Department of Transportation (WyDot) is in the process of reconstructing highway 26/89 from Alpine to Hoback Junction. Within the Wolf Creek and Cabin Creek sections of the highway, some recreation facilities will be affected. WyDot is required to mitigate impacts to developed recreation facilities located within the reconstruction project. In response to the loss of campsites in the Wolf Creek and Cabin Creek sections, WyDot has agreed to relocate campground facilities to a Forest Service approved area, hence the need for this analysis.

The Bridger-Teton National Forest proposes to close Cabin Creek Campground, construct a new campground in an area referred to as the Wolf Creek Staging Area, and build a T-intersection at the Sheep Gulch Boat Ramp. The purpose of these actions is to address resource concerns at the existing campground, retain the camping capacity from Fall Creek Road to Sheep Gulch Boat Ramp, enhance bald eagle habitat, and improve public safety at developed recreation sites. The Project Area is located within the Snake River Canyon corridor between, and including, Fall Creek Road T38N R117W Section 6 and Sheep Gulch Boat Ramp T37N R118 Section 23 (Figure 1). All proposed actions are within the Project Area and are described in detail in Chapter 2 of this analysis.

## 1.2 History of Project Area

The Snake River Canyon has undergone several changes as the demand and use of the area increased over the last decade. The following is a summary of the changes relevant to the camping opportunities within the Project Area:

- Decision Memo (June 1990) –
  - Wolf Creek Campground was turned into a shared meal site for river outfitters and closed to overnight camping. **(Loss of 10 single –family campsites, 80 People At One Time (PAOT))**
- Snake River Canyon Final Environmental Impact Statement – Highway Reconstruction (January 1994) –
  - Cabin Creek Campground - It was decided that the new highway construction approved in this analysis would destroy vegetative cover between the highway and the Cabin Creek Campground, eliminating at least 4 campsites. **(Loss of 4 family sites, 32 PAOT)**
  - West Table Boat Ramp - It was decided that the new highway construction approved in this analysis would affect camping at this site. West Table was closed to overnight use due to its conflict with the day use boat launch, lack of potable water, and location within identified bald eagle habitat. **(loss of 6 family sites, 48 PAOT)**
- Special Order #95-03-22-D4 (March 1995) –
  - Dispersed Camping - Closed the Snake River and Hoback Canyon to dispersed camping between May 1 and Labor Day weekend due to health and safety concerns. **(Loss of 28 dispersed campsites in the Snake River Canyon)**
- Proposal to re-design camping and boat ramp facilities at Elbow, East Table, and Station Creek Decision Notice (October 1997) –
  - Elbow Campground was determined to be closed and riparian habitat restored. **(Loss of 7 single family sites, 56 PAOT).**

- Station Creek overflow area would be redesigned from a campground containing 5 single-family sites to a campground that can accommodate 2 group sites (**Loss of 5 family sites, addition of 2 group sites, total gain of 40 PAOT**)
- East Table Boat Ramp Campsites were closed due to bank erosion, floodplain and location in identified bald eagle habitat (**Loss of 2 single-family sites, 16 PAOT**)

**Table 1: Campsites in the Project Area (From May 1<sup>st</sup> – Labor Day 2003)**

*Note: The following table considers the number of sites available during the months of highest use in the project area. Dispersed sites are calculated with a PAOT of 8.*

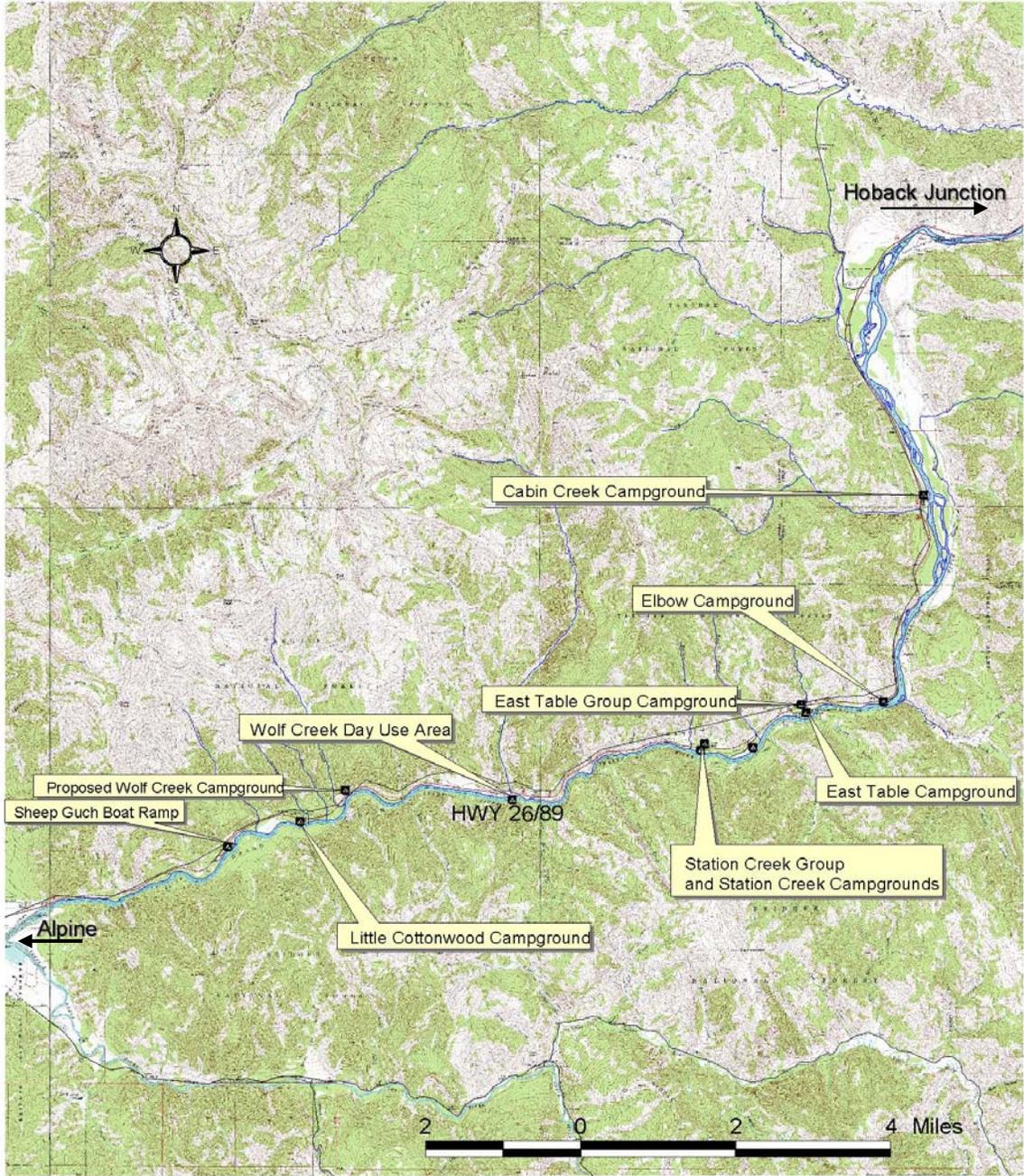
Camp Name	Type of Use	# of sites	Capacity people at one time (PAOT)	% Utilization June thru August	Condition Comments
Cabin Creek Campground	Developed single-family camping	6	48	85%	Tree cover is disappearing due to bug infestation. Economically inefficient. Within bald eagle nesting habitat. Multiple trails and eroded banks leading to river. Facilities not ADA (Americans with Disabilities Act) compliant. No water.
<i>Elbow Campground</i>	<i>Developed single-family camping</i>	<i>0</i>	<i>0</i>	<i>N/A</i>	<i>Closed as result of 1997 Decision Notice. Bank erosion, floodplain and located in bald eagle habitat. No water. Facilities not ADA compliant.</i>
East Table Campground	Developed single-family camping	18	144	85%	Problem with user-created trails leading to the river. Erosion and compacted sites affecting lodgepole pine.
East Table Overflow	Group	1	40	70%	Site developed as result of 1997 Decision Notice. Sites are close to the highway. Lodgepole pine insect problems.
<i>East Table Boat Ramp</i>	<i>Semi-Developed single-family camping</i>	<i>0</i>	<i>0</i>	<i>N/A</i>	<i>Closed due to lack of potable water, conflict with day use boat launch, located in bald eagle habitat. Facilities not ADA compliant.</i>
<i>West Table Boat Ramp</i>	<i>Group Site</i>	<i>0</i>	<i>0</i>	<i>N/A</i>	<i>Closed as a result of 1994 Highway EIS. Conflict with day use boat launch. No water. Campground facilities not ADA compliant. Located in bald eagle habitat.</i>
Station Creek Campground	Developed single-family camping	16	128	85%	Four sites added as result of 1997 Decision Notice to close Elbow Campground. Located in potenyail bald eagle nesting habitat.

Camp Name	Type of Use	# of sites	Capacity people at one time (PAOT)	% Utilization June thru August	Condition Comments
Station Creek Group Campground and Trailhead	Group Site	2	80	80%	Two group sites were developed as result of the 1997 Decision Notice. Site is working well.
Little Cottonwood Group Campground	Group Site	1	40	80%	Facilities not ADA compliant. Potential to add an additional group site in the future.
Wolf Creek Meal Site Area	Single-Family	0	0	N/A	Closed to overnight camping as a result of Decision Memo in June 1990. Site currently being used as a shared meal site for outfitters.
Dispersed Campsites	Dispersed	0	0		Project area closed to dispersed camping from May 1 <sup>st</sup> to Labor Day.
<b>Total PAOT (People At One Time)</b>			<b>480</b>		

**Table 2: Camping Opportunity Changes Within The Project Area Since 1990:**

	January 1990 (Historic Levels)	December 2002	Change
Single-Family Sites	74	40	-34
Dispersed/Walk-in Sites	28	0	-28
Group Sites	4	4	0
Total PAOT	976	480	-496

**\*\*PAOT = Single Family (8) + Dispersed Sites (8) + Group Sites (40)**



**Project Area: Snake River Canyon  
(Fall Creek Road to Sheep Gulch Boat Ramp)**

### **1.3 Purpose and Need for the Proposed Actions**

An Interdisciplinary Team (ID Team) reviewed the direction provided by the Forest Plan, field reviewed, and evaluated the existing conditions of the Project Area. The ID Team identified site-specific opportunities for resource management necessary to implement the Forest Plan and enhance present conditions, or address management concerns, in order to move the area towards the Desired Future Condition (DFC).

**1.3.1 Meet camping demands in the Snake River Canyon** - Between 1990 and 2000, river and campground use has increased dramatically. Since 1990 there has also been a loss of 496 PAOT in the project area. This amount includes the closure of dispersed camping in the Snake River Corridor from May 1<sup>st</sup> to Labor Day.

**1.3.2 Opportunity to move concentrated recreation use away from bald eagle habitat** - A plan for managing eagles in the Project Area was prepared in 1996 entitled Greater Yellowstone Bald Eagle Management Plan. This plan identified two management zones associated with nesting bald eagles. The Cabin Creek campground is located within zone II of the active Cabin Creek nest. Cabin Creek campground contains 10 family campsites, antiquated facilities and is located on the river. Highway reconstruction will remove at least 4 campsites in the campground and remove vegetative screening between the highway and the campground. Wolf Creek Staging Area (site of proposed campground) is further away from existing nest sites and is approximately ¼ mile from the river.

**1.3.3 Opportunity to improve visitor safety within developed sites and onto highway** - The Sheep Gulch Boat Ramp has two highway access roads. Currently, the east (upstream) access road can only be used by traffic coming up from the boat ramp. Vehicles coming from the parking lot cannot make the left turn on to the access road to utilize the east highway access (Figure 2). This creates a bottleneck and traffic jams with people/vehicles trying to get to the boat ramp and vehicles returning from the ramps that are forced to come all the way back through the main parking lot to leave the area.

**1.3.4 Opportunity to reduce resource impacts and conflicts between user groups**-River users comprise the majority of campground use in the Snake River Canyon. River users often come in large groups, occupy more than 3 single-family campsites per group and tend to eat their meals together and socialize at one campsite. This has led to a conflict with the single family camping experience originally designed for these campsites.

Developed campgrounds and dispersed sites immediately adjacent to the river has led to users launching their boats from the campgrounds rather than the designated boat ramps. This has led to multiple trails being developed in the campgrounds and stream bank damage along the riverbanks.

The lack of open campgrounds in the fall forces hunters to camp in dispersed sites. The proposed campground could accommodate horse use and remain open during hunting season. The area is large enough to design a campground that would separate campsites while accommodating the longer recreational vehicles and trailers prevalent today.

## **1.4 Objectives of the Snake River Canyon Campground Relocation Project**

As a result of the opportunities discussed in Section 1.3, the following objectives have been identified (action alternatives must meet these objectives to some degree):

1. Provide developed camping opportunities that approach the quantity that was found in the Project Area before 1990.
2. Ensure long-term protection of wildlife populations (specifically bald eagles) by reducing human disturbance in identified habitat areas within the Project Area.
3. Improve traffic flow within Sheep Gulch Boat Ramp and onto the highway.
4. Reduce conflicts at developed sites between single-family, walk-in, group river users, and fall hunters by offering a greater range of each type of experience in the Project Area.

## **1.5 Scope of This Environmental Analysis**

This section defines and explains the scope (boundaries/limits) of the Snake River Canyon Campground and Boat Ramp Infrastructure Environmental Analysis. It briefly describes the history of the planning process, lists the resource issues studied in detail, identifies those issues eliminated from detailed study, and explains the relevant planning documents.

### **1.5.1 History of the Snake River Canyon Campground Relocation Planning Process**

In 2001, the Forest Service began an environmental analysis of the Snake River Canyon Campground and Boat Ramp Infrastructure Project. The Snake River Canyon ID Team initiated public scoping (all contacts outside the Forest Service) in September 2001. The ID Team sent letters to 61 individuals, groups, organizations, or agencies.

The ID Team received 6 comments from this initial scoping. These comments can be found in the project file. Using these responses and the information gathered during internal scoping, the ID Team identified 6 potential issues (unresolved conflicts and opportunities). The issues are listed and explained in Section 1.5.2.

**Please Note:** The September 2001 scoping document referred to relocating Elbow and Wolf Creek campgrounds to the Wolf Creek Staging Area. This was written in error. A decision was made in the proposal to re-design camping and boat ramp facilities at Elbow, East Table, and Station Creek Decision Notice (October 1997), to close Elbow Campground. Elbow Campground will not be addressed in this analysis except in regards to the affected environment. In addition, a June 1990 Decision Memo closed Wolf Creek Campground to overnight camping. The decision identified Wolf Creek as a shared meal site for outfitters. Wolf Creek Campground (referred to as the Wolf Creek meal site in this analysis) will not be addressed in the analysis except in regards to the affected environment. Finally, the September 2001 scoping letter proposed the installation of a public phone at the West Table Boat Ramp to improve communications in the canyon for emergency situations. This proposal has been dropped from this analysis and has since been included in a separate analysis.

### **1.5.2 Issues Studied in Detail**

The Snake River Canyon ID Team carefully considered comments received from the public, other agencies, and Forest Service resource specialists. The ID Team determined that the following issues are relevant to the decisions that must be made concerning the Snake River Canyon Campground and Infrastructure Project. These issues directly influenced the technical design of the project. Chapter 3 describes how each proposed alternative would affect the following issues.

**Issue #1: Developed Recreation within the Project Area:**

Recreation demands are expected to continue to rise in the Snake River Canyon area. Since 1990 there has been a loss of 496 PAOT in the Project Area (Including the closure of dispersed camping in the Snake River Corridor from May 1<sup>st</sup> to Labor Day). The increase of river use, specifically large group use, has led to a conflict with the single family camping experience originally designed for these campsites. The concentrated use within campgrounds adjacent to the river has resulted in damaged sites, user-created trails to the river and erosion along the riverbank. Finally, there is a need to keep a campground open through hunting season to provide a camping opportunity to hunters and to minimize the impacts of dispersed camping during the hunting season.

**Issue #2: Wildlife:**

The Snake River Canyon supports a wide diversity of wildlife habitats and their associated species. Threatened or endangered species that either are or may be present in the river corridor are bald eagle, grizzly bear, gray wolf and lynx. Of the threatened or endangered species, the bald eagle is considered the most dependent upon the Snake River corridor and the most vulnerable to disturbance from human activities near known nest sites. Elk, deer, and moose crucial winter range also exists within the river corridor. In addition, the Snake River Corridor supports habitat for 14 sensitive species: spotted frog, common loon, trumpeter swan, harlequin duck, boreal owl, peregrine falcon, flammulated owl, great gray owl, northern goshawk, three-toed woodpecker, spotted bat, western big-eared bat, wolverine, and fisher.

**Issue #3: Wild and Scenic Rivers and Visual Quality:**

The Visual Quality Objective (VQO) is a desired level of excellence based on physical and sociological characteristics of an area. Each management area within the Forest contains VQO threshold standards. There are five VQO levels arranged along a continuum: maximum modification, modification, partial retention, retention, preservation (USDA Forest Service Landscape Aesthetics Handbook). The Visual Quality Objective (VQO) for the Snake River corridor is identified as Retention in the Forest plan. This designation is due to the unique landscape of the Snake River Canyon, the eligibility of the river as Wild and Scenic, and the high use and visibility of Forest System lands adjacent to both the Snake River and Highway 89. The Forest plan standards and guidelines require that eligible river segments are protected from activities that could diminish or change the free-flowing characteristic, water quality, or the scenic, recreational, fish and wildlife, and other values which make the river eligible for designation.

**Issue #4: Soil and Water Quality:**

Concentrated recreational use in the campgrounds adjacent to the Snake River is of concern when viewed in terms of the expected increase of recreation demands. User-made trails to the river and between campsites has led to an increase in damage to the soils in the form of compaction and erosion. Sedimentation from unstable banks has resulted from river users using the campsite as a boat launch site.

**Issue # 5 Vegetation:**

Vegetation types along the river corridor primarily include: riparian, sagebrush, and conifers. Forests include lodgepole pine and Douglas fir interspersed with small stands of spruce and fir. A plant survey was conducted on all affected areas during the development of the Snake River Canyon Highway Reconstruction EIS (1/94). Payson's

milkvetch (a sensitive plant species) was found at the Cabin Creek Campground. Payson's milkvetch grows in areas that have been disturbed by natural or human processes, thus fire, tree cutting, and trampling may increase the occurrence of this species. However, disturbances which remove topsoil will eliminate the habitat and noxious weeds have the ability to displace populations of Payson's milkvetch.

**Issue #6 Cultural Resources:**

In 1994 a cultural resource survey was conducted for the Snake River Canyon Highway EIS (1/94). No historic properties listed as eligible for the National Register of Historic Places were identified in the Project Area. There would be no effect to historic properties as a result of any of the three alternatives described in this assessment. *Therefore, this issue will be eliminated from further detailed study in this analysis.*

In preparation for this environmental assessment, alternatives 2 & 3 were created to address the above issues. These alternatives are described in Chapter 2.

**1.5.3 Concern raised but eliminated from further detailed study in Chapters 2 and 3:**

**Concern:** Changing the camping experience from two small campgrounds to one large campground will change the character of camping in the canyon and will raise the rates making camping cost prohibitive.

**Response:** The proposed action does not include changing the character of the camping experience. The campground would be designed with 3 loops of 6-7 campsites per loop. Vegetation and topographical breaks would reduce visuals and sound between each loop. The walk-in sites would be located far enough away from the trailer sites to give a semi-developed camping experience. There are no plans to raise fees.

**1.5.4 Relevant Planning Documents That Influence the Management Direction of this Environmental Analysis**

*Bridger-Teton National Forest Land and Resource Management Plan (1990)*

*Snake River Canyon Final Environmental Impact Statement – Highway Reconstruction (January 1994)*

*Greater Yellowstone Bald Eagle Management Plan – Greater Yellowstone Bald Eagle Working Group (1996)*

*Bald Eagle Management Plan for the Lower Snake River (WGFD 1994)*

*Special Order #95-03-22-D4 Dispersed Camping in the Snake River Canyon (March 1995)*

*Snake River Final Area Analysis (August 1996)*

*Environmental Assessment - Proposal to manage outfitted and organizational group use/Proposal to re-design camping and boat ramp facilities at Elbow, East Table, and Station Creek - Decision Notice (October 1997)*

*Special Order # 040321 – Developed Camping (June 2001)*

*Environmental Assessment – Management of Outfitted Scenic Floating and Float Fishing along Snake River – Decision Notice (August 1998)*

*Environmental Assessment – Snake River Whitewater Outfitting – Decision Notice (May 2000)*

### ***1.6 Decisions That Must Be Made***

The District Ranger of the Teton Division must decide whether to implement infrastructure changes to developed recreation sites in the Snake River Canyon **now** or to **defer** activities until a later time. These activities are described in detail in Chapter 2.

If the District Ranger decides to conduct activities **now**, she must decide from the following specific management activities:

- Should Cabin Creek Campground be closed
- Whether a new campground will be constructed at the Wolf Creek Staging Area
- If a new campground is constructed, which design alternative to use (Alternative 2 or 3)
- What mitigation and/or monitoring measures to implement to meet Forest standards and minimize resource damage

The District Ranger must also determine if the selected alternative (plan) would or would not be a major Federal action, significantly affecting the quality of the human environment. If the District Ranger determines that it **would not** significantly affect the quality of the human environment, then she can prepare and sign a Finding of No Significant Impact (FONSI) and the project can proceed.

If the District Ranger determines that the selected alternative **would** significantly affect the quality of the human environment, then an Environmental Impact Statement (EIS) and a Record of Decision (ROD) must be prepared and signed before the Snake River Canyon Campground and Boat Ramp Infrastructure Project could proceed.

## **Chapter 2: Alternatives Including the Proposed Action**

### **2.1 Introduction**

This chapter is the heart of this EA. This chapter describes the activities of the No Action Alternative and the Action Alternatives. It presents the predicted attainment of project objectives, providing a clear basis for choice among the options for the decision maker and the public. Finally, this chapter identifies the Teton Division's preferred alternative.

### **2.2 Alternatives considered but dismissed:**

1. An alternative to allow dispersed camping only in the Wolf Creek Staging Area was dismissed because it would not meet the Federal Highways Administration (FHA) requirement to mitigate the loss of single-family sites. In addition, the purpose and need of maintaining the current number and type of campsites and meeting Forest health and safety standards would not be met. To meet health and safety standards, a toilet and garbage facilities would have to be provided at the site. Due to the high cost of installing and maintaining such facilities, a fee would have to be assessed.
2. An alternative to allow group camping and family camping at the Wolf Creek Staging Area was dismissed because of known conflicts, which arise when the two user groups are mixed in the same campground. Family campers are looking for a quiet atmosphere while the group users prefer to do activities together (ex. Eating, socializing, camping, etc.) In the *Snake River Area analysis* (August 1996) and resulting *Decision Notice* (October 1997), it was decided that group camping would be provided at the Station Creek Group Campground, and Cottonwood Creek Group Campground.

### **2.3 Description of Proposed Alternatives**

#### **2.3.1 Alternative 1: No Action**

This alternative represents a continuation of current management. Cabin Creek Campground would be maintained at its current location. Highway construction would destroy vegetative cover between the highway and the campground. Four of the ten campsites would be closed due to the proximity of the reconstructed highway. The Cabin Creek Campground would remain without potable water. Facilities would have to be upgraded to meet Americans with Disabilities Act (ADA) standards for accessibility.

Sheep Gulch Boat Ramp infrastructure would remain the same. The intersection within the Boat Ramp would not be improved for better traffic flow and a safer intersection. Traffic jams and user conflicts would continue.

#### **2.3.2 Alternative 2: Single-Family and Walk-In Sites**

The intent of this alternative is to efficiently manage one campground which would accommodate camping capacities similar to those found in the Project Area before 1990. In addition, infrastructure changes of the Sheep Gulch Boat Ramp are proposed.

A campground containing 20 single-family sites and 18 walk-in sites would be constructed at the Wolf Creek Staging Area. The Wolf Creek Staging Area Campground would be designed to meet ADA standards. The campground would consist of 3 loops, which could be opened or closed depending on seasonal management objectives (i.e. during hunting season). The campground would be serviced with a solar water system, 2

frost-free hydrants and three accessible 2-hole toilets. Each of the 20 family campsites would have a spur approximately 75 feet long to accommodate a large trailer or vehicle with boat or horse trailer. Site furniture would consist of an accessible picnic table, fire-ring, bear box, crushed gravel "living area" and tent pad. In cases where the tent pad is located away from the spur, the connecting trail would also meet ADA standards. The walk-in sites would be located away from the family campsites and designed to accommodate people desiring a less developed camping experience. The restrooms located in each loop would also service the walk-in sites (refer to figure 2). Silt fences and erosion control methods would be required during construction to minimize sediment entering the Snake River. Vegetative buffers, landscaping and contouring would screen campground activities from the highway to meet the VQO of retention and Wild and Scenic Rivers designation. Effectiveness monitoring of the proposed campground project will be accomplished through water quality monitoring to comply with state water quality standards.

Cabin Creek Campground would be closed once the Wolf Creek Staging Area Campground was constructed. All roads, campsites and facilities would be removed and revegetated. Reclamation of the campground would occur after September 6, 2004 to avoid disturbing bald eagle nesting and to retain a campground for visitors during the 2004 season. Reclamation of the roads and spurs would be designed to enhance Payson's milkvetch habitat.

A T-intersection would be constructed at the east (upstream) access road of the Sheep Gulch Boat Ramp facility to accommodate east and west traffic flows.

### **2.3.3 Alternative 3: Group Sites**

Like alternative 2, this alternative would maintain overall camping capacity in the canyon at approximately current levels with a shift towards group camping. Four group sites would be developed in the 3-loop footprint shown in Alternative 2 (Figure 3). No family sites or dispersed/semi-developed sites would be constructed under this alternative due to the potential for conflict with mixing single-family camping with group camping. Each group site would include a common kitchen area with fire ring, Dutch oven pit, preparation table, 5-7 tent sites and a group parking area. An accessible toilet and frost-free water hydrant would be provided near each loop.

Cabin Creek Campground would be closed once the Wolf Creek Staging Area Campground was constructed. All roads, campsites and facilities would be removed and revegetated. Reclamation of the campground would occur after September 6, 2004 to avoid disturbing bald eagle nesting and to retain a campground for visitors during the 2004 season. Reclamation of the roads and spurs would be designed to enhance Payson's milkvetch habitat.

A T-intersection would be constructed at the east (upstream) access road of the Sheep Gulch Boat Ramp facility to accommodate east and west traffic flows.

**2.4 Table 3: Comparison Summary of the Alternatives and Project Objectives**

<b>Project Objective</b>	<b>Alternative 1 – No Action</b>	<b>Alternative 2 – Single Family and Walk-in Sites</b>	<b>Alternative 3 – Group Sites</b>
<p><b>Objective #1:</b> Provide developed camping opportunities that approach the quantity that was found in the Project Area before 1990 (#PAOT in Project Area). * PAOT before 1990 = 976</p>	480	736	592
<p><b>Objective #2:</b> Ensure long-term protection of bald eagles by reducing human disturbance in habitat areas within the Project Area (# campgrounds within management Zone I or Zone II of active bald eagle nest sites).</p>	1 – Cabin Creek	0	0
<p><b>Objective #3:</b> Improve traffic flow within Sheep Gulch boat ramp and onto the highway.</p>	No infrastructure improvements of Sheep Gulch Boat Ramp.	Traffic flows and safety within Sheep Gulch improved by construction of T-intersection.	Traffic flows and safety within Sheep Gulch improved by construction of T-intersection.
<p><b>Objective #4:</b> Reduce conflicts at developed sites between single-family, walk-in, group river users and fall hunters by offering a greater range of each type of experience in the Project Area. (# of group, walk-in, and single-family sites in Project Area)</p>	Single-Family = 40 Walk-in = 0 Group = 4	Single-Family = 54 Walk-in = 18 Group = 4  * Proposed Wolf Creek Staging Area Campground would remain open with limited services through hunting season.	Single-Family = 34 Walk-in = 0 Group = 8  * Proposed Wolf Creek Staging Area Campground would remain open with limited services through hunting season

**2.5 Mitigation Measures for the Action Alternatives**

- Maintain all mature trees within the Wolf Creek Staging Area (proposed campground site) and maintain the existing vegetation buffer between the highway and the proposed campground.
- Plant additional Douglas fir within the proposed campground and between the highway and proposed campground.

- When activities are within 300 feet of live water, sediment control would be placed prior to the start of rehabilitation and/or construction and maintained throughout the project.
- The seed mix would contain only native species, or species which would not prohibit the eventual establishment of native vegetation, and would not be placed between September 15 and July 1. Final seed mix would not be placed when snow depths exceeds six inches.
- Thoroughly pressure wash all earth moving and earth-hauling equipment to remove noxious weed seeds prior to mobilizing the equipment onto the project.
- Use only certified weed free straw and hay throughout the project.
- All cuts and fills shall be shaped to create warped (varied pitches) slopes. The surface shall be left rough (not bladed smooth) so that the topsoil shall bond and stay in place.
- Ditches shall be u-shaped with rounded edges and revegetated.
- Tops of cuts shall be rounded to blend with uphill topography.
- Vegetation (trees as well as understory species) removal for campground construction must create a natural appearing opening. This includes feathered edges of both the understory and overstory.
- Aside from feathering, the created edges of vegetation would undulate, incorporating naturally occurring openings.
- The age classes along clearing edges shall transition from mature forest age to classes to younger age classes adjacent to openings.
- Access to the proposed campground shall be oriented to take advantage of screening provided by natural topography and vegetation.
- Existing barren cut slopes would be treated and vegetated, where feasible.
- All above ground structures and facilities would have non-reflective surfaces, utilize native materials where possible, and have colors indigenous to the immediate surroundings.
- All culverts shall have flared ends.
- The backs of all signs shall be painted dark brown.

## **2.6 Identification of the Preferred Alternative**

Alternative 2: Single Family and Walk-in sites is the Teton Division's preferred alternative. It addresses the objectives and best implements the direction provided for Management Area (MA) 48 and moves the Project Area closer to the Desired Future Condition (DFC) identified in the Forest Plan.

## **CHAPTER 3: AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES**

### **3.1 Introduction**

This chapter describes the environmental components of the affected resources and displays the expected effects to the environment that would occur with regard to implementation of the alternatives described in Chapter 2. This chapter focuses on the issues described in Section 1.5.2.

#### **Project Area Location**

Proposed campground activities and improvements to Sheep Gulch Boat Ramp are located in the Snake River Canyon. Specifically, the Project Area is located within the Snake River Canyon corridor between, and including, Fall Creek Road T38N R117W Section 6 and Sheep Gulch Boat Access T37N R118 Section 23 (Figure 1). The landscape is considered unique due to the presence of the Snake River and connecting tributaries, diverse vegetation communities, rock outcroppings, and changing topography. The Forest Plan identifies the project area to be located in Desired Future Condition 3 (DFC), which is managed to protect or enhance wild, scenic and recreation values.

### **3.2 Developed Recreation**

#### **Affected Environment**

BTNF Management Plan (1990) standards direct that where roads and developed recreation exist, facilities should be provided to enhance existing opportunities. Camping opportunities that have been provided in the past are developed single-family camping, developed group camping and dispersed camping. Historical use numbers indicate that we are not replacing camping opportunities as road construction projects and associated management decisions close campgrounds and dispersed areas (Table 2).

Prior to 1999, single-family camping was hard to find in the Snake River Canyon due to the influx of unauthorized river groups (75-150 people per group) utilizing campgrounds designed for single-family camping. After implementing the decision documents referenced in Chapter 1, single-family camping was re-established at East Table, Station Creek, Cabin Creek, and Elbow Campgrounds. Group camping was established at Station Creek Group, Little Cottonwood Group, and East Table Overflow campgrounds.

River use and group use camping was addressed in the *Decision Notice* (October 1997). River users who come in groups of more than 15 people are required to get a permit to float the river. Groups of more than 30 people will only be permitted during low use times (Mon-Thurs between July 1 and Labor Day, any day prior to July or after Labor Day). A maximum of 1 permit/day is issued to institutional outfitters that cater to accredited schools, physically challenged clients, rehabilitation programs or economically disadvantaged groups. Groups and institutional groups need camping accommodations in or near the Snake River Canyon.

The above group use allocation on the river was used to guide where and how much group camping should be allowed in the canyon. This was done to balance the number of group campsites with group allocation on the river. Cottonwood, East Table Overflow, and Station Creek Group Campgrounds now accommodate a total of 4 group campsites.

The Special Order #95-03-22-D4 (March 1995) closed the Snake River and Hoback Canyon to dispersed camping between May 1 and Labor Day weekend due to health and safety concerns. As a result, approximately 28 dispersed campsites were closed in the Snake River Canyon. For this analysis dispersed sites are calculated with an average of 8 PAOT. Therefore, a total of 224 PAOT are lost between May 1<sup>st</sup> and Labor Day as a result of this special order.

Facility design at the Sheep Gulch Boat Ramp facility currently has two exits. Over the years, users exiting from the parking area were encouraged to exit via the west exit road. People leaving the boat ramp area were encouraged to use the east exit, however, making a left hand turn was dangerous due to poor site distance onto the highway. Highway reconstruction will lower the grade of the road to make exiting from the east exit safe. The intersection located south of the east exit can only be utilized by vehicles leaving from the boat ramp area. A vehicle coming from the parking lot has a difficult time making the left turn to leave via the east exit due to the extreme angle of the intersection. At high use times, that vehicle may have to circulate down to the boat ramp in order to turn around and return to an exit. This causes a lot of congestion, frustration and conflict for many river users. A simple design change, construction of a T-intersection, would correct this deficiency and improve traffic flow throughout the entire facility.

#### **Direct and Indirect Effects of Implementing Alternative 1: No Action**

The no action alternative would result in a loss of 4 single-family campsites at Cabin Creek Campground due to highway construction. When compared to historical use levels, there would be a total loss of 34 single-family sites and 28 dispersed campsites in the Project Area. Total POAT in the Project Area would be 496 less than historic levels (Table 2).

The camping experience at Cabin Creek Campground would be greatly diminished due to the impacts imposed by the new highway alignment, fill slope encroachment and reduction of vegetative cover between the highway and the campground. The cost of upgrading (adding ADA compliant bathrooms) and maintaining a 6-unit campground at Cabin Creek Campground would be costly and not economically efficient.

The existing design of the intersection at Sheep Gulch Boat Ramp would continue to cause bottlenecks and conflicts amongst user groups. River personnel would have to assist with traffic and crowd control at this intersection to assure safe traffic flow.

#### **Direct and Indirect Effects of Implementing Alternative 2: Single-Family Sites and Walk-In Sites**

Under this alternative single-family, dispersed, and group site camping would be enhanced, approaching historical campsite use levels. A campground containing 20 single-family sites and 18 walk-in sites would be constructed at the Wolf Creek Staging Area. There would be 54 single-family, 4 group and 18 dispersed campsites in the Project Area.

Enough room exists to create a vegetative/visual buffer between the highway and the proposed campground. A larger campground would enable the Forest Service to provide a greater number of each type of camping settings, better visitor services, improve upon public safety, and operate the campground at reduced costs, making the site more economically viable.

The proposed T-intersection at Sheep Gulch Boat Ramp will improve traffic flow within the boat ramp facility. River personnel would not have to deal with traffic control issues at this intersection. There would be no effect to current developed or dispersed recreation trends in the Project Area.

### **Direct and Indirect Effects of Implementing Alternative 3: Group Sites**

Under this alternative, emphasis would be on group camping. Four group sites would be developed in a 3-loop footprint at the Wolf Creek Staging Area site. There would be a total of 8 group campsites available in the Project Area. When comparing historical use levels, there would be a loss of 40 single-family and 28 dispersed/walk-in campsites. There would be an increase of 4 group sites in the Project Area.

The effects of the T-intersection at Sheep Gulch Boat Ramp would be the same as those described in Alternative 2.

Increasing the number of group campsites in the Snake River Canyon would have an effect on river management practices. One of the goals of the Decision Notices (August 1998 and May 2000) was to reduce river use congestion by instituting group use limits. By allowing additional group campsites river management goals could be compromised and on-river conflicts and accidents could increase. Providing a high number of group sites may have an adverse effect to the management goals designed to maintain wild and scenic values of the Snake River.

### **Cumulative Effects**

In the Snake River corridor (South Park Bridge to Palisades Reservoir), there is one private campground and six public campgrounds on National Forest lands. There are additional developed campgrounds on National Forest along the Hoback River, Greys River and surrounding Palisades Reservoir. Since 1995, four private campgrounds have been closed in the Jackson vicinity resulting in a loss of developed single-family and some group camping opportunities. These closures have increased pressure on National Forest land to provide all types of camping experiences.

Lack of an additional campground and alterations of road intersection improvements at Sheep Gulch Boat Ramp under Alternative 1 would not have an impact to the current increase in recreational demand or affect recreation and tourism on the Snake River. However, fewer PAOT would be provided for an increasing demand for such use. An increase of illegal dispersed camping or overnight stays in day-use areas may occur due to the high volume of displaced campers seeking camping opportunities near the river.

The activities proposed under the action Alternatives 2 and 3 are consistent with past management and compatible with the current recreation uses and character of the area. The effects from past, proposed, and reasonable foreseeable future developed recreation management would not change the DFC or affect the recreation opportunities within the Snake River corridor or in the Project Area. Past levels of use such as boating, camping, picnicing, fishing, and hunting are projected to continue with only short term displacement of users of particular areas while projects are implemented.

## **3.3 Wildlife Including Threatened and Endangered Species**

### **Affected Environment**

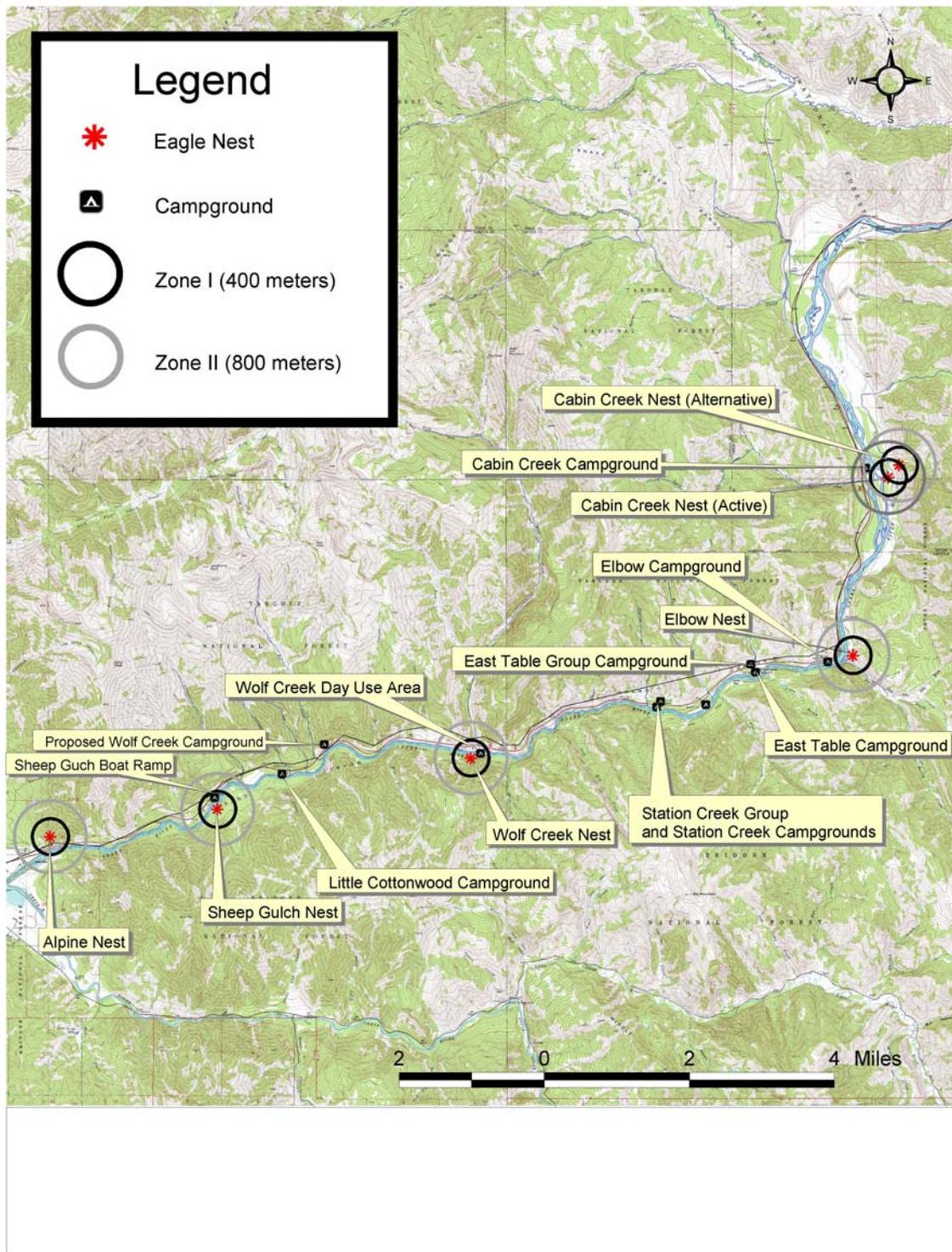
The following addresses how the alternatives would affect wildlife species associated with the vegetative community types within and adjacent to the project sites. Vegetation types along the river corridor primarily include: riparian, sagebrush, and conifers. Forests include lodgepole pine and Douglas fir interspersed with small stands of spruce and fir. *A complete biological*

*assessment and biological evaluation was prepared to determine the effects of the proposed action on Management Indicator Species, Sensitive Species, and Threatened, Endangered and Proposed Species (refer to the project file for more information).*

Forest Sensitive Species – Forest-wide standards and guidelines require protection of Forest sensitive species in the Project Area. The Snake River Corridor could support habitat for 9 sensitive species: spotted frog, boreal owl, peregrine falcon, flammulated owl, great gray owl, northern goshawk, three-toed woodpecker, wolverine, and fisher.

Management Indicator Species – Each wildlife species has individual habitat requirements, however, the sheer number of species renders single-species management unfeasible. Similar needs among wildlife species allows a general grouping of animals associated with common habitat types. MIS (Management Indicator Species) represent animals with more specific habitat requirements, animals that require rare or unique habitats, and animals that are popular game/viewing species. Six of the eight Bridger-Teton National Forest MIS species may utilize the project sites or lands adjacent to them. Elk, deer, and moose crucial winter range exists within the river corridor. They have been observed using existing developed sites within the canyon in late winter/early spring.

Threatened, Endangered, and Proposed Species - The Endangered Species Act requires federal agencies to ensure that all actions which they authorize, fund, or carry out are not likely to jeopardize the continued existence of any endangered or threatened species, or result in the destruction or adverse modification of their critical habitat. Threatened or endangered species that either are or may be present in the river corridor are bald eagle, grizzly bear, gray wolf and lynx. Of the threatened or endangered species, the bald eagle is considered the most dependent upon the Snake River Corridor and the most vulnerable to disturbance from human activities near known nest sites. The Snake River Canyon above Alpine, Wyoming is an extensively studied bald eagle habitat area with both wintering and breeding eagles. Included in the area of the proposed action is a stretch of the Snake River, between Jackson Lake and Palisades Reservoir. This area is considered part of the Snake Population Unit of the GYE (Greater Yellowstone Ecosystem), and is described in the GY Bald Eagle Management Plan (GY Bald Eagle Working Group 1996). Fifty-four Snake Unit breeding territories were reported in 1995. This was predicted to increase in the future (GYBEWG 1996). The nesting season occurs between February 1 and August 15. Several management zones are discussed in the GY Bald Eagle Management Plan (1996) that are intended to protect eagle nests from unnecessary human disturbances during the nesting season. Zone I (400 meters or approximately ¼-mile) and Zone II (800 meters or approximately ½-mile) are of particular interest in regards to this proposed action. These distances are depicted in Figure 2 for the Cabin Creek, Elbow, Sheep Gulch and Alpine nests. The Cabin Creek Campground is located with management zone II of the Cabin Creek nest.



**Figure 2: Developed recreation sites, Bald Eagle nests, and nest management zones I and II within the Snake River Canyon from Cabin Creek downstream to Alpine.**

## **Direct and Indirect Effects of Implementing Alternative 1: No Action**

Forest Sensitive Species – The No Action alternative would result in continued concentrated recreational use in an area which is showing signs of stress and is located in a more fragile site than the proposed campground site. Projected increase of recreational demands on camping facilities in the Snake River Canyon would stress the antiquated six unit Cabin Creek Campground. Parasitic stress related to recreational use has resulted in thinning of the Cabin Creek Campground in previous years and would be expected to continue if there is not a change in use. In addition, soil compaction and bank stability is a concern with continued concentrated use of the Cabin Creek Campground. The proximity to the river and lack of potable water in the campground has resulted in user-created trails to and along the river.

Management Indicator Species – There is temporal separation of the activities currently existing at the project sites and the use of the area by elk, moose, and deer. They utilize the project sites as winter range, which is outside the window of use for recreationists. These ungulates tend to follow the snow line as it rises in elevation and are usually not present upon the arrival of the season's first visitors. The continuation of recreational activities at the Cabin Creek Campground may result in impacts to the remaining MIS species (with an exception of Brewer's sparrow), however, the relative size of the project area to adjacent suitable habitat would not result in a significant effect on any of the MIS species.

Threatened, Endangered, and Proposed Species – The project areas contain suitable habitat or may serve as corridors of travel for the gray wolf, bald eagle, lynx, and grizzly bear. Of these species, the bald eagle is the only one known to utilize the lands within project areas on a consistent, observable basis. The Cabin Creek Campground is located within 800 meters (management zone II) of a historically active and successful bald eagle nest. Although the Cabin Creek nest has been successful in previous years despite the presence of the campground, it can not be assumed the nesting birds have adapted to the human use of the area and activities would not adversely affect future nest productivity. Continued use of a campground that is within management zone II of a historically active and successful nest may affect individual eagles adversely in future years.

Gray wolf and grizzly bear populations are currently concentrated to the north of the project areas. It is unlikely that the no action alternative would have any direct or indirect effects on the gray wolf or grizzly bear populations in Wyoming or Idaho. There, presently, does not appear to be substantial overlap of the recreational activities within the Snake River Canyon and active wolf packs or individual grizzly bears.

Lynx have not been documented to be present in or near the campground sites and only some marginal habitat exists in the area. It is possible that a lynx may pass through the area at some point in the future. However, the no action alternative would result in no change in existing habitat, so vegetation standards need not be considered. In addition, snow compaction is not an issue for activities associated with the proposed actions will not take place during winter months.

## **Direct and Indirect Effects of Implementing Alternatives 2 & 3: Action Alternatives**

Forest Sensitive Species – Implementation of the alternatives would result in no impact to five of the fourteen Forest sensitive species. The remaining species may use the Project Areas for

foraging and/or travel corridors. Currently, there are no known Forest sensitive bird nest sites located in proposed construction/rehabilitation areas.

The proposed actions may impact individual spotted frogs, boreal owls, flammulated owls, great grey owls, northern goshawks, peregrine falcons, three-toed woodpeckers, wolverines, or fishers but they are not likely to cause a trend toward federal listing for any of these species. Direct and indirect effects may result in habitat alteration, displacement and disturbance. Given the relatively small scope and scale of the proposal it is not likely to cause a loss of viability or change the distribution of these species within the BTNF.

Management Indicator Species - There is temporal separation of the activities currently existing at the project sites and the use of the area by elk, moose, and deer. They utilize the project sites as winter range, which is outside the window of use for recreationists. The relative size of the Project Areas and the type of habitat impacted (Wolf Creek Staging Area) in relation to the MIS species habitat requirements would not lead to any significant impacts. The proposed activities may affect individual MIS species (with an exception of Brewer's sparrow), however, they are not likely to cause a trend toward federal listing for any of these species.

Threatened, Endangered, and Proposed Species – It is unlikely that implementation of the preferred alternative would have any direct, indirect or cumulative effects on the gray wolves in Wyoming or Idaho. The wolf population is concentrated to the north of the project areas. There, presently, does not appear to be substantial overlap of the recreational activities within the Snake River Canyon and active wolf packs. Direct alteration of the habitat of the gray wolf would not be significant.

Lynx have not been documented to be present in or near the campground sites and only some marginal habitat exists in the area. It is possible that a lynx may pass through the area at some point in the future, however, the proposed action results in no significant change in existing habitat, so vegetation standards need not be considered. In addition, snow compaction is not an issue for activities associated with the proposed actions will not take place during winter months.

There is not likely to be any direct or indirect effects of implementing the Proposed Actions to grizzly bear or any occupied habitat because the nearest designated grizzly habitat and denning sites are in the Yellowstone Recovery Area and Gros Ventre Wilderness. The closest known den is over 20 miles from the Project Areas or greater. The Project Areas and vicinity are not currently considered to be grizzly bear habitat and no grizzly bears have been recorded to be present. There is a chance that a wandering grizzly could come into contact with humans, human food, and garbage at the campgrounds in the future. The new Wolf Creek Campground would be equipped with bear boxes at each site to minimize bear-human conflicts if grizzly bears were to expand their range to the south.

If bears were to den in the Project Areas the probability of disturbance as a result of the proposed actions are minimal because activities associated with the proposed actions will take place during non-denning months.

Rehabilitation of the Cabin Creek Campground would have a beneficial effect to the nesting success of the bald eagles located at the Cabin Creek nest which is within the 800 meter management zone. Rehabilitation of the campground would proceed after the nesting period (August 15<sup>th</sup>).

Recreational use in the form of a campground would not be a significant change to the current use of the Wolf Creek Staging Area. The area has been used for stockpiling road supplies and staging heavy equipment since 1997. Effects of this use has been monitored yearly along with nesting production at each of the nest sites along the river corridor between Alpine and Hoback Junction. Bald eagles have been observed foraging within the river corridor adjacent to the Wolf Creek Staging Area (PALTA 2004). In addition, potential nesting habitat does exist across the river from the staging area. A nest was located across the river from the proposed site in a tree that fell in 2001 (Patla 2004). However, the campground and associated human use would be concentrated on the opposite side of the river and across the highway from potential nesting habitat.

### **Cumulative Effects**

The combined environmental effects of projects on public lands within the Snake River corridor and projects on adjacent private land may be more substantial than those resulting from the Proposed Action, and they may be of a different nature. Activities occurring on public and private lands within the river corridor in the foreseeable future, which may cumulatively affect developed recreation and wildlife are:

1. Recreation facilities on public lands are being re-designed to better meet recreational needs and reduce resource impacts. Several campgrounds have been redesigned in order to minimize resource impacts along the river. Facilities within campgrounds are being brought up to standard through the addition/maintenance of ADA facilities, bear boxes, established trails, and garbage service.
2. Development on nearby private lands is occurring. In particular, the town of Alpine is growing and several private high-end resorts which include lodges, residential homes and a golf course are being developed within the canyon.
3. Recreation use is increasing within the river corridor. No specific restrictions are currently in place to address increasing riverbank use or to control river activities originating from non-Forest System lands. In particular, recreational use in the upstream section of river (Wilson Bridge to South Park) has increased tremendously in the past few years and is beginning to influence recreational use in the scenic section below South Park Bridge. Limits on non-outfitted use originating on Forest Service lands have been established but to date, this use is within these limits. No specific plans are currently in place to implement restrictions on non-outfitted use if established limits are exceeded.

As recreational use increases, monitoring of resource conditions and public comments may reveal that use levels are not acceptable, even though they are within the specified limits. A particular resource condition, congestion levels at facilities or congestion levels on the river may become unacceptable. Such a scenario might occur if a resource impact (e.g. documented decline in wildlife species) was occurring that was attributed to recreational use levels or if confrontations and safety problems were escalating even with educational programs and ramp/river personnel in place. At that point, additional analysis and public involvement would be needed to develop new management direction to retain the qualities of the river corridor that people desire.

**Table 4: Threatened, endangered, sensitive and management indicator species considered in analysis of Action Alternatives.**

<b>Common Name</b>	<b>Status</b>	<b>Species/Habitat Potentially Present</b>	<b>Carried Through Technical Analysis (BE/BA)</b>	<b>Determination ACTION ALTERNATIVES</b>
Black-footed ferret	T	N/N	N	No effect
Kendall warm springs dace	T	N/N	N	No effect
Colorado River fishes	T	N/N	N	No effect
Ute's ladies-tresses	T	N/N	N	No effect
Grizzly bear	T	N/Y	Y	No effect
Gray wolf	EX/N	N/Y	Y	Not likely to jeopardize the continued existence
Canada lynx	T	N/Y	Y	No effect
Bald eagle	T	Y/Y	Y	No effect
Spotted frog	S	Possible/Y	Y	MI
Common loon	S	N/N	N	NI
Trumpeter swan	S	N/N	N	NI
Harlequin duck	S	N/N	N	NI
Boreal owl	S	Possible/Y	Y	MI
Great grey owl	S	Y/Y	Y	MI
Northern goshawk	S	Y/Y	Y	MI
Peregrine hawk	S	Possible/Y	Y	MI
Three-toed woodpecker	S	Possible/Y	Y	MI
Townsend's Big-eared bat	S	N/N	N	NI
Spotted bat	S	N/N	N	NI
Wolverine	S	Possible/Y	Y	MI
Fisher	S	Possible/Y	Y	MI

Common Name	Status	Species/Habitat Potentially Present	Carried Through Technical Analysis (BE/BA)	Determination ACTION ALTERNATIVES
Rocky Mountain Elk	MIS	Y/Y	Y	MI
Moose	MIS	Y/Y	Y	MI
Mule deer	MIS	Y/Y	Y	MI
Bighorn sheep	MIS	N/Y	Y	NI
Pine marten	MIS	Y/Y	Y	MI
Brewers sparrow	MIS	N/N	N	NI
Cavity nesters	MIS	Y/Y	Y	MI
Red squirrel	MIS	Y/Y	Y	MI

### 3.4 Wild and Scenic River and Visual Quality

#### Affected Environment

The landscape in the Snake River Canyon is considered unique due to the presence of the Snake River and connecting tributaries, diverse vegetation communities, rock outcroppings and changing topography. In addition, the Snake River has been found eligible for inclusion in the Wild and Scenic Rivers System. Forest plan standards and guidelines require that eligible river segments are protected from activities that could diminish or change the free-flowing characteristic, water quality, or the scenic, recreational, fish and wildlife, and other values which make the river eligible for designation.

Within the context of the Forest Plan direction, proposed activities are in a DFC 3 area, managed for river recreation. The Forest plan standards and guidelines allow for a Visual Quality Objective of retention. This is due to the unique landscape of the Snake River Canyon, the eligibility of the river as Wild and Scenic River, and the high use and visibility of Forest System lands adjacent to both the Snake River and Highway 89.

Developed recreation facilities occur all along the Snake River Canyon. Cabin Creek Campground is situated between the highway and river. Although mature timber once screened the facilities from the highway, recent highway reconstruction has eliminated much of that screening. In addition, tree thinning operations over the last few years to remove weak, disease infested trees from the Cabin Creek Campground also reduced the vegetative cover of the site. Cabin Creek Campground is visible from the river. Constructed features and evidence of concentrated use is seen by the numerous user-created trails that connect the developed site the river's edge.

#### Direct and Indirect Effects of Implementing Alternative 1: No Action:

Under the No Action alternative, management activities would consist of general maintenance and improvements with the developed recreation sites of the Snake River Canyon. Cabin Creek Campground would not meet the VQO standard of Retention as seen from the highway or river.

The relocation of the highway and past tree thinning has eliminated the vegetative buffer as seen from the campground and river.

**Direct and Indirect Effects of Implementing Alternatives 2 and 3: Action Alternatives:**

The proposed closing/rehabilitation of the Cabin Creek Campground would enhance attributes for Wild and Scenic River designation, especially as seen from the river. Revegetation of the Cabin Creek Campground would provide a buffer to the recently relocated highway. The site for the proposed Wolf Creek Staging Area Campground is not visible from the river due to the difference in elevation and distance from the river. Implementation of alternatives 2 and 3 would have no effect to the VQO objectives of the Project Area.

**Cumulative Effects**

There are currently 11 developed facilities on National Forest in the Snake River Canyon. In addition, private development in the Snake River Canyon is expected to continue. Lack of management activities under Alternative 1 would not move the Snake River Canyon or the Project Area closer to the visual standards identified in DFC 3 or qualities associated with wild and scenic rivers.

The activities proposed under the action Alternative 2 and 3 are proactive given the expected increase of private development along the Snake River. The action alternatives are consistent with past management and compatible with the current recreation uses and character of the area. The effects from past, proposed, and reasonable foreseeable future developed recreation management would not change the VQO class or affect the visual qualities within the Snake River Canyon or in the Project Area. Both action alternatives would utilize the mitigation measures identified in Section 2.5, therefore, the proposed actions would meet Retention standards as seen from the highway and river.

### **3.5 Soil and Water**

***Affected Environment***

The capture, storage and effective release of precipitation in the form of runoff, surface flow, or groundwater are a vital part of the function of a watershed. For a watershed to function properly there must be adequate ground cover to absorb the precipitation and slow the runoff process. In steep canyonlands such as the Project Area, runoff is obviously much greater than in more gentle topography; consequently, water erosion and subsequent sediment deposition are significant factors in the water quality of the Snake River and stability of the Snake River Canyon soils.

**Direct and Indirect Effects of Implementing of Alternative 1: No Action**

Concentrated recreational use in the Cabin Creek Campground would result in an adverse affect in the soil and water quality in the immediate area, but would be insignificant at the Project Area level. User-made trails to the river and between campsites would see an increase in damage to the soils in the form of compaction and erosion. Sedimentation from unstable banks would likely result from river users using the campsite as a launch site.

**Direct and Indirect Effects of Implementing of Alternative 2 and 3: Action Alternatives**

Closing Cabin Creek Campground would result in an overall improvement in soil and water conditions at the campground site. The site of the proposed campground (Wolf Creek Staging Area) is a previously disturbed site which was approved for equipment and materials storage in the Snake River Canyon Highway Reconstruction EIS (1/94). Utilization of the disturbed site,

defining travel corridors (roads and walking paths) through the staging area, and rehabilitating areas outside the proposed campground boundary would be beneficial to the area. A short-term increase in sediment entering the river may result during decommissioning of the old campground and construction of the Wolf Creek Staging Area Campground, but could be minimized using silt fences and erosion control methods specified during construction of the campground. By implementing the mitigation measures identified in Section 2.5, Forest standards for soils would be met. The proposed actions would have no effect (long-term) on water quality, aquatic habitat, and soil conditions in the Project Area.

### **Cumulative Effects**

Recreation demands are expected to continue to increase over the long term with greater numbers of people looking to use the Snake River Canyon for a variety of recreational experiences. In addition, private development along the Snake River Canyon may also have a cumulative effect to soil and water quality in the Snake River Canyon. The lack of management activities under Alternative 1 would result in a reduction of the campground (from 10 sites to 6) and the addition of facilities to meet ADA standards. The continued use of a highly concentrated site would not be proactive giving the expected increase in use within the Snake River Canyon.

The activities proposed under the action Alternatives 2 and 3 are consistent with past management and compatible with the expected increase of recreation of the area. The effects from past, proposed, and reasonable foreseeable future Forest Service developed recreation management would have an insignificant effect to the soils or water quality of the Snake River corridor. Both action alternatives would be located at the currently disturbed staging area and would utilize the mitigation measures identified in Section 2.5.

## **3.6 Vegetation**

### **Affected Environment**

Vegetation types along the river corridor primarily include: riparian, sagebrush, and conifers. Forests include lodgepole pine and Douglas fir interspersed with small stands of spruce and fir. A plant survey was conducted on all affected areas during the development of the Snake River Canyon Highway Reconstruction EIS (1/94). Payson's milkvetch (a sensitive plant species) was found at the Cabin Creek Campground. Payson's milkvetch grows in areas that have been disturbed by natural or human processes, thus fire, tree cutting, and trampling may increase the occurrence of this species. However, disturbances which removes topsoil will eliminate the habitat and noxious weeds have the ability to displace populations of Payson's milkvetch.

### **Direct and Indirect Effects of Implementing Alternative 1: No Action**

Vegetation around high use recreation sites become stressed and susceptible to insect, disease, exotic species, and parasite attacks due to concentrated use. Tree stress occurs due to soil compaction, root damage, and camper blight (bark damaged by hatchets, nails, wire, vehicles, etc.). Under this alternative concentrated recreation use would continue at Cabin Creek Campground. The campground would remain with six sites and additional facilities would be required to meet ADA standards. There would be an adverse affect to Payson's milkvetch due to the loss of topsoil from the continued use and concentration of activities at Cabin Creek Campground.

### **Direct and Indirect Effects of Implementing Alternative 2 and 3: Action Alternatives**

The proposed action of closing the Cabin Creek Campground and applying proper reclamation treatments to the road and spur surfaces may enhance Payson's milkvetch viability. The site for the proposed campground (Wolf Creek Staging Area) is a previously disturbed site. The

mitigation measures identified in Section 2.5 would be followed, therefore, there would be no significant effect to plant communities of the Snake River Canyon associated with the proposed action alternatives.

### **Cumulative Effects**

Stress related disease and parasite attacks to trees is a concern along the Snake River Corridor. Several of the existing campgrounds had to be thinned due to the presence of such infestations. Relocating concentrated recreational use to a larger area away from the river would reduce the future use demands that are expected in the canyon.

A survey of the Snake River corridor found 14 populations of Payson's milkvetch. Lack of management activities under Alternative 1 would have an adverse affect to one of these populations.

The activities proposed under the action Alternatives 2 and 3 are consistent with past management and compatible with the current recreation uses and character of the area. The effects from past, proposed, and reasonable foreseeable future developed recreation management would not have a significant effect to the vegetation of the Snake River Canyon corridor.

## ***Chapter 4***

### **4.1 Implementation**

The Wyoming Highway Department is allowed to use the Wolf Creek Staging Area until the end of the highway construction project, which is 2005. If one of the action alternatives (Alternative 2 or 3) is chosen, the highway contractor will construct the new Wolf Creek Staging Area Campground and rehabilitate Cabin Creek Campground by fall of 2004. By having the highway department construct the campground, costs will be reduced by taking advantage of machinery already in the area.

If the No Action alternative is chosen, Cabin Creek Campground would remain operating in their present condition.

### **4.2 Others Consulted and List Of Preparers**

**Lincoln and Teton Counties, Wyoming:** Responsible for guiding development of private land, law enforcement and search and rescue.

**Wyoming Department of Transportation:** Responsible for providing safe and efficient transportation systems.

**Wyoming Game and Fish Department:** Responsible for management of fish and wildlife populations and for on-river activities such as boating regulations and life jacket requirements.

### **4.3 INTERDISCIPLINARY TEAM**

Jan Langerman, Developed Recreation Manager, Jackson-Buffalo Ranger District

Linda Merigliano, Recreation Program Manager, Jackson-Buffalo Ranger District

Sarah Dewey, Wildlife Biologist, Jackson-Buffalo Ranger District

Larry Mullen, Contract Wildlife Biologist, Fed Source

David Cernicek, River Manager, Jackson-Buffalo Ranger District

Jim Ozenberger, Ecologist, Jackson-Buffalo Ranger District

Lis Novak, Landscape Architect, Bridger-Teton National Forest/Intermountain Region

Jan Spencer, Landscape Architect, Bridger-Teton National Forest

David Fogle, Fisheries Biologist, North Zone Fisheries Biologist

Chad Hudson, Recreation Specialist, Jackson-Buffalo Ranger District