SOUTH FORK WALLA WALLA LANDOWNER ACCESS

ENVIRONMENTAL ASSESSMENT

EA # OR-035-06-03

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CHAPTER 1 – INTRODUCTION AND BACKGROUND

Landowners in the South Fork of the Walla Walla River (SFWW) drainage have been accessing their private land above the BLM land for decades. The land owners use an old logging road that follows the SFWW River, and in some places crosses the river. In July 1992, the BLM designated an area of the SFWW as an Area of Critical Environmental Concern (ACEC) to recognize and protect fish, wildlife, riparian and scenic values within the area and wrote a management plan. The area encompassed by the boundary includes 2065 acres administered by the BLM. As part of that plan, in 1993, BLM ended grazing within the ACEC. In addition, BLM removed three structurally failing bridges. In October 1994, as part of the ACEC plan, BLM limited motorized vehicle travel of 1,500 GVW or less to the SFWW River trail system. The Umatilla National Forest manages the Class III OHV and hiking trail on the north side of the river under a right-of-way with the BLM. The BLM also closed the remainder of the ACEC to motorized use, and to overnight camping to prevent further deterioration of the area's resource values. The landowners were authorized an exemption to the road closure until 1999. Under the exemption, landowners could access their property using full-sized vehicles by following a route that crossed the river ten times. Most of the crossings are direct, but since the 1996 flood, two require almost 300 feet of driving directly in the stream.

After the listing of the bull trout in 1998 and the Mid Columbia steelhead in 1999, and after completion of a Biological Assessment (BA), the landowners were limited to crossing the river from July 1 – August 15, and were not allowed to maintain the road or use heavy machinery in the river. The U.S. Fish and Wildlife Service (USFWS) and National Oceanographic and Atmospheric Administration, National Marine Fisheries Service (NOAA-Fisheries) concurred in Biological Opinions (BO) in 1999.

In 2000, the landowners formed an association and requested year-round access by OHV- Class I (quad) vehicles. They proposed widening the trail using hand tools and the OHV trail would only be used for quads by the landowners and not the general public. They also wanted to retain the 6-week window for crossing with full-size vehicles, from July 1 - August 15. In April of 2002, the BLM responded that this proposal was not likely to be approved for the following reasons:

- Many sections of the trail would not accommodate widening to the necessary width.
- Granting concurrent rights-of-way to the property owners on the trail overlapping the Forest Service right-of-way would be difficult to administer.
- Use of Class I OHV's (quads) by property owners only would be difficult and expensive to enforce and hard to explain to the recreational OHV rider observing such use.

In 2004, BLM was able to show through extensive monitoring and data collection that it was feasible to suggest that the landowners be granted a 6-month (July 1-January 1)

window of access to their cabins with full-sized vehicles. A Biological Assessment was prepared and submitted to NOAA-Fisheries and USFWS for concurrence. On November 22, 2004, USFWS issued a BO on the bull trout and on January 27, 2005, NOAA-Fisheries issued a BO on steelhead concurring with the increased access dates with some concern expressed for minimizing impact as much as possible.

In 2004, the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) informed the BLM that they had initiated a program to restock the SFWW River with spring Chinook salmon, and expressed concern that this extended time period for full-size vehicle access would be detrimental to their four-year old replanting program in the SFWW. This concern caused the BLM to prepare this Environmental Assessment (EA) to assure all impacts of the Proposed Action and alternatives are adequately assessed.

Proposed Action

The property owners have proposed that the BLM allow them six months of access to their property above the BLM administered lands in the canyon of the SFWW River via full-sized vehicles.

Over time, the landowners have made a variety of proposals regarding their access needs, ranging from just Class I OHV (quad) access year around, to OHV plus the currently allowed six weeks of full-sized vehicle access, to the most recent proposal of six months of access via full-sized vehicles. Each was in addition to the use of the trail all year via motorcycle/horses/walking. This proposed action reflects the most current correspondence received from two of the property owners.

Location

The SFWW River watershed is located in northeast Oregon and is part of the Walla Walla Subbasin. The northern boundary is the dividing ridge to the south of the North Fork Walla Walla River and the southern reaches of the Couse Creek watershed to the confluence with the Walla Walla River, 13.64 miles below where it flows into the Columbia River, near Milton-Freewater, Oregon. The watershed traverses from southwest to southeast beginning at the dividing ridge between Blalock Mountain, which divides the South and North Forks.

The SFWW River originates at elevations of 4920 ft -5575 ft. in the Blue Mountains. Most of the upper watershed is a lightly roaded area administered by the Forest Service with a good network of trails, including the trail leading up the river through the BLM ACEC. There is limited access to private land up the river. Below the forested area, the river flows through agricultural lands within the area surrounding the town of Milton-Freewater, Oregon. The majority of the BLM lands are within 1 mile of the river, with SFWW River crossing BLM lands for approximately 3.5 miles. The Umatilla National Forest and Forest Capital Partners (formerly owned by Boise Cascade) manage adjacent large blocks of land in the canyon.

Purpose and Need for Action

The purpose describes the objectives the BLM is striving to meet in crafting the alternatives. The needs describe the main factors driving the way the BLM accomplishes the purpose or objectives.

Purpose

- Allow reasonable access to private lands above the SFWW ACEC for approximately five separate families. The BLM Manual Section 2800 at .06D states that: "It is the policy of the BLM to allow owners of non-Federal lands surrounded by public land managed under FLPMA a degree of access across public land which will provide for the reasonable use and enjoyment of the non-Federal land. Such access must conform to rules and regulations governing the administration of the public land; keep in mind, however, that the access necessary for the reasonable use and enjoyment of the non-Federal land can not be denied."
- Manage the SFWW ACEC lands under the Federal Land Policy and Management Act of 1976.
- Manage the fisheries resources within the SFWW ACEC pursuant to the Endangered Species Act.
- Comply with the requirements of the PACFISH/ INFISH policies and procedures.
- Protect natural and cultural values of the SFWW ACEC per the Resource Management Plan Amendment Decision of July 1992.
- Contribute to species protection and habitat enhancement objectives as identified in the Magnuson Stevens Act, P.L. 94-265, as amended through October 11, 1996 (which applies to all salmon and coastal fish of Oregon, Washington, and California.

Needs

- Landowners have requested improved access beyond the current July 1-August 15 timeframe for full-sized vehicles to accommodate cabin maintenance and more flexible family use of the dwellings during holiday seasons.
- CTUIR out-planted Carson origin adult spring Chinook salmon in the SFWW starting in 2001 to spawn naturally, and are having some success.
- On-going compliance with the current Biological Opinions on the steelhead and bull trout require some management actions in the SFWW.

Environmental Analysis and Decision Process

An interdisciplinary evaluation of the resources in the analysis area including; wildlife, fisheries, recreation, cultural and traditional values, and hydrology/water quality among others will be documented as part of this Environmental Analysis (EA). The analysis is accomplished by examining the different resources in the ACEC and recommending a course of action that best meets the objectives outlined in the Baker Resource Management Plan (RMP 1989), the ACEC Amendment (RMP 1992) and the other laws and guidance documents listed in the Purpose and Need.

The purpose of this EA is to assess the effects of allowing a reasonable mode of access for the landowners above the ACEC who have limited access alternatives and determine if the direct and indirect environmental effects associated with the provision of such access are significant. If the effects are not significant, a 'Finding of No Significant Impact' (FONSI) will be documented upon the completion of the analysis. In addition to providing analysis to determine whether or not an environmental impact statement is necessary, this EA will provide the public and the decision maker with information about the alternatives and the associated effects of each and assist the decision maker in selecting an alternative.

The Baker Field Manager, as the responsible official, will consider all factors and decide whether to implement the Proposed Action and determine whether the Proposed Action is consistent with the RMP as amended, as well as other pertinent laws and regulations.

The interdisciplinary team designed the EA so that the decision maker can select components from the different alternatives and select from choices in how to implement an alternative.

Public and Government Input Summary and Issue Development

BLM has received input from the public and interested parties on this area and issue over the years.

- In 2000, the property owners formed an association and requested year-round access by OHV- Class I vehicles in addition to the six weeks of access with full-sized vehicles.
- From 2001-2004, BLM held multiple meetings with the multi-agency Level 1 team, the landowners, USFWS, NOAA-Fisheries and other interested persons to resolve this complex issue.
- In 2004, in response to the Biological Assessment on a possible six-month access by the property owners, the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) informed the BLM that they had initiated a program to restock the SFWW River with Chinook salmon. CTUIR explained they had been working on their program for four years and that extending the crossing time period would detrimentally affect their program for replanting the SFWW River.
- The property owners agreed to the shortened full-sized vehicle crossing time for 2004 and 2005 reluctantly, until the BLM could do an EA. The shorter vehicle access was and is of concern to the property owners since the rest of the year they would use the trail via permitted travel methods (horses, motorcycles, walking, mountain bikes), which can be difficult, due to weather, and the trail's location and condition (especially during the cooler, wetter months). This keeps them from accessing their property much of the year.
- In January 2005, BLM sent to a mailing list of about 183 persons and organizations, a "scoping letter" to gather possible issues for the EA.

- In 2005, the BLM met with CTUIR and the landowners in separate meetings to try and refine the alternatives and to hear other suggestions for the property owners' access.
- In the spring of 2006, the BLM met with the property owners in Pendleton to present possible alternatives for the EA.
- In July 2006, BLM met with CTUIR representatives to further identify concerns and discuss potential alternatives for consideration in the EA.
- In July 2006, BLM worked out route modifications with a representative of the property owners that could be included in one of the alternatives.
- In July 2006, BLM has received several letters from individual landowners expressing their opinions about providing reasonable access to their land and their choice of alternatives.

In response to the January 2005 scoping letter, BLM received four comment letters. Issues identified were:

- Altering or removing materials from this section of the stream requires a permit from Oregon Department of State Lands.
- Minimize damage to all anadromous species at crossings by removing the spawning habitat at the crossings.
- Reduce the number of crossings and habitat damage at those crossings where it is not feasible to construct additional road.
- Reduce travel by ATV's (OHV's) whenever and wherever it is possible as those ATV users who violate the law (causing resource damage) give the rest a bad reputation.
- Consider low water bridges built of concrete as crossing method.
- Increased vehicle use will effect non-motorized recreation and degrade the trail experience for other public land users.

Management Direction and Conformance with Existing Plans

The Baker Resource Management Plan

The SFWW River watershed consists of a total of 491,031 acres. Less than one percent is managed by the Baker Resource Area, Vale District, BLM, located in Baker City, Oregon. The Baker Resource Management Plan (BLM 1989) provides for a balanced level of resource development, conservation, and protection. For details contact the BLM Baker Resource Area.

South Fork Walla Walla River Area Plan Amendment

The BLM amended the RMP with the July 1992 South Fork Walla Walla River Area Plan Amendment Decision (BLM 1992). The plan designates BLM land on the SFWW River as an ACEC, and provides special management direction to protect and enhance the important values of the riparian ecosystem, fisheries habitat, and scenic values while allowing recreational use. For more detail contact the Baker Resource Area for a copy of the ACEC Plan Amendment. The ACEC encompasses 2065 acres of land administered by BLM. The plan closed the trail to vehicle use and grazing, removed three deteriorating bridges and limited OHV travel to the trail system. BLM

built a parking area with a toilet at a trailhead about 2/3 of a mile upstream from Harris Park. These changes have limited recreation impacts and there is marked restoration occurring with the riparian vegetation and wetlands; areas of bare soil and reduced vegetation are rapidly being naturally restored with native vegetation. Documentation is in the BLM Annual Monitoring Reports (1998-2005).

PACFISH/INFISH

PACFISH is the Interim Strategies for Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California established in1995. INFISH is the BLM's Interim Bull Trout Habitat Conservation Strategy. The PACFISH/INFISH standards and guidelines and riparian reserves also provide tools for managing resources associated with the river systems. Management within riparian areas follows guidelines from PACFISH/INFISH. The overall riparian goals for high priority watersheds are to maintain, restore, or improve riparian areas to achieve a healthy and productive ecological condition.

Biological Opinions from USFWS and NOAA-Fisheries

Non-discretionary terms and conditions were developed by USFWS (2004) and NOAA-Fisheries (2005) in the Biological Opinions which they prepared for bull trout and steelhead, respectively. These included monitoring of wet stream crossings, improving the vehicle route by protecting wet areas and springs, development of a pollution control plan, monitoring of the crossings and restoration as needed, maintenance of field notes, an annual monitoring report due each year that summarizes all activities, monitoring, spawning and fish data. Each of the biological opinions also asks that the BLM continue to pursue a long-term remedy to the private land access within the SFWW River corridor.

If any alternative other than the No Action Alternative is chosen, there will be a new Biological Assessment prepared by the BLM and submitted to the NOAA-Fisheries and the USFWS. Any new non-discretionary terms and conditions developed by them as a result of the BA will automatically become part of the Decision Record of this EA. These agencies would then evaluate whether to write a Concurrence Letter and/or a Biological Opinion. In either event, BLM will monitor to assure that the impacts are at the level predicted and continue to be acceptable. Actions to implement the alternatives will include such monitoring.

Magnuson-Stevens Act, as Reauthorized in 2006.

The BLM must adhere to the Magnuson-Stevens Act, administered in Oregon by the Pacific Fisheries Management Council (PFMC). The council is one of eight regional fishery management councils established under the Magnuson-Stevens Act. PFMC develops and carries out fisheries management plans for salmon, ground fish and coastal pelagic species off the coasts of Washington, Oregon, and California.

As required by the Magnuson-Stevens Act, PFMC described and identified Essential Fish Habitat (EFH) in each of its fisheries management plans. EFH includes "those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity." All streams, lakes, ponds, wetlands, and other water bodies currently, or

historically accessible to salmon in Washington, Oregon, Idaho, and California are designated as EFH for affected salmon stocks with management plans.

The proposed project area occurs within the designated EFH for spring Chinook salmon, which was not warranted for listing under ESA on March 9, 1998 (63 FR 11482). There have been salmon planted in the basin and the first established returns to the South Fork were achieved in 2004 with 300 Chinook salmon returning to spawn in the river.

CHAPTER 2 – PROPOSED ACTION AND ALTERNATIVES

Design Features and Mitigations Common to all Alternatives

These actions are built into all of the alternatives, and should be included as part of each alternative.

- Any access by full-sized vehicle is assumed to be by 4x4 high clearance vehicles equivalent to, but no larger than, a 1 ton pickup truck. The primitive existing road is wide enough for single vehicle passage. Future use of the primitive old road (2 track) would be monitored to assure that it does not widen as a consequence of casual use.
- Chinook, steel head, and bull trout redds are monitored for emergence and dispersal prior to BLM granting written authorization each year to the landowners. (Applies to all alternatives that include vehicles in the stream: No Action, Alternatives 1A and 1B.)
- The landowners comply with a list of actions in the Spill Prevention Plan for the South Fork Walla Walla River prepared in June 2005 by the BLM, (See Appendix 1). (Applies to all alternatives that include vehicles in the stream: No Action and Alternatives 1A and 1B.)
- Compliance monitoring with use restrictions will occur annually for the first five years, and periodically thereafter or in accordance with monitoring schedules identified in Biological Assessments/Opinions.
- Native species will be used for any replanting or reseeding that occurs as part of an action.
- Since the ACEC plan identifies the area as potential goshawk habitat, prior to any construction activities, the surrounding area will be surveyed during the nesting period for goshawk nesting. If nests are found, construction activities in the approximately 400 acres buffer area around the nest will not be carried out between April 1 – June 30, depending on the proximity to the nest.
- Any ground disturbing management actions will be surveyed for archaeological sites, which would be avoided.
- Authorized and unauthorized OHV use will be monitored. If cultural resources impacts are identified, these would be mitigated by physical barriers, frequent enforcement patrol, strict enforcement of closures, or data recovery, if there are no other feasible protection options.

- If monitoring shows that riparian conditions are jeopardized or deteriorating, riparian exclosure fences may be installed to deter unauthorized uses.
- In consultation with CTUIR, BLM will ensure continued access to the BLM lands for the exercise of CTUIR treaty rights.
- Trail markers will be placed and maintained showing location, and signs showing permitted use and routes along the trail.
- Measures will be implemented to ensure that trail modifications or stream crossing design and construction would not result in sedimentation above 10% cumulative increase in Nephlometric Turbidity Units (NTUs) reaching the SFWW River.
- BLM will endeavor to work with the adjacent landowner Forest Capital Partners (formerly Boise Cascade) to place signs notifying the public of the areas closed to motorized OHV use on BLM lands. The signs will be maintained at a gated logging road along Elbow Creek, which appears to be used for unauthorized Class I OHV (quad) access to public lands. Additional physical barriers (e.g., fence, boulders, rolling dip) may be placed on BLM land on Elbow Creek to deter unauthorized motor vehicle use.
- Pursue ATV grants or other funding sources to fund a "seasonal river ranger" to patrol and provide education and information.
- Work with Forest Service to maintain trail as per stipulations of the right-of-way.
- Implement NOAA Fisheries Conservation Recommendation # 2 of their 2005 BO. "Pursue methods and funding that help avoid driving through side channels and springs in the path of travel which have the potential to support Mid Columbia River steelhead."
- Implement OHV ban during severe winters to protect wintering elk and deer as per ACEC plan

No Action Alternative

Continue to allow the annual written exemption to the road closure for July 1 – August 15 each year for the members of the South Fork Property Owners Association. The owners of the private property and dwellings make a combined total of approximately 30 round-trips during the six-week period to bring in supplies including propane tanks, refrigerators, home maintenance materials, equipment, food and other supplies for use in their dwellings. From the BLM trailhead to the mouth of Elbow Creek, the property owner vehicles use the remnants of an old Boise Cascade logging road. Above Elbow Creek, the vehicles use an older abandoned road that accessed the Umatilla National Forest above the public lands administered by the BLM. These old roads periodically serve as a shared use trail that is managed by the Forest Service under a right-of-way authorization from the BLM. (See Map 1, SFWW Area of Critical Environmental Concern, in Appendix 2.) The vehicles must cross the SFWW ten times in the three and one-half miles from the trailhead to the cabins on private land which lies between BLM and USFS managed lands.

During the rest of the year, the property owners are limited to accessing their cabins via the USFS trail by motorcycles, walking, horses or bicycles.

Chinook, steelhead, and bull trout redds are monitored for emergence and dispersal prior to the BLM granting written authorization each year to the landowners. The landowners also comply with a list of actions in the Spill Prevention Plan for the SFWW River prepared in June 2005 by the BLM, (See Appendix 1).

Alternative 1. Preferred Alternative: Longer Window of Property Owner Access with Full-sized Vehicles

This alternative would allow the landowners to access their private land via a full-size vehicle using stream crossings for a six-month period from July 1 to January 1 each year. It would follow the same annual process of the BLM providing written permission after the steelhead and bull trout[1] redds are monitored for emergence and dispersal of the fry. Use is estimated to be a combined total of approximately 90 landowner trips per year (personal communication, John Ehart, June 28, 2006).

Oregon Department of Fish and Wildlife (ODFW) currently lists July 1 to August 15 annually as the in stream work window for this portion of the SFWW. An exception to this work window will be required prior to authorizing this extended crossing time.

There are two alternative methods to implement the longer access period.

Alternative 1. A. Preferred Alternative: Modify the Existing Route to Avoid Chinook Redds (modify some wet crossings)

Vehicles would follow slight crossing modifications to alleviate the potential of affecting the spring Chinook spawning. (See Map 2, All Existing Stream Crossings, in Appendix 2 to note the crossing numbers.) There currently are ten wet crossings. There would be no vehicle use on the crossings from approximately August 15 to September 15 each year while the Chinook were choosing their sites for spawning. After spawning occurs and the redds are located, new pathways through the water would be marked. Based on previous monitoring, BLM specialists expect that most new crossings would have the same entrances and exits as presently occur, but it might be necessary to avoid a new location of a redd by driving a short distance around the redd on the downstream side and then swing back up to the exit point. Some modifications would involve some movement of rocks/small boulders to provide a more ramp-like entrance/exit from the streambed, and some clearing of shrubs the width of a full-sized vehicle. This would require the use of machinery.

The following crossing modifications could be made if spawning occurs on the crossing:

1. Crossings # 1-# 4 are used by Chinook in some years for spawning. Each crossing would be evaluated and without changing the entrances and exits, the routes through the water for each crossing would be slightly adjusted to the down stream side from the existing crossings to avoid gravels suitable for

[1] Note: the emergence of fry for Chinook occurs in spring, not in July, so this particular monitoring is just for steel head and bull trout.

Chinook redds. A rock apron would be added the first crossing to protect the stream bank and the perennial tributary at the first crossing. Large cobble would be placed at the first crossing to protect the stream bank that is currently bare soil due to vehicle and motorcycle use. Rock would be added to the entrance and across the small stream to protect the area and help prevent sediment from entering the river.

2. At crossing # 5, the area allowed for vehicle crossing would be moved slightly downstream from the existing crossing. Some small boulders would be moved, possibly by hand. (See Map 3, Proposed New Crossing # 5, in Appendix 2). The modification would route the vehicles on the south side of the shoreline for 20 feet and then directly cross on larger cobble/boulder material below the redds. The crossing would require machine movement of boulders to create the crossing on the north side and may require the removal of 2-4 shrubs for re-entrance on to the north side. The Western paper birch would not be disturbed.

3. Modifying crossings # 8 and # 9 (See Map 4, Proposed New Crossing # 8 and # 9 in Appendix 2) would shorten the linear distance traveled longitudinally in the stream by about 135 feet as the vehicles would cross more perpendicularly to the river and then back again. This would require clearing some old roadbeds in the riparian area, making entrances from the river by piling some small boulders and some rocks to allow the vehicles to gain the bank from the riverbed. A modification to a gravel bar to allow this route would also be needed. The effect would be to shorten the existing crossings that cover linear distances in the riverbed.

   a. Stream crossing # 8 would move the vehicles over to the old roadbed on the north side of the river and then directly cross back over the river after being on the north side for approximately 225 feet. Some small shrubs would be removed to open the old roadbed. No trees would be removed and there would be no reduction in shade. Some fallen trees would be moved from the roadbed closer to the shoreline. All grasses and small forbs would be left in place. A rock entrance and exit would be added to the crossing to prevent bank damage upon entering and exiting the north side. This modification would reduce the driving distance in the river by approximately 95 feet.

   b. Stream crossing # 9 would cross over to the old roadbed on the north side of the river and then directly cross back over the river after being on the north side for approximately 150 feet. No vegetation would be removed. A small spring would be protected with the installation of a 14” culvert to prevent vehicles from driving through the spring. A rock entrance would be added to the crossing to prevent bank damage upon entrance to the north side.

Alternative 1. B. Allow Existing Routes by Deterring Spawning on Crossings with Suitable Chinook spawning Gravels

Install a webbing material or other material that would deter the spawning activity of the spring Chinook at the crossings which currently have, or in the future will develop, suitable gravel beds and other conditions needed for spring Chinook to spawn. Material would be placed prior to August 1, and then removed by September 30, after monitoring, when the Chinook would have already spawned. The current areas that would be "hardened" are crossings # 4, # 5, and # 8. The material would be brought to the sites by pickup and rolled out slowly across the river while securing the material. The material would be secured on either side of the river with rebar and held in place by placing small boulders on top of the material. During the first year the property owners would not be allowed to drive over the deterrent material until after spawning had occurred. The sites would be monitored and verified that this application for deterring spawning was successful. If it is successful in the second year there could be use of the vehicle crossings during the spawning period. There may be some alterations with use or limitations during the spawning period depending how successfully the material worked. It may be determined that avoidance and non-use of the crossings still may need to occur until Chinook spawning and redd locations are known. If redds occur on other areas where there is no deterrent material, then avoidance of the redds would occur as described in Alternative 1. A.

Alternative 2. Reconstruct the Existing Trail to Accommodate Class I OHV's (quads); Restrict Class I Use to Property Owners

Introduction

The trail would be reconstructed and/or the route modified to accommodate to Class I OHV's (quads) from the trailhead to the private land. The Oregon State Department of Transportation defines Class I vehicles as any off-road vehicle weighing less than 800 pounds, less than 50 inches wide with a saddle seat, that travels on three or more low-pressure tires. The existing trail right-of-way is for a 24 inch tread width which is designed to accommodate Class III vehicles (motorcycles) only. Where the trail overlaps with the road, the width varies to a much wider tread. Trail Design Guidelines recommend a tread width of 50 to 60 inches for Class I vehicles. The steepness of the side slope and the difficulty level desired establish the tread width design

The Walla Walla Ranger District of the Umatilla National Forest currently manages the trail under a right-of-way to the FS from the BLM. The agencies and other stakeholders would work together to develop a strategy to allow the trail to be reconstructed where necessary to accommodate use by Class I OHV's (quads). Trail building techniques would be used to minimize impacts to other resources such as using end hauling rather than side casting of waste materials during trail widening activities to avoid impacts to water and other resources.

Access would continue to be open to the Class III (motorcycles), and pedestrian, horse, llama, and mountain bike use. Control of type of access would be at the BLM

trailhead. The existing trailhead gate structure and bollard/other blocking structures would be redesigned and modified to allow laden packhorses and motorcycles through while blocking Class I OHV's. The landowners would have keys to the gate to allow their Class I OHV's.

This alternative prohibits wet crossings by property owners with full-sized vehicles.

The most difficult section of trail to reconstruct for Class I use is between wet crossing 1 and 2. There are two alternative variations to address this difficult section. The trail from wet crossing 2 up river to the private property will be the same for each variation and as described above in this section.

Alternative 2. A. Install Two Class I OHV- sized (quad) Bridges Near Existing Crossings # 1 and # 2.

While this is a feasible alternative and is analyzed accordingly, if chosen it would require a Plan Amendment since the SFWW River Plan Amendment (July 1992) only provides for access on the north side of the river. That would include re-releasing this EA to include a 90-day public review by the Oregon State Governor's Office.

The BLM would oversee the installation of two Class I OHV (quad) bridges on the existing structurally sound bridge abutments that remain from the original Boise Cascade logging bridges. These bridges would allow a reroute of the trail to the south side of the river to bypass an existing steep segment of the trail on the north side that crosses multiple seeps on erosive soils. Installing the bridges would route the trail across the river to the south side at crossing # 1 and route it back across to the north side at crossing # 2. The replaced segment of the north-side trail would be obliterated and rehabilitated. The two bridges would facilitate access to the south side of the river, between crossings # 1 and # 2, by pedestrian, bicycles, horses, and motorcycles. The bridges would be designed so that the land owners could utilize them with their quads. Public quad use would be unauthorized. The remainder of the trail would be reconstructed to accommodate Class I OHV's (quads).

The ground around the old bridge abutments was previously disturbed during their original constructions in 1979. Installation of new OHV bridges would be monitored for undetected archaeological resources. If new ground disturbance is proposed at the bridge locations, subsurface probing for undetected archaeological resources would be conducted prior to bridge design. Any Native American archaeological sites identified during monitoring or subsurface investigations would be avoided or mitigated by implementing further design measures developed in consultation with the Oregon State Historic Preservation Office (SHPO) and CTUIR.

Alternative 2. B. Reconstruct the Existing Trail on the North Side of the River to Accommodate Class I OHV's- Restrict Class I Use to Property Owners. No Class I OHV Bridges Would Be Constructed.

The trail would be reconstructed but would stay on the north side of the river. Under this alternative no bridges would be built.

The most difficult section of trail to reconstruct for Class I use is located in the NE1/4NW1/4 of Section 14, on the north side of the river (generally opposite the location of wet crossings 1 and 2). This section of trail is approximately 1,500 feet long. About half of it traverses a rock cliff face and the other half travels through a vegetated area which is fed by a series of seeps and springs. The portion of trail crossing the rock face (about 750 feet) would be reconstructed to accommodate Class I quads with a tread width of 72 inches.[2]

At the east end of this rock cliff face, an old trail farther upslope will be reconstructed (about 750 feet) to accommodate use by the Class I OHV's. The grade on the west end of this old trail reroute is 25%, which is steeper than desired, but there may be an opportunity to relocate this section to reduce the grade. Rerouting this section of trail may serve motorized users, but non-motorized users would not be inclined to take the new trail, which would have a steeper grade and pitch, longer distance, and less shade. Non-motorized users would continue to use the existing trail. Therefore the existing trail would not be obliterated and rehabilitated.

Any new trail route proposed to accommodate Class I OHV's would be surveyed for archaeological resources. If sites are found, BLM would avoid archaeological resources by route design measures developed in consultation with the Oregon SHPO and CTUIR.

Other Alternatives Considered, but Not Analyzed in Detail

Road Construction Outside the Narrow River Drainage

Earlier in the project analysis, an alternative was evaluated that would have provided a road built over the uplands previously owned by Boise Cascade north of the ACEC and currently owned by the Forest Capital Partners. It would have come over the ridge and dropped down into the private land tract owned by the property owners. This alternative was dropped from further consideration because it would have been very expensive, a right-of-way would have been needed from Forest Capital Partners, funding and legal questions were numerous and complicated.

Public Access Class I OHV Trail

Considered to a much greater depth before setting it aside was the concept of upgrading the trail currently managed by the FS through the ACEC, from the existing width to Class I width and opening it for public quad use. The trail construction

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[2] A 72 inch tread width is greater than the guideline (60 inches) to help provide a safer trail. The side slope in this area is 50-70%. An "easiest" classification for a Class I trail on such an extreme side slope is not recommended, so a wider tread width is the only option. This is the most critical section of trail from a feasibility standpoint. This segment of trail is on 40-60 foot cliffs which give little room for error if a mistake is made. Blunt force trauma, the terrain (rock), and water hazards (river) create a serious safety concern.

impacts would have been the same as Alternatives 2. A. or B. However, the authorization of public use of Class I OHV (quads) traveling up and down the trail from the trailhead to the Forest boundary would have created a management issue because the FS trails above BLM lands prohibit Class I vehicles. The 3.2 mile trail would not be satisfying for quad use (trail too short), and riders would likely look for ways to add interest to their experience by playing with alternative ways of traversing the terrain. The numbers of persons doing this would exceed the capability of the canyon to resist damage from off-trail travel. The private lands and FS lands above the BLM would also likely incur off-trail damage.

No Access through the ACEC by motorized vehicles.

An alternative was considered that prohibited motorized access beyond the BLM trailhead to the Forest boundary, through the ACEC. Impacts to other resources would be less severe/reduced with this alternative than other alternatives considered. All wet crossings would be eliminated thus reducing impacts to water quality and fish. Elimination of motorized use on the trail would reduce impacts to soils and sediment delivery to the stream. Trail maintenance needs would be less labor intensive/reduced.

However, this alternative does not meet the objectives identified in the Purpose and Need, so it was not analyzed in further detail.

Low Water Concrete Crossings

As per a comment during the scoping period, the BLM considered constructing low water concrete bridges over the wet crossings. This was eliminated from further analysis since they would permanently eliminate those areas from potential spawning habitat for all fish species including the federal listed bull trout and steelhead.

CHAPTER 3 – AFFECTED ENVIRONMENT

Introduction

This chapter summarizes the physical, biological and cultural environment of the SFWW ACEC. Resource values that are either not present in the area or would not be affected by any of the alternatives will not be discussed. These values include wilderness study areas, research natural areas, paleontological or mineral resources, prime or unique farmlands, air quality, soils, hazardous wastes, socioeconomic or environmental justice considerations.

Project/Analysis Area

The project area is within the boundary of the Area of Critical Environmental Concern. The focus of analysis is the bottom of the canyon, the SFWW River and its riparian area and the trail/road complex along the river.

Vegetation

General

This area comprises a unique assemblage rarely found in the Pacific Northwest east of the Cascades. This area encompasses many small plant communities of both a dry and wet nature. These communities are a result of the wide variety of exposures, slopes, moisture regimes and soil conditions found in the ACEC. Their uniqueness and vulnerability are in part because they exist within a relatively small area. Even with incomplete inventories to date, agency personnel have discovered at least 300 distinct plant species within the river corridor.

Riparian/Wetlands/Unique

The riparian habitat consists of three separate but interrelated plant communities. The sheer rock faces and outcroppings with seeps and springs create a moist micro-habitat for mosses and ferns, creating hanging gardens. The springs create bogs and marshy areas along the toe of the slopes providing habitat for sedges, rushes and grasses. Along the river's edges a highly diverse and well-developed shrub and tree community exists including ponderosa pine, Douglas fir, grand fir, white fir, alder, willow, paper birch, water birch, Pacific yew, black cottonwood, mock orange, ocean spray, ninebark, service berry, western mugwort, red-osier dogwood, elderberry and snowberry. Western paper birch, *Betula papyrifera* var. *commutata* appears to be only known in this area of Oregon, although it had been found in South East Washington. This is of regional importance due to its uniqueness. There are Western paper birch trees at Crossings # 8 and # 9.

Special Status Species

There are no federally listed plant species known to exist here. However, the Western paper birch and Pacific yew communities found in the bottom of the canyon represent disjunct communities for these species. This location may be the only one for the Western paper birch in Oregon according to the National Resources Conservation Service. The mountain lady-slipper (*Cypripedium montanum*) occurs here and the clustered lady-slipper (*Cypripedium fasciculatum*) is likely to occur here. Both are species of interest and concern in Oregon to the Oregon State Natural Heritage Program and are BLM Sensitive species.

Hydrology/Water Quality

From field surveys documented in Appendix 4, SFWW Water Quality Restoration Plan, and field observations by BLM specialists**,** and low-level aerial photography from 2004, the BLM believes that the SFWW is a stable B3 (Rosgen. 1996)stream type with an excellent vegetation component.

In August 2005, The State of Oregon Department of Environmental Quality completed and submitted to the Environmental Protection Agency (EPA), the Stream Temperature Total Maximum Daily Load (TMDL) and Water Quality Management Plan (WQMP) for the Walla Walla Subbasin, August 2005. (Report is available from DEQ and for review at the Baker Resource Area office in Baker City, OR.) EPA

approved it in September 2005. This TMDL and WQMP identified that for this segment of the SFWW, the temperature is too high for the most restrictive (listed bull trout) of the many beneficial activities. (See the Fisheries Habitat description, next section of this chapter, for temperatures). As required by the TMDL and WQMP, the BLM is preparing a Water Quality Restoration Plan for the SFWW (See Appendix 4). This plan identifies management strategies to assure that BLM management does not increase stream temperature. Vegetation and shade are listed as "surrogates" for water temperature in the TMDL. As outlined in the WQRP, the BLM will manage the ACEC t protect riparian vegetation which provides shade to the SFWW.

Fisheries

Fisheries Habitat

The SFWW is a cold-water source for the Walla Walla River Subbasin and supports anadromous and native fish habitat. The SFWW River originates from Deduct Springs in the Blue Mountains and is 27.1 miles long. The BLM managed land begins at river mile (RM) 8.0 and ends at the private land boundary at RM 11.5.

Oregon Department of Fish and Wildlife (ODFW) completed a stream survey in August 1993 on the BLM and Forest Service portion of the SFWW River. Oregon State University and Oregon Department of Fish and Wildlife developed the stream survey methodology used for the stream survey. Results of that survey are summarized below.

The narrow valley floor is 23% moderate v-shape and 77% multiple terraces. The channel morphology is 23% constrained by bedrock and is 77% unconstrained within a single channel. The wetted surface width is 21.32 feet (6.5 meters) and the depth averages 1.37 feet (0.42 meters). The average gradient is 1.8%. The water temperature recorded during August ranged from 46.0-58.0 F. (8-14.5 C.). The bank stability was 97% stable with only 2.2% actively eroding. The dominate substrate was gravel (41%) and cobble (36%). Pools were 15% of the habitat units with 74% in riffle and 10.6% in rapids. There were no pools over 0.62 feet (1 meter) in depth. There was 61% canopy closure in Zone 1, which is the water influence zone (0-32.80 feet or 0-10 meters).

BLM specialists conducted a Proper Functioning Condition (PFC) survey on the BLM portion of the SFWW River in July 1999 and rated the river as Proper Functioning. The SFWW is in excellent condition from Harris Park upstream to the headwaters (BLM Specialists' professional opinion).

The SFWW River has a drainage area of 163 sq. km., which is 4% of the Walla Walla Subbasin (Walla Walla Subbasin Plan 2004). Flow information has been recorded since 1908 on the SFWW River. The maximum mean flow during the spring is approximately 575 cubic feet per second (cfs). The minimum flow in the fall is approximately 75 cfs.

The new stream temperature rules created by DEQ has designated the SFWW as a cold water source, which means the seven-day maximum average may not exceed 12.0 degrees C. or 53.6 degrees F. In 1999 and 2000, stream temperatures were monitored continuously in the SFWW River from June until September, near the gauging station above Harris Park. Both years, the seven-day maximum was at, or lower than, 58 degrees F. Since then the stream temperatures have been monitored periodically throughout the summer months. In 2003, it was monitored on June 30 and August 15. On June 30, the high temperature was 46.3 degrees F. and on August 15, the high temperature was 50.5 degrees F. In 2004, the river was monitored periodically from May to November. The highest temperature recorded that year was 57.4 degrees F. during July. In 2005, the river was monitored periodically from February to September. The highest temperature recorded in 2005 was 63.3 degrees F.

TES Fish Species

Federally listed fish species occurring within the SFWW Subbasin consist of Mid Columbia summer steelhead and bull trout. Mid-Columbia Spring Chinook salmon are not currently listed in this watershed as threatened or endangered.

In response to a court order, the NOAA-Fisheries published a proposal on February 15, 1998 to list the Mid-Columbia River Basin segments of summer steelhead *(Oncorhynchus mykiss)* under the Endangered Species Act of 1973 (P.L. 93-205). The Mid-Columbia River population of summer steelhead includes the SFWW River watershed.

The US Fish and Wildlife Service (USFWS) published a final rule listing the bull trout *(Salvelinus confluentus)* in the Columbia River Distinct Population Segment as a threatened species under the Endangered Species Act (Federal Register Volume 63, Page 31647). The rule became final on July 10, 1998. The USFWS has designated critical habitat for the SFWW River, but has not included the BLM administered land in that designation.

Bull Trout

Bull trout in the Walla Walla Subbasin exhibit both fluvial and resident life histories. Adult resident forms are generally less than 12 inches in length, while adult fluvial bull trout can exceed 20 inches in length. Both forms spawn in headwater tributaries from late August into November, although the actual spawning season may vary within this period depending on local conditions in each stream. After spawning, fluvial bull trout return to over-wintering areas in the main stems of both river systems until the following spring when the upstream migration begins, presumably in response to increasing water temperatures.

They spend the summer through fall in lower order tributaries or in the upper main stems of the Umatilla and Walla Walla Rivers. Ages of bull trout in this area range up to 9 years, but most spawning adults seem to be 5 years or over. Size of bull trout observed during Oregon Department of Fish and Wildlife spawning ground surveys in the SFWW River in 1995 ranged in size from approximately 8 inches to greater than

24 inches (Germond, *et al*. 1996a). Three local populations have been identified in the recovery unit: (1) Upper Walla Walla Complex, which includes the North and South Forks of the Walla Walla River; (2) Mill Creek and tributaries; and (3) the Touchet River and tributaries. (See Bull Trout Recovery Plan, Chapter 10. USDI 2004).

Bull trout spawn mainly in the SFWW River (Reach I) between Table Creek and the second major tributary above Reser Creek (River River Mile 15 to 22), the lower (7 miles) of Skiphorton, and the lower (0.5 mile) of Reser Creek. The majority of spawning fish are found above Bear Creek (ODFW, *in litt*. 1999c). The largest number of bull trout captured in a trap on the SFWW River approximately 2 miles upstream of the forks between 1992-2000 was 211, in 1992 (B. Kilgore, *in litt*. 2001).

Utah State University started a study in 2001 on bull trout to look at abundance, growth and movement within the river. (See Bull Trout Population Assessment … Utah State University 2004). They continue to monitor and tag fish and to take genetic samples of fish. CTUIR has been conducting a large radio-tracking program for the last few years to look at temporal movement patterns of bull trout.

Bull trout in the Walla Walla Subbasin are not at immediate risk of extinction (USFWS 2002). They spawn and rear in the headwaters of the Walla Walla Subbasin and most of its tributaries, but some fish migrate downstream as far as the lower main stem Walla Walla River. The extent of their downstream movements is presently unknown in the Walla Walla and Touchet basins, but it is currently under study in the Walla Walla River through use of radio telemetry. Barrier removal, reduction of instream sediment, and reducing or maintaining stream temperatures are some of the primary habitat recommendations in the draft bull trout recovery plans. Only with improvement on private land can this population reach its potential. The area on the SFWW from Harris Park to the headwaters is considered in “nearly pristine condition” (Germond, et al 1996b) where the trailhead and trail are located.

Summer Steelhead

Historically, summer steelhead spawned and reared throughout a large area of the middle and upper reaches of the main stem Walla Walla and Touchet Rivers and their tributaries. Widespread habitat degradation resulting from irrigation, dry land farming, livestock grazing, and logging has reduced usable spawning habitat by approximately 50% (Washington Department of Game (WDG) 1985).

Steelhead enter the subbasin from December - March, with peak numbers in February - March (ODFW 1987). There are no accurate numbers of historical run sizes; annual runs are believed to have contained 4,000 to 5,000 fish (ODFW 1987). For run years 1977-78 through 1986-87 an estimated 1,090 to 1,817 native summer steelhead annually returned to the subbasin.

Emergence normally occurs from May - July. Juveniles may rear in the subbasin for up to two years but substantial numbers of juveniles emigrate from late April - May from Oregon headwaters as one-year-old juveniles (ODFW 1987).

Low stream flow is the main limiting factor for summer steelhead. Extensive irrigation withdrawals severely compound naturally low stream. Irrigation in Oregon normally completely diverts the main stem Walla Walla River by the time it reaches the Oregon-Washington border (CTUIR 1990). There are three permanent irrigation diversion structures: the Burlingame Diversion (RM 36.0), the Nursery Bridge Dam (RM 45.8), and the Little Walla Walla Diversion Dam (RM 48.2), on the main stem Walla Walla River that impede the fish. All stream flow diversions in Washington are screened. In Oregon, ODFW with NMFS funding installed 23 diversion screens in 1986-88 within the Walla Walla Subbasin (CTUIR 1990). Currently work is being done on several irrigation channels/diversions and more water is being kept in the main river to promote migration of Chinook salmon.

Spring Chinook Salmon

The proposed project area occurs within the area designated as Essential Fish Habitat (EFH) for spring Chinook salmon, which was not warranted for listing under ESA on March 9, 1998 (63 FR 11482). EFH for Chinook salmon is considered to be those habitats occupied at present and those historic habitats in the Walla Walla River Basin.

Spring Chinook salmon have been extirpated, at least functionally, from the Walla Walla Basin since the early 1920s (Nielsen 1950, Van Cleave and Ting 1960) although some adults were recorded in steelhead creel surveys as late as 1955 (Oregon Game Commission, 1956 and 1957). Recently, a few adult spring Chinook have been observed in the Touchet River (Mendel et al.2001, 2002) and in the main stem of the Walla Walla River (Zimmerman and Duke 2001, 2002; Bronson and Duke 2003). These fish are presumed to be strays from other basins because they were extinct (?) and most of the returning fish are generally unmarked and are likely from reintroduction efforts in the Umatilla River or elsewhere. Coded wire tags recovered from a few adults trapped in the Touchet River had Tucannon Hatchery codes (Mendel et al. 2002).

In 2001, the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) released more than 1,000 spring Chinook salmon into the Walla Walla River basin. The CTUIR have built a fish holding facility just north of Harris Park on the South Fork to facilitate their restoration efforts. The adult fish were released to spawn in the South Fork. The CTUIR out-planted Carson origin adult spring Chinook salmon into the SFWW and Mill Creeks during 2002-2003 to spawn naturally (Zimmerman and Duke 2001, 2002; Bronson and Duke 2003; Contor and Sexton 2003). It is too early to know if the recent habitat and flow improvements in the basin will provide suitable conditions for the progeny of the out-planted Chinook to return at or above replacement (2.0 returns per spawner). CTUIR documented successful spawning, juvenile rearing, and smolt migration of naturally reared progeny of out-planted Chinook salmon (Contor and Sexton 2003, Schwartz et al. 2004). CTUIR has initiated a smolt program along with the adults that are being out-planted into the SFWW River.

In 2004, the first returning Chinook salmon returned up the river to spawn; 110 fish passed through the CTUIR Nursery Bridge Dam Fish ladder. From the CTUIR Fish

Facility to the South Fork Trailhead there were 41 Chinook redds and from the South Fork Trailhead to Bear Creek there were 64 Chinook redds. There were a total of 225 redds were counted in the basin. In 2005 from the CTUIR Fish Facility to the South Fork Trailhead there were 8 Chinook redds and from the South Fork Trailhead to Bear Creek, 28 Chinook redds out of a total of 78 redds were counted in the basin.

In the last three years BLM and other agencies have observed Chinook spawning on the BLM managed land with specific emphasis towards watching the use on vehicle crossings. Results from the last three years of monitoring are:

- There has always been spawning activity on the fifth vehicle crossing.
- There has been at least one redd on three other crossings (# 1, # 4 and # 8).
- There has been spawning activity upstream or downstream of crossings # 2, # 3 & # 9.
- There are at least three crossings that have never been used for spawning (Crossing # 6, # 7 & # 10).

Wildlife

Threatened (Bald Eagles)

The bald eagle is (*Haliaeetus leucocephalus*) is listed as threatened under the Federal Endangered Species Act (ESA). The SFWW River falls under the guidance of the Pacific Bald Eagle Recovery Plan. This plan calls for providing a "secure habitat for bald eagles in the 7-state Pacific recovery area and increasing populations in specific geographic areas to levels where it is possible to de-list the species." The EA is within one recovery area: the Blue Mountains. There are 14 key areas in the Blue Mountains that contain important habitat for eagles.

Occasional reports of bald eagles occur in the Walla Walla River drainage downstream toward Milton-Freewater. These reports would indicate the eagles seen are migrating through the area in their seasonal north-south movement. There is no indication that they reside in the drainage during the remainder of the year.

BLM Sensitive (Goshawk)

The northern goshawk (*Accipiter gentilis*), is a Bureau Sensitive species, and is managed in a manner that does not contribute to the need to list the species under the ESA. According to the SFWW River Plan Amendment, there is the potential for goshawks to nest with in this site. Currently there are no known sites. If one is discovered, approximately 400 acres surrounding the nest will be managed according to guidelines formulated to protect and enhance goshawk habitat in the area. The goshawk is a forest habitat generalist that uses a wide variety of forest ages, structural conditions, and successional stages for its life history.

Requisite nesting habitat characteristics for goshawks include dense overhead foliage or a high degree of tall tree canopy cover, but they have been known to use open area sites when dense overhead foliage is not abundant. Most nests are located on north facing slopes in dense, mature, or old-growth conifer stands (Reynolds et. al 1992).

Terrestrial

Due to its uniqueness, there is a large variety of wildlife species that are not threatened or sensitive that occupies the area; which is considered game. This area is located within a critical winter range for about 1,100 Rocky Mountain elk. They tend to use the south-facing upland slopes. The dense undergrowth in the riparian area provides habitat for white-tailed deer and ruffed grouse. Mule deer occur in the upland habitats and black bear use all habitats in the area. Because of steep rock slopes, the ODFW has identified the area as suitable Rocky Mountain bighorn sheep habitat and re-introduction site. Furthermore, the steep rim rock located in this area would provide habitat for cougar and bobcats.

The area also supports a rich variety of non-game wildlife, located in diverse, well-developed riparian habitat and on adjacent uplands. The canyon is also a major wintering area for ladybug beetles. The beetles congregate on riparian foliage, particularly on the trunks of Douglas fir trees beginning in late October. They reside there until late April or early May (BLM, 1992, USDI Forest Service, July 1997).

Aquatic

Various salamanders, newts, and Pacific tree frogs, occupy small moist areas on the steep cliffs of the hillsides, the moister vegetated areas of the bottomlands, the small pools associated with spring outflow and small tributary streams in the early life-stages. Many recent studies have found that amphibians are particularly vulnerable to unknown environmental conditions, and are succumbing to lethal skin fungus and other health problems. Their thin porous skins do not protect them from changes in their environment

Archaeological and Historic Resources

Previous archaeological inventories on the SFWW River have identified one archaeological site (35 UM 168) and two EuroAmerican historic building sites. The building sites consist of a free standing stone chimney (which is all that remains of a log cabin probably constructed in the 1940s), and the Demaris cabin site including a collapsed frame building, privy and spring box. Due to their lack of integrity, the historic building resources are probably not eligible for the National Register of Historic Places. None of these previously recorded sites would be affected by any of the proposed action alternatives. On June 30, 2005, BLM inventoried the existing vehicle route presently used by private landowners between the Trailhead and Elbow Creek. No new cultural resources were identified in or adjacent to the single-track vehicle road or stream crossings in this reach. BLM contracted for an archaeological inventory on both sides of the SFWW, between Elbow Creek and the upstream private land boundary. The inventory was completed on July 27, 2006, and no new archaeological or historic sites were found.

Native American Treaty Rights and Traditional Uses

The project falls within the homelands of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), and is located on lands ceded by the Treaty of 1855.

Under the terms of the 1855 Treaty, the Tribes reserved their rights to hunt and gather plants on the ceded lands and to take fish at their usual and accustomed locations. Ethnological reports indicate that the Walla Walla inhabited permanent villages on the Columbia and near the mouth of the Walla Walla River; and (among other locations). Cayuse bands had winter settlements near Milton-Freewater and Walla Walla, Washington (Stern 1998). The Tribes procured seasonally available fish, game, and plant resources in the mountainous regions of the Walla Walla drainage.

Both forks of the Walla Walla River are the location of usual and accustomed fishing and hunting grounds for the Confederated Tribes of the Umatilla Indian Reservation (Suphan 1974). Historically, the SFWW River provided habitat for trout, steelhead, Chinook salmon and other species as part of the traditional fishery. In the early 20th century, development of diversion structures and appropriation of water led to the elimination of salmon runs from the South Fork. Recently, as part of a basin-wide effort, the CTUIR have out-planted to establish spring Chinook in the South Fork river reach, and constructed a fish holding facility downstream from Harris Park. CTUIR proposes to expand the facility to a full hatchery for spring Chinook. Restoration of the salmon to the Walla Walla system is Botanical inventories along the river trail have identified species of plants known to have been traditionally important as food, medicine and material to the Tribes. Examples of plants of potential cultural interest that are known to be present in the riparian zone or adjacent rocky hillsides include western serviceberry, hawthorn, yew, native rose, cow parsnip, bittercherry, Cous' Biscuit-root, fernleaf desert parsley, other lomatium species, sweet-cicely, glacier lily, *Triteleias sp.*, raspberry, native blackberry, wild onion, balsamroot, and yarrow. BLM is not aware of any traditional plant gathering locations specific to BLM lands on the SFWW.

Wild and Scenic River Potential

In 2005, the BLM initiated a Wild and Scenic Rivers Eligibility Inventory for the Baker Resource Management Plan Planning Area and compiled a list of waterways that potentially possessed outstandingly remarkable values. The BLM ID Team and Baker staff identified eight waterways totaling approximately 43.7 miles that have potential to possess Outstandingly Remarkable Values (ORV's) and thus required further review. The SFWW River is one of these segments.

The Baker Resource Area, BLM received a draft report from a contractor for the "potential" eligibility of the SFWW River. The contractor has determined that the segment of the SFWW River through public lands were found to meet the WSR "Eligibility" criteria and should be given further consideration for inclusion into the National Wild and Scenic River System.

The contractor also determined that the management of the public lands along the SFWW River is currently covered under the Baker Resource Management Plan (BLM 1989) and the SFWW River Area Plan Amendment (BLM 1992), which are consistent with the protection of ORV's identified along the river.

These results are based on a preliminary draft report. Further evaluation is necessary and on-going. The BLM Baker Resource Area is currently reviewing this draft report and is providing comments for inclusion. These comments will need to be addressed by the contractor, along with any additional data provided by the staff, prior to the BLM's acceptance of the results. The final results are scheduled for delivery later in the fall of 2006.

The Wild and Scenic Eligibility review area includes all of the lands within ¼ mile each side of the SFWW River from the existing trailhead to the USFS boundary. The analysis area includes only those BLM managed public lands within the identified study zone, and does not consider any private or other agency lands that occur within that same zone.

All of the lands assessed do fall within the SFWW ACEC.

Recreation Resources & Scenic Values

The SFWW River is a popular recreation area. The area is a day use destination for residents of northeast Oregon and southeast Washington. It is easily accessible via paved Umatilla County Road 600 and is only 10 to 20 miles from the population centers of Milton-Freewater and Walla Walla, serving a population of approximately 150,000 people. Recreational facilities include a developed trailhead with vault toilets, loading ramp, and picnic area. Weekly garbage service is provided.

Visitor uses include: Class III off-highway vehicle use, hiking, horseback riding, fishing, hunting, and sight-seeing. No reliable recreation use data has been compiled in recent years. A study done in 1981 revealed weekend visitor use to be approximately 7,000 visitors per year, with the average being 135 visits per weekend. Current use is reported as being 3,000 visitors per year. This is based on anecdotal evidence and professional judgment. Use has been estimated as being lower in recent years due to many management changes since 1981. Primarily, public vehicle access has been limited beyond the trailhead.

The trailhead provides access to Trail #3225 which is located on BLM land before entering the Umatilla National Forest and an extensive trail system. The existing 3.2-mile trail (Trail #3225) is under management of the Forest Service via a right-of-way granted in 1998. Although the trail system extends well into the drainage, up to 90 percent of the use occurs within the first mile of the trail below Elbow Creek. Many, if not most of the users, consider the trail to be an extension of Harris County Park. The FS has performed maintenance regularly throughout the life of the trail. Due to weathering and use levels, some non-recurring maintenance items (drainage structures, geo-textile, rolling dips, turnpike, etc.) currently need attention.

The trail is located along the north shore of SFWW. The trail has been developed for shared use; Class III OHV (motorcycle) motorized use and all non-motorized uses. Portions of the trail follow an old abandoned road bed, so the trail width varies widely from the trailhead to the Forest boundary. Beyond the Forest boundary, the trail system is managed for Class III width only. Portions of the trail are also used for

landowner access to private properties which lie between the BLM parcel and the Forest boundary. During permitted periods, the landowners utilize full-sized vehicles (4x4 pickups and jeeps) on portions of the official trail and on portions of the old abandoned road that are not part of the trail. This shared use and inconsistency causes some confusion for the public.

The existing vehicle closure for BLM lands confines motorized use to the designated trail system. Except for the allowed use by private landowners, motorized use off the existing trail is prohibited. However, unauthorized public motorized use does occur. To discourage off trail use, BLM has implemented a signing plan to identify the trail and restrictions.

Some resource damage is occurring due to human use, such as sediment entering the river from devegetated dispersed sites adjacent to the river, vehicles driving into the river, and vehicles driving through wet, muddy areas. User defined trails and previously abandoned trails exist within the riparian zone. Some of the user defined trails are steep, but do not show evidence of gully erosion. Some visitors to the area do not use "no trace" ethics resulting in informal rock fire rings, litter, and vegetation destruction. Enforcement of the terms of the ACEC Plan and Federal Register Notice has resulted in reduced overnight camping. The effects of human use are evident along the river but since the implementation of the road closure, the negative impacts have been reduced significantly (see attached photos, Appendix 3).

Much of the area's recreation use occurs in the riparian zone along the narrow corridor adjacent to the SFWW. Even though attempts have been made to encourage trail use further up the hillside, away from the riparian zone, success has been limited. Visitors, whether motorized or non-motorized, are almost always seeking a recreation experience which is augmented by views of the river and abundant shade. Non-motorized visitors also seek to take the most level path available, avoiding steep pitches in grade.

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

The SFWW canyon contains exceptional scenery in a variety of landforms, vegetation, water and color with few cultural modifications to the landscape. The outstanding characteristics include: high vertical relief as expressed in prominent cliffs, a variety of vegetative types expressed in interesting form, textures and patterns, rich color combinations and clear, clean cascading water.

Removal of the bridges reduced the cultural modifications over the river. However, the large stringers left alongside the trail are out of character and detract from the pristine experience available along the trail.

CHAPTER 4 – ENVIRONMENTAL CONSEQUENCES

No Action Alternative

Vegetation

The on-going use of the primitive road and the ten wet crossing locations of the river in full-sized vehicles by the property owners is not affecting the upland vegetation, but is causing some minor damage to riparian vegetation along the stream edges at the crossings. The vehicles are staying on the track and the current estimated total 30 round trips by the property owners is not widening the single vehicle width, two-track aspect.

Hydrology/Water Quality

While past management practices may have impacted riparian habitat, current management, not withstanding permitting the use by the property owners of full-sized vehicles to cross the stream, is contributing to improved riparian vegetation and habitat. The TMDL (DEQ, 2005) uses surrogates of shade, riparian vegetation, and stream width to measure compliance with the stream temperature criteria. Field observations by BLM resource specialists and from low-level aerial photography show that riparian vegetation has shown marked improvement since the designation of the AECE. The TMDL (Figure 1-11 pg 1-21, DEQ, 2005) indicates that the target potential channel width should be approximately 15 meters while the existing channel width is over 20 meters along the BLM managed portion of the SFWW. Surveys conducted by the BLM in 2006 (SFWW WQRP, Appendix 4) show, however, that the current bankfull channel width is between approximately 43 and 49 feet (13-15 meters). This information would indicate that the SFWW is at or near the potential channel width described in the TMDL. The BLM acknowledges that at most of the stream crossings used by vehicles the channel is wider than the potential described in the TMDL, however field observations have shown that this impact is very localized to the stream crossings and affects only about one percent of the channel length.

Several springs are intercepted by the present trail and create water flow over the trail and into the river. Only one of the springs is intercepted by a small pipe and it is presently undermining the trail. This area appears to be moving due to instability caused by the springs and perhaps by the trail placement itself. An eventually slope failure could occur in this area.

Decreases in bank stability and vegetation loss at the crossings lessen the shoreline riparian vegetation and shading capability at the point of the crossings. However, the bank stability and loss of vegetation at the vehicle crossings has not changed or increased over the years of use. The impact to the shoreline of 3.5 miles of stream on BLM administered land is less than 1% (.008%) (approximately 300 feet of shoreline) of the existing shoreline vegetation.

Fisheries

Fish Habitat

The BLM anticipates no additional impacts from the administration of the property owner activity than what is presently occurring. The property owners are presently allowed to cross the river to access their private land during a 6-week window that takes place from July 1- August 15. This time period protects steelhead redds and their emergence and any bull trout redds that may occur in the area and their emergence. At present, there is verification of steelhead spawning each year on several of the crossings (BLM Monitoring Reports 2003-2005). However, bull trout spawning surveys have shown that 99% of the bull trout spawning occurs upstream of Bear Creek (CTUIR 2005), which is upstream of the private land and the BLM managed land.

Continuation of the No Action Alternative would continue to produce a low level of sediment when vehicles cross, and would continue the physical impacts from vehicles to side channels and springs. Bank stability will continue to be slightly lessened and vegetation will continue to be broken and damaged only at the crossing points. Sediment sampling occurred at the crossings in 2003 and 2005. In 2003, the BLM sampled the turbidity the first time the vehicles crossed the river and the last time the vehicles crossed the river on August 15. In 2005, the BLM monitored turbidity at the crossings on the first crossing date only.

In 2003, at the first crossing time, turbidity averaged 4.65 NTUs (Nephlometric Turbidity Unit) above the base turbidity (0.50-1.16). The highest reading for turbidity was at the crossing # 4; a reading of 9.68 NTU's which was 9.18 above the base of 0.50 NTU's. In August 2003, the reading for turbidity averaged 1.5 NTU's with the highest reading of 1.43 at crossing # 2. In 2005, at the first crossing time, turbidity averaged 2.25 NTU's above the base turbidity (0.91-1.39). (See the BLM Section 7 Monitoring Reports 2003 and 2005 for further detail). It appears that the first crossing of the year has the most potential to release sediment deposited from that year; more sediment is in place from winter high flows. As use occurs throughout the six week driving window, the gravels contain progressively less sediment, which in turn release less sediment with each crossing. The relatively clean gravels, the suitably sized streambed substrate and the flow patterns are likely why Chinook salmon choose several of the crossings for spawning.

The BLM administers the land surrounding 3.5 miles of SFWW River, which is approximately 13% of the 27.1 miles of the river. Proportional to the area of the entire South Fork the impacts appear to be minimal to existing fish habitat. The BLM is anticipating no additional impacts to the overall habitat above those presently occurring.

Fish Species

Bull Trout

The use of vehicle crossings should not affect bull trout spawning. Most of (99%) the spawning occurs above Bear Creek up to the headwaters. This is above the private property and above the BLM administered land. There could be displacement of young and adults as vehicles cross the river if they are near the crossings at the time. CTUIR monitoring has proven that bull trout adults and young migrate downstream in the SFWW River during the latter part of the year and may even migrate to NFWW River for a portion of the winter months. It is now thought that bull trout young will stay near their redds for several months and possible years (CTUIR, personal communication, 2005). This will reduce the risk that fry or smolts maybe crushed while hiding in the substrate while vehicles pass on the crossings downstream from Bear Creek. Use of the crossings from July1-August 15 creates minimal risk that there would be direct contact with fish.

Summer Steelhead

Steelhead migrate upstream during the last part of winter with the beginning of the high flows. They normally spawn in the South Fork from February–April each year. Steelhead use several of the crossings for spawning. This has been validated over the years; although the exact placement of redds each year is hard to verify due to high flows and the reduction of visibility. They often choose the same areas for spawning as Chinook do because they have the same substrate and flow habitat requirements. For the last several years, the BLM has calculated the emergence of steelhead fry and has validated the emergence prior to permission for the property owners to travel across the river on July 1. At any one time, there could be steelhead young or 1+ (age of over one year) in the river on or near the crossings. Like most fish, specialists expect that they would move when vehicles approach the crossings. There is a risk that young fry could hide in the gravels and be crushed by vehicles. The BLM specialists have never seen loss of fish during the use period of July 1- August 15.

Spring Chinook Salmon

In 2001, CTUIR transplanted adult Chinook salmon into the Walla Walla Subbasin including the SFWW River. In 2004, the first returning adults came upstream into the SFWW River to spawn. The Chinook have chosen to spawn on or immediately adjacent to several of the crossings. These crossings have the right size of substrate material and flow patterns necessary for over-wintering the eggs. Usually Chinook will spawn with the first freshet of early fall in late August or early September. The potential redds at crossings used by the Chinook are protected under the No Action Alternative because crossing by the property owners ends each year (August 15) before the Chinook spawn. Any direct impacts from property owner vehicles during the July 1 –August 15 period are minimal and do not affect the continued existence of the populations although some young fry could hide in the gravels and be crushed by vehicles. The BLM has not observed loss of any fish during the use period of July 1-August 15. Based on the monitoring conducted in previous years, and the mitigation

designed into the ongoing current use, the property owner activity is not adversely affecting the CTIUR salmon-restocking program.

Wildlife

Threatened (Bald Eagles) and Sensitive (Goshawk)

The property owners continuing to drive up the river valley on the trail/road segments and through the wet river crossings during the six-week window during July 1 - August 15 would not affect bald eagle. However, if goshawks, which are extremely sensitive to disturbance during the bonding and nesting season of April 1 - August 30, nested near the trails or crossings, they could be driven off the nest, particularly during the early months up through mid-June by both the full-sized vehicles, and the motorcycles and other recreational users/uses.

Terrestrial and Aquatic Species

The continuation of the driving by the property owners during the existing six-week window of July 1 - August 15 would not affect the songbirds, various other raptors, or game and non-game species in the ACEC. The salamanders, newts, Pacific tree frogs and other amphibians that occupy moist terrestrial areas and small pools associated with spring outflow and small tributary streams would not be significantly affected.

Archaeological and Historic Resources

The alternative would have no effect on archaeological resources. The landowners currently use sections of previously existing roads and trails to access their property. No cultural resources have been identified on the vehicle route.

Native American Treaty Rights and Traditional Uses

The alternative would not limit tribal access or use of the area for traditional fishing or resource gathering. As described in the Fishery analysis, seasonal vehicle use limitations and associated mitigating measures would continue to provide protection for fish spawning and would have minimal impact to the fish populations. Although ongoing landowner use of the existing single-track road has maintained openings for passage through the vegetation on the river benches and crossings, the adjacent riparian plant community has become well-established and vigorous ground cover characterizes most of the flats and banks along the river.

Wild and Scenic River Potential

Under the No Action Alternative the current situation within the SFWW would be maintained and no impacts would occur to the identified ORV's or to the potential eligibility as a Wild and Scenic River.

Recreation Resources and Scenic Values

In the short term, recreational opportunities and landowner access would change little under the No Action Alternative. In the long term, sustainability of the trail/road may be questionable due to future flood events and trail failure. Public OHV use may

increase as populations increase and popularity of the sport increases. Single-track Class III OHV (motorcycle) trails are in great demand. The SFWW and the rest of the trail system on the Umatilla Forest, provides a quality motorized as well as non-motorized recreation experience. Recreation uses such as hunting, fishing, hiking, horseback and mountain bike riding are currently popular activities but are not expected to change substantially.

Based on past experience and observations, there will be increased pressure for quad access into the drainage and trail system, and unauthorized use may increase. Nationally, 2200 quads are sold per day, so there is a huge demand for quad riding opportunities that is not being met.

As the trail is brought back to right-of-way standards, landowner access would be improved slightly, visitor experiences will be improved, and degradation of other resources will be reduced. The trail would be well identified and users of all types would be directed away from the wet areas and side tributaries that provide fry habitat. The trail would remain a "more difficult" trail creating challenges for landowner access.

Visual resources would change little under the No Action Alternative. Disturbance from construction and maintenance activities on the trail have softened over time. The trail is of minimum width creating little contrast in line or color. Vegetation is encroaching into the old road bed making it narrower every year and softening its edges.

Long-term impacts include:

- attainment of Class II visual management objectives
- "more difficult" single track trail experience would continue
- continued unauthorized use
- continued FS maintenance of trail right-of-way

Monitoring

Monitoring is an essential part of determining if the protection management objectives are being met. The BLM proposal for monitoring the No Action Alternative is as follows:

- The BLM will use steelhead and bull trout spawning survey data from the previous year for bull trout and current year for steelhead to determine whether active spawning redds are known or suspected to be present at road crossings or within 300 feet downstream. Trend data may be used to help establish spawning periods and emergence. This will occur in the spring prior to the July 1st crossing opening date.
- Survey the redd sites in the project area several times in the spring to verify emergence of fry. Edge habitat and side channels will be monitored to verify emergence of fry. Also calculate the temperature regime to validate the number of days needed for emergence to occur. If active redds are known or

suspected to be present, the BLM will delay opening the road until July 15, or as long as necessary for fry to emerge from the affected redds. "Active redds" means redds that still contain pre-emergence fry, and not redds that fry have vacated. With this clarification it is not expected that active redds will be present during the in-water work period on a regular basis. Most years are expected to have fry emergence prior to the in-water work window, and therefore not require a delayed road opening. If emergence of fry has not occurred by the end of June, we will notify the landowners of the situation and tell them there is a change in the crossing time period.

- The driving route will be walked and observed for any possible problems prior to July 1st.
- The landowners will make sure their vehicles are clean of oil and grease as much as possible, especially with regards to areas that may be in the water. (See the Spill Plan, Appendix 1)
- There will be no maintenance of the road by mechanized equipment, which includes the roadway across the river.
- Streambanks and crossings will be monitored, and adjustments made to the allowed use to minimize impacts.
- Monthly visits to the crossings will occur to document use and impacts.
- BLM will prepare monitoring reports for USFWS and NOAA-Fisheries on a yearly basis with all data summarized.

Cumulative Effects

Within the Walla Walla Subbasin, historical and current land use activities have impacted anadromous and resident fish populations, reducing habitat and numbers markedly. Historical land uses affecting habitat in the Walla Walla Basin include forest management, livestock grazing, irrigated agriculture, urbanization, and flood control management. Liberal harvest regulations and fish stocking programs have also been implicated in the decline of TES fish species.

No resource disturbing activities within the watershed of the SFWW at present or in the foreseeable future are known to be planned by the FS or Forest Capital Partners. Impacts on stream bank vegetation and sediment are minimal to the watershed as a whole and the local segment of the river that flows through BLM managed land. There should be no cumulative impacts to the subbasin from the administration of the property owner activity. The BLM manages less than 1% of the entire watershed.

No cumulative effects are known for other resources from the No Action Alternative, within the context of the ACEC or the SFWW watershed.

Alternative 1. A. Preferred Alternative: Longer Window of Property Owner Access with Full-sized Vehicles; Modify the existing route to avoid Chinook redds (modify some wet crossings)

Vegetation

The longer window of use by the full-sized vehicles would mean about 90 total round-trips by the property owners. This would likely make the two-track appearance of the primitive road more prominent, but would not likely widen it such that the longer period of use would damage the surrounding vegetation. However, the modification of the river ingress and egress points at crossings # 5, # 8 and # 9 would result in removal of small numbers of relatively young riparian shrubs/trees and grass/forb vegetation. In particular, the sensitive individuals of Western paper birch located at crossings # 8 and # 9, a species known in Oregon only in this canyon, would be at risk of damage unless care is taken to avoid them.

Hydrology/Water Quality

Currently, the stream crossings are well established with riparian vegetation immediately up and down stream of most of the crossings. These crossings have been used for many years and an increased time of use would not be expected to impact riparian vegetation beyond what is already occurring at the crossings. While there is an impact to the stream width already at the crossings, most of the crossings are well rocked and are stable according to past monitoring, and as such increase in use should not result in more widening. Therefore, the increase in time from six weeks to six months of allowing the property owners to cross the river should not affect the stream width, presence of vegetation and subsequent shade, or the stream temperature. Nor is an increase in sedimentation seen as a problem (See Fish Habitat section below).

Flows from several springs are intercepted by the present trail and create water flow over the trail and into the river. A small pipe intercepts only one of the springs and it is presently undermining the trail. This area appears to be moving due to instability caused by the springs and perhaps by the trail placement itself. An eventual slope failure could occur in this area, which could create more water quality impacts.

Fisheries

Fish Habitat

This alternative extends the crossing time from six weeks to six months (July 1 – January 1) each year which would increase the number of times the property owners cross the river; an estimated 90 total crossings by all property owners. The effects to fish habitat and changes to sediment production, bank stability and vegetation may not be fully realized until this occurs, but are not predicted to be significant.

At the crossings which would not be moved, some additional sediment would be produced, but per previous monitoring (See No Action Alternative, above), there is less release of sediment from the rocks under the tires with each successive crossing. With storm events and fall rains there will be periodic normal increases of sediment in

the river. When this occurs there will be another deposit of sediment on the gravels in the crossing. With vehicular travel on the crossings after these events there will be additional release of sediment. This sediment build-up will be less than occurs in the spring and. therefore should not exceed the standard of no more than 10% cumulative increase in NTU's over background.

Bank stability may decrease with the increased use but over the last few years of monitoring there does not appear to be any additional loss or change. The bank edge at most the crossings are well-rocked and there is no divergence of the pathway that occurs year after year. The crossings that do not have adequate rock protection do appear to continue to have sediment and very small gravel that stays year to year. Areas that are not well-rocked may start widening at the entrance back into the pathway entrance to the crossing. This may be more apparent at high flows and may allow more flow to move into the pathway. As the water recedes this may produce more sediment to the river. A crossing permit may be required by DEQ to allow the increased turbidity.

There should be no additional loss of vegetation at the riverbank at the crossings that would not be moved with this alternative. The property owners use the crossings the same way at each crossing. Each use is on the same pathway. Their pathways leading to each crossing in many places is just the width of the vehicle and directly guides them to the exact crossing location. In the last three years of monitoring the crossings. BLM specialists have seen no additional loss of vegetation. The bank stability and loss of vegetation at the vehicle crossings has not changed or increased over the years of use. The impact to the shoreline of 3.5 miles of BLM administered land is less than .008% (approximately 300 feet of shoreline) of the existing shoreline vegetation.

Water flowing from two perennial springs across the vehicle route will need to be protected from impacts. As part of the existing BO's from USFWS and NMFS the BLM has agreed to fix these spring/side channel crossings to protect the habitat presently used by fry and young fish. Bridges will most likely be placed over the springs as protection.

At crossings that would be modified, changing the routes to avoid Chinook redds should have minimal adverse impact on fish habitat. Modification of the existing route would be altered downstream to eliminate damage to Chinook redds. This alternative proposes to change routes for crossing once the Chinook redds have been verified each year. The new designated crossings would release additional sediment, as occurs in the first crossing each year and there would some displacement of small boulders and cobble in the new crossings. High flow events each year would be expected to continue to rearrange cobble and boulders at those crossings, as it does each year. There may be some loss of habitat with compaction of the streambed. The reductions proposed for crossings #8 and #9 would create fewer impacts to habitat supporting all fish species. The crossings affect approximately 11, 240 sq. feet, which is less than 1% of the total streambed in the 3.5 miles that the SFWW River flows through BLM managed land**.** A permit from ODFW will be necessary to allow the landowners to cross the river outside of the normal "instream work window".

Fish Species

Bull Trout

This alternative will extend the vehicle crossing time period from July1 - January 1. The extended period of use should not affect bull trout spawning, because 99% occurs above Bear Creek towards the headwaters. Young and adults could be temporarily displaced as vehicles cross the river if they are near the crossings at the time. CTUIR monitoring has proven that bull trout adults and young migrate downstream in the SFWW River during the latter part of the year and may even migrate to NFWW River for a portion of the winter months. It is now thought that bull trout will stay near the redd for several months and possible years (CTUIR personal conversation 2005). This will reduce the risk that fry or smolts maybe crushed while hiding in the substrate while vehicles pass. There is a risk that the fry and possible smolts could be affected by the extended crossing time but BLM specialists expect this to be minimal.

Modification of the routes to avoid Chinook redds should have minimal impact on bull trout. There would be no impact on spawning. There would be the same type of displacement and risk of young and adults at the modified alternate crossing as occurs at the regular vehicle crossings. An additional sediment release from alternate routes may cause displacement of bull trout for an additional time period until turbidity returns to base levels. The reductions in the length of vehicle crossings proposed for crossings # 8 and # 9 would create fewer impacts to bull trout habitat.

Summer Steelhead

The extended time period should not affect spawning of steelhead which occurs each year from February–April in the SFWW River. Although redds do occur on the crossings, emergence has occurred each year before July 1 (See Monitoring Reports 2001-2005). Steelhead can rear in the SFWW River for up to two years prior to migration downstream. Vehicles crossing the river could displace fish for a period but likely they would move upstream or downstream with movement in the river. There is a risk that young fry could hide in the gravels and be crushed by vehicles, but usually young steelhead tend to flee disturbance. Fry and possible smolts could be affected by the extended crossing time but BLM specialists expect this to be minimal.

Modification of the routes to avoid Chinook redds should have minimal impact on steelhead. There would be no impact on spawning because spawning and emergence occurs prior to July 1 each year. There would be the same type of displacement of young and adults at the modified alternate crossing as occurs at the regular vehicle crossings. An additional sediment release from alternate routes may cause displacement of steelhead for an additional time period until turbidity returns to base levels. The reductions in the length of vehicle crossings proposed for crossings #8 and #9 would create fewer impacts to steelhead and possible avoidance to fish rearing in those areas.

Spring Chinook Salmon

This alternative extends the vehicle crossing time period from July 1 to January 1, affecting the Chinook salmon spawning and incubation of eggs. In 2001 CTUIR

transplanted adult Chinook salmon into the SFWW River, which has started a run with returnees coming back to the SFWW River. Chinook spawn in late August or early September. Since the run has been established several of the vehicle crossings have been chosen as spawning areas by the Chinook.

In the last three years BLM and other agencies have observed Chinook spawning on the BLM managed land with specific emphasis towards watching the use on vehicle crossings. Results from the last three years of monitoring are:

- There has always been spawning activity on the fifth crossing.
- There has been at least one redd on three other crossings (# 1, # 4 and # 8).
- There has been spawning activity upstream or downstream of crossings # 2, # 3 & # 9.
- There are at least three crossings that have never been used for spawning (Crossing # 6, # 7 & # 10).

Vehicles using the crossings over the extended time period could destroy all or part of any Chinook redd that is created on a vehicle crossing location. There may be enough compaction from the vehicle to crush the eggs, destroy necessary flow or reduce available oxygen. This would reduce or eliminate survivability of the Chinook salmon redds created on the vehicle crossings.

If there were no crossing modifications planned as part of this alternative, there would be a possibility of destroying up to 10 redds each year. This is with the present spawning that is occurring. This may increase over time, if Chinook spawning increases in the next few years with more returnees.

The crossing modifications should protect Chinook salmon redds created on the vehicle crossings. No vehicle use would be allowed on the crossings from approximately August 15 to September 15 each year while the Chinook were choosing their site for spawning. After spawning occurs and redds are located, new pathways through the water would be marked. Based on previous monitoring, BLM specialists expect that the new crossings would have the same entrances and exits as presently occur, but it might be necessary to avoid a new location of a redd by driving a short distance around the redd on the downstream side and then swing back up to the exit point. This will prevent a sediment release over the redd. Moving the crossing route downstream of the redds would most likely occur if there was spawning on crossings # 1-4. The modification on crossing # 5 would be moved downstream but would also be considered a permanent change due to the yearly spawning that occurs on that site. Crossings #8 and #9 would be shortened which would eliminate crossing of most of the potential spawning areas. There has never been any spawning observed on crossings # 6, # 7 and # 10. This modification should protect Chinook spawning and survival of the eggs while in incubation. With this alternative there should be no travel on any known redd.

Wildlife

Driving up the river valley in full-sized vehicles on the trail/road segments and through the wet river crossings during the six-month window between July 1 - January

1 by the property owners would have minimal disturbance to the bald eagle because this area is normally used only for seasonal movement. However, if goshawks, which are extremely sensitive to disturbance during the bonding and nesting season of April 1 - August 30, are found nesting near the trails or crossings, they could be driven off the nest. This is particularly likely during the early months of March through mid-June by both the full-sized vehicles, and the motorcycles and other recreational users/uses.

The extended window for driving would not affect the songbirds, various raptors, or most of the non-game species in the ACEC. Salamanders, newts, Pacific tree frogs, and other amphibians which occupy moist terrestrial areas, small pools associated with spring outflow, and small tributary streams (side channels), would not be significantly affected by the ongoing vehicular traffic. This is partly because the two larger muddy crossings will be modified by building small bridges over them.

However, extending the window of full-sized vehicular access by the landowners (on top of on-going recreational and hunting use) into the winter may disturb the wintering Rocky Mountain elk and white-tail/mule deer population. These species use primarily the south facing upper slopes, but also come down to water in the canyon; which is a natural corridor. This is a critical time for the elk and deer because they have limited energy reserves throughout the fall/winter period to spend on stressful situations such as noise disturbance. Prolonged stress events can trigger early death of game animals; especially of the old, young, or weak.

Archaeological and Historic Resources

No archaeological or historic sites have been identified on or adjacent to the vehicle route and crossings and so no effects are anticipated.

Native American Treaty Rights and Traditional Uses

The alternative would not limit tribal access to the area to exercise traditional fishing or resource gathering. As discussed in the fishery analysis, implementation of the alternatives (coupled with regular monitoring and corresponding adaptive adjustments) should not affect opportunities for traditional fishing over the long term because impacts to fish spawning, rearing, and migration are minimal due to seasonal restrictions and the proposed design and mitigation measures. Vehicle crossing modifications or opening old roadbeds could result in the removal of some individual riparian plants. However, impacts to the habitat for riparian cultural plant communities are minor or unlikely to occur. The amount of vegetation removed would be limited to small areas at three crossings, and to the removal of plants that have become established upon 250 linear feet of old road bed to be re-opened near crossings # 5 and # 8. This is an impact to about 0.05 acres of riparian habitat, which would not adversely affect the riparian cultural plant habitat in the river corridor. The alternative should have no effects on cultural plant populations that may be located on rocky hillsides outside the river riparian zone.

Wild and Scenic River Potential

Under both Alternative 1. A. and 1.B., the increased use of full-sized vehicles for a greater period of time (6 months) and at greater frequencies (90 trips per year) would adversely impact the "Recreational" ORV identified in the Draft Eligibility Report. Increased user conflicts due to increased traffic have the potential to degrade the recreational experience and therefore degrade/threaten the Recreation ORV of the SFWW. Trail users are unaccustomed to random encounters with full-sized vehicles during the peak use season, as well as not expecting full-size vehicles on recreation trails as a whole.

Recreation Resources and Scenic Values

Under both Alternative 1.A. and 1.B., the trail and old road would continue to be a shared use trail/road in certain locations. Fall rains, snow, and freeze/thaw characteristics of the fall and winter months generally cause soils to become saturated and more susceptible to rutting and erosion. The landowner access route would use the old road bed which is co-located with the trail in some segments. Where the road is located on the river bottom gravels, it is very stable and would not be susceptible to late season rutting. Upstream from Elbow Creek there are segments where full-sized vehicle travel could create soft spots, rutting, and erosion during wet periods. The segment of road/trail from crossing #10 to the cabins may be the most susceptible to this impact, especially after Thanksgiving. Late season use by full-sized vehicles on the trail may increase mud and slippery conditions. Where these conditions occur, there would be an impact to the trail surface, increasing maintenance costs and reducing the recreation experience for non-motorized users.

During the fall hunting season, horseback use of the trail system increases significantly. Big game hunting is continuous from mid-August into early December and upland game bird hunting continues into the spring. Pack strings are a popular mode of transportation for hunters. Where the trail is shared, a conflict may occur between horse use and full-sized vehicles. However, given the number of trips anticipated by the landowners this impact is anticipated to be slight.

The safety factor of the No Action Alternative and Alternatives 1. A. and 1. B. are similar in that the trail would not be reconstructed. It would remain in its current location and be maintained at its current design standard. Maintenance actions would take place that would improve trail safety minimally due to improved surface. The section of trail which is on the north side of the river, opposite crossings # 1 and # 2, poses the highest safety risk due to tread width and side slope. This section would not change under these alternatives.

This alternative would slightly affect visual resources. In the short term, changes in the landowner route would require minor vegetation removal and clearing. Machinery would be required. There would be a negative impact to the visual resource. The disturbance would draw the attention of the casual observer. Re-growth and healing of disturbed areas are expected to eliminate this impact within one growing season. In the longer term, late season access may create some contrast in form and line due to

wheel tracks going through vegetation and possibly an increase in muddy areas. This impact is expected to be minimal.

Long-term impacts would be as stated in the No Action Alternative.

Monitoring

Monitoring is an essential part of the determining if the protection management objectives are being met. The BLM proposal for monitoring this alternative includes all monitoring proposed under the No Action Alternative. In addition, the BLM proposes to accomplish additional monitoring for Alternative 1. A. They are:

- Include Chinook spawning survey data from the previous year for determining whether active spawning redds are present at road crossings. Trend data may be used to help establish spawning periods and emergence. This will occur in the spring prior to the July 1 crossing opening date.
- Survey the Chinook redd sites in the project area several times in the spring to verify emergence of fry.
- Monitor Chinook spawning to determine placement of redds. Each redd will be flagged and a new crossing pathway will be determined after spawning has occurred. The crossing will be re-flagged for avoidance of the redd.
- Monitor crossings frequently July 1- January 1 for redds, any damage to crossings or any habitat effected.
- Monitor stream banks and existing riparian vegetation.
- Maintain all field notes and summarize at the end of the year. Include in the data collected: flow, fish or redds observed, date, time, observer.
- Prohibit all instream work except vehicle crossings.
- Maintain stream and road crossings. It may be necessary to stabilize stream banks used at the crossings by adding river rock on occasion to prevent erosion.
- Any sick, dead or injured fish must be reported, preserved and sent into USFWS or NMFS.
- Establish permanent cross-sections at some of the crossings to ensure changes in the stream width are not occurring.
- Establish photo-points at some of the crossings to monitor riparian vegetation.

Cumulative Impacts

The SFWW River is over 27 miles long and the BLM manages 3.5 miles along the river. The crossings occupy less than 1% of the bank area within the 3.5 mile corridor. Since the ACEC management actions were implemented the vegetation and stream banks in the SFWW River corridor has been restored to almost pristine condition. The crossings may affect that portion of habitat and may affect some fish use with the extended crossing time. There may be additional impacts to the stream bank with extended use. There will be additional releases of sediment which will be minimal after the first trips are accomplished. Affects would be minimal to the watershed as a whole and the local segment of the river that flows through BLM managed land. There should be no cumulative impacts to the sub basin or to bull trout, Chinook salmon or

summer steelhead populations from the administration of this proposed alternative. The BLM manages less than 1% of the entire watershed.

No cumulative effects are anticipated to any other resources.

Alternative 1. B. Longer Window of Property Owner Access with Full-sized Vehicles; Allow Existing Routes by Deterring Spawning on Crossings with Suitable Chinook Spawning Gravels

Vegetation

The placement of geo-textile deterrent materials in the streambed at crossings # 4, # 5 and/or # 8 to deter fish spawning in the crossings would not affect vegetation.

Hydrology/Water Quality

Impacts would be the same as from Alternative 1. A.

Fisheries

This modification would have almost no impact to present fish habitat. Before spawning occurs each year in August, material (webbed type of various fabrics) would be laid down across the vehicle crossings that have proven to be used for spawning by Chinook salmon; crossings # 4, # 5 and # 8. This would not alter the streambed but would only deter Chinook from use. The material would be removed at the end of the spawning period in mid-September, and the streambed gravels would be subject to normal flows. There would be no blockages created in the river while the material is in place. The deterrent material placed at the three crossings would occupy approximately 4100 sq. feet of the streambed. This is less that .005% of the total streambed in the 3.5 miles that the SFWW River flows through BLM managed land**.**

Fish Species

Bull Trout and Summer Steelhead

This modification would not affect bull trout spawning, rearing or migration. This alternative would deter any use by fish for spawning but would not prevent any upstream or downstream movement. During installation and removal each year there may be a short time period when fish are displaced for a short time period. There should be no overall effect to either species because bull trout have never used the crossings designated for modification for spawning and steelhead young are rearing at this time.

Spring Chinook Salmon

This modification would not affect Chinook salmon spawning, rearing or migration, except by temporary annual removal of less than .005% of the total streambed in the 3.5 miles that the SFWW River flows through BLM managed land**.** This alternative would deter Chinook spawning on the three crossings but would not prevent any upstream or downstream movement. During installation and removal each year there may be a short time period when fish are displaced.

Wildlife

The BLM placement of spawning deterrent materials in the streambed at crossings #4, #5 and #8 would not affect bald eagle, and likely would not affect potentially nesting goshawks. It also would not affect terrestrial birds, mammals, amphibians or other species.

Archaeological and Historic Resources

No archaeological or historic sites have been found on or adjacent to the vehicle route and crossings and so no effects are have been identified for the atlernative.

Native American Treaty Rights and Traditional Uses

The alternative would not limit tribal access to the area to exercise traditional fishing or resource gathering. As discussed in the Fishery analysis, placement of spawning deterrent material at the crossings would be unlikely to limit traditional fishing opportunities. Except for the displacement of fish at a few vehicle crossings; the alternative would have almost no impact to fish habitat and populations. Effects to riparian or upland cultural plant populations are not anticipated under this alternative.

Wild and Scenic River Potential

This alternative would have the same impacts as Alternative 1. A.

Recreation Resources & Scenic Values

As described above in Alternative 1. A., the trail and other recreation activities would remain unchanged and the encounters between the trail users and the full-sized vehicles would be the same in this alternative as in Alternative 1. A. The impacts regarding access via full-sized vehicles during the wetter months of fall and winter remain the same.

The primary impact to recreation resources would be from placement of the crossing materials in the river. Physical impacts would be slight, as it is assumed that the materials and equipment would be transported by pickup as far as crossing # 8. Potential impacts include slightly increased motorized traffic.

All crossing materials would have an affect on the visual resource. Currently, the visual integrity of the river is nearly pristine. A man-made structure of any type would reduce the visual experience. Until the exact material is identified, the level of impact is difficult to determine. However, no matter what material is used, there will be a change in texture, form, and possibly color. Unless designed very carefully, the structure would draw the attention of a casual observer thus violate the management objectives of the Class II allocation.

Long-term impacts would be as stated in the No Action Alternative.

Monitoring

In addition to the monitoring proposed for the No Action Alternative and Alternative 1. A.., the BLM proposes to accomplish additional monitoring for Alternative 1. B. This will include:

- Monitoring would occur during installation and removal of the deterrent material to make sure there was no entrapment of or harm to fish.
- The areas where the deterrent material is applied will be monitored weekly. Readjustments will be made to any material that appears to be loosening, blocking or interfering with normal use of the stream.
- Additional deterrent material may be added to other crossings in future years if spawning occurs on a different crossing site due to changes in streambed material or preference.

Cumulative Impacts

The cumulative impacts are the same for this alternative as for Alternative 1. A, and no other cumulative impacts have been determined for other resources.

Alternative 2. A. Reconstruct the existing trail to accommodate Class I OHV's (quads); restrict Class I use to property owners - Install two Class I OHV (quad) sized bridges at existing crossings # 1 and # 2

Vegetation

The reconstruction of the trail would widen it from a tread path of 24 inches wide, to 60 to 72 inches wide. Under this alternative, this would disturb the vegetation on the slope just above and below the trail. Where the trail is close to the river, widening activities would be done upslope of the trail rather than on the side nearest the river. Upgrading the trail and allowing use of the trail by the property owners on Class I OHV's (quads) would eliminate the use of the wet stream crossings by full-sized vehicles and the small amount of riparian vegetation currently missing at the crossings would grow back relatively quickly because of the moisture.

Installation of two new OHV-sized bridges at the existing abutments near crossings # 1 and # 2 would create some local loss of vegetation immediately around the abutments, especially on the south side of the river, which has not been disturbed by on-going recreation since the ACEC was closed to vehicular traffic. A diverse population of shrubs and small trees has grown over the old roadbed on the south side. This vegetation would be removed, which could create very localized loss of shade in those areas. On the north side of the river there has been little growth of shrubs or trees immediately on or around the abutments, which attract human use. Ground vegetation such as grasses and perennial plants would not be removed. This would help hold soil in place along the route.

Over 2-7 years, the slopes adjacent to the trail would re-vegetate with lichens, mosses, forbs and small shrubs, and with forbs, shrubs and small trees around the bridge abutments and leading from the existing trail to the abutments.

The long-term impact of the installation of the two bridges would be an increase in amounts of all modes of motorized and non-motorized travel and other recreational activities on the south side of the river. Currently, the south side is used lightly by all. Over time, the vegetation in this more level accessible areas along the trail system could be damaged. The extent of the damage would depend on the presence of the BLM or FS during the high use months. Individuals of BLM and FS-designated sensitive species, if located closely along the trail could be physically damaged or lost. Some additional impacts to other wet areas and riparian vegetation could occur from off-roading.

For the first few years after construction, there may be an additional loss of vegetation as the trail stabilizes. Until some of the areas are completely stabilized there may be an additional loss of shrubs, brush or trees created by the disturbance during construction, but because of the amount of moisture that is located in the canyon everything should re-vegetate rather quickly. Regular maintenance of the trail would include removing fallen trees and other vegetation that has fallen onto the trail. Material taken off the trail would be carefully disposed of in openings and would not be side-cast into the river or along the stream bank where high flows could move it into the river.

Hydrology/Water Quality

The modification to add bridges at the first two crossings would eliminate the steep cliff section of the trail, which is currently producing sediment into the river. The installation of two bridges at the first and second crossing areas would eliminate that portion of the trail that is steep and dissects several springs. Several springs are intercepted by the present trail and create water flow over the trail and into the river. Only one of the springs is intercepted by a small pipe and it is presently undermining the trail. This area appears to be moving due to instability caused by the springs and perhaps by the trail placement itself. Eventually expect that there could be some slope failure in this area which could create more water quality impacts. During construction there may be additional springs that are exposed. This may create additional wet areas along the trail. Some of these areas may need rocking or possible culvert placement.

Other than the site specific and short term impacts, the alternative would not affect the hydrology of the stream, including shape, form or temperature.

Beneficial impacts which would be expected to occur with this alternative include reduced sedimentation, and a negligible increase in riparian vegetation and streambank stability.

Fisheries

Fish Habitat

In this alternative there would be no use of the present 10 stream crossings with full-sized vehicles by the property owners. The elimination of the crossings would end the on-going impacts to the stream habitat, including any compaction to the streambed, release of sediment or changes to the streambed configuration, and lack of shade-producing vegetation at the crossing sites.

The overall affect to fish habitat in the 3.5 mile river corridor would be from re-construction of parts of the trail. Portions of the trail are very close to the river and presently contribute sediment to it. The entire trail is located within the Riparian Habitat Conservation Areas (RHCA) and in some places the trail/road and river share the same stream bank. Impacts from areas that will not need construction should not change. There may be additional sediment from soil displacement from OHV travel by the landowners or unauthorized quad riders

The construction phase of the trail could create the greatest change to riparian vegetation, the stream bank and soil, therefore to the edge habitat for fish. With the loss of some riparian vegetation and displacement of rocks/boulders presently protecting the stream bank, a slight risk is created; possible reduction in stream bank stability where the trail is very close to the river. No material would be taken from the stream bank for building the trail. Widening the trail in the bottomlands would expose bare soil. This could create additional sediment in the river during very high flow events or rain storms.

Installation of the bridges on the old abutments would create some localized loss of vegetation and shade on the river, especially the south side.

The first portion of the trail would be eliminated with this modification. The trail across the bridges would be opened up for all users to eliminate the steep section of the trail. This would bring all the users to the south side of the river which would create additional impacts to the riparian vegetation. When all users of the trail are transferred to the south side of the river we would expect some additional impacts. There could be some additional impacts to other wet areas and riparian vegetation from off-roading.

Fish Species

The only affect to any fish species with Alternative 2. A. would be to habitat (See above under Fish Habitat). The biggest potential to affect any fish species will be from sedimentation created during construction and constant use. It is not predicted to exceed the turbidity standards.

There is minimal risk that the effects from this alternative would impact spawning, rearing, life stages, or migration for bull trout, summer steelhead or Chinook salmon with this alternative.

Wildlife

Threatened (Bald Eagles) and BLM Sensitive (Goshawk)

The construction activities to build the two OHV bridges at the existing bridge abutments near crossings # 1 and # 2 and to upgrade the trail on the north side of the river, would not affect bald eagles. The construction activities to build the two OHV bridges at the existing bridge abutments near crossings #1 and #2 and to upgrade the trail on the north side of the river, would not affect bald eagles. If there are goshawk nests in the ACEC, construction activities occurring during the April 1 through August 30 will be mitigated according to the Goshawk Management Plan (Reynolds et al. 1992).

The increase in amount and timing of use on the trail by property owners or unauthorized OHV's (the recreating individuals who do not abide by the trail designation) would create a level of noise and disturbance that is less conducive to goshawk specifications of nesting and rearing of young. If installed, the bridges may allow more recreational use of all categories on the south side of the river. Currently, some unauthorized Class I OHV's (quads) cross the river at low flow and recreate on the south side. Any additional amounts of unauthorized Class I OHV use would likely be most noticeable on the south side, where relatively little use occurs except around Elbow Creek, but may not be of numbers that could disturb potential goshawk nest sites.

Terrestrial and Aquatic

Construction activities would cause short-term physical impacts to amphibians and existing habitat along the trail such as songbirds and large and small animals. These activities would occur during the mid to late summer, not extending to the timing of critical winter range.

Archaeological and Historic Resources

No archaeological or historic sites have been found on or adjacent to the vehicle route and crossings and so no direct effects have been identified for the alternative. An examination of the existing vehicle track did not locate any archaeological resources at or between crossings # 1 and # 2. As bridges would be placed at the location of previously disturbed areas, direct impacts to archaeological resources from construction are not expected. Vehicle use, to the extent that it is limited to the existing roadbed between crossings # 1 and # 2, would have minor impacts to the riparian vegetation, mostly by maintaining the present opening through the adjacent dense undergrowth, and no direct impacts to undetected archaeological resources are anticipated. However any unauthorized motorized off-road vehicle use of the flat between crossings # 1 and # 2 could result in damage and removal of vegetation within the riparian area over the long term. Removal of vegetation outside the roadway perimeter between crossings # 1 and # 2 could expose previously undetected archaeological resources, for which additional monitoring and enforcement measures would be needed to prevent damage by erosion, casual recreation use or unauthorized actions. If riparian conditions begin to deteriorate under this alternative, periodic

monitoring would be implemented to check for undiscovered resources outside the impact area of bridge construction. At present, due to dense shrub ground cover it would be difficult to investigate the flat by traditional subsurface probing. Design features would allow the installation of exclosure fences if monitoring shows deterioration of riparian vegetation. Exclosure fences would lessen the potential for unauthorized use and the exposure of previously undetected archaeological sites.

Native American Treaty Rights and Traditional Uses

The alternative would not limit tribal access to the area to exercise traditional fishing or resource gathering. There could be a localized reduction of riparian vegetation and associated increase in sedimentation from bridge installation and public recreation use of the flat between crossings # 1 and # 2. As described by the Fishery analysis, with the proposed elimination of all wet crossings and other design features to reduce sediment delivery, the alternative would have minimal affect on fish habitat or populations and therefore would be unlikely to limit opportunities for traditional fishing. The flat between crossings # 1 and # 2, (which is a small portion of the riparian area along the SFWW on BLM lands) could be affected by unauthorized use over the long term, reducing a small area of potential habitat for cultural plants. Design features to install riparian exclosures would mitigate the potential effect to the riparian cultural plant habitat. The alternative should have little to no effect on cultural plant populations that may be located on rocky hillsides beyond the river riparian zone, since there are no easily accessible upland areas between crossings # 1 and # 2.

Wild and Scenic River Potential

Under Alternative 2. A., the increase in traffic from private landowner Class I (quads) use would have a “slight” impact to the “Recreational” Outstandingly Remarkable Value identified in the Draft Eligibility Report. The impact would occur from the introduction of vehicles not commonly associated with the SFWW trail. However, there is an established acceptance of motorized vehicles by other trail users (i.e. horses, motorcycles, mountain bikes, hikers), and therefore the impacts would be less minimal. Although there would still be an impact, it would not be expected to significantly reduce the overall “Recreational” ORV determination for the SFWW.

Recreation Resources & Scenic Values

Under this alternative the trail would be re-designed to accommodate Class I (quad) motorized use for landowners only. Public use of Class I vehicles will continue to be prohibited. Given the wider and more easily negotiated trail, all wet crossings would be eliminated. There are many environmental consequences to recreation and visual resources that are common to both Alternatives 2.A. or 2.B.

One objective of Alternative 2. A. is to design a trail that would meet the “easiest” classification for Class I vehicles allowing improved landowner access. The existing SFWW trail varies in width depending on terrain and sections that are shared as a road. Much of the trail already meets the 50-60” width recommended for a Class I “easiest” classification. In many cases, by simply cleaning out the slough on the

inside of the cut bank a width could be obtained that would be acceptable. However, other segments of the trail would remain "more difficult".

The following table is a simplification of trail design guidelines illustrating the changes expected from the existing Class III (motorcycle) to Class I (quad) trail associated with each difficulty level. Construction of a trail following these guidelines has varying degrees of affect on many resources.

	Easiest		**More Difficult**		**Most Difficult**	
Element	**Class I**	**Class III**	**Class I**	**Class III**	**Class I**	**Class III**
Max. Pitch	10-15%	15-10%	15-30%	20-30%	> 30%	>30%
Sustained Grade	<10%	<20%	10-25%	<25%	>25%	>25%
Clearing Width	84"	48"	50-72"	36-48"	60" max.	48"max.
Tread Width						
Sideslope <10%	50"	18"	50"	18"	50"	12"
Sideslope 10-50%	60"	24"	60"	18"	50"	12"
Sideslope 50-70%	NR*	NR*	60"	24"	50"	18"
Sideslope >70%	NR*	NR*	60"	NR*	50"	24"

* NR = Not Recommended

Only the landowners would have authorized quad access on the trail. Currently the trail width and topography at the steep section of trail (north side between crossings 1 and 2) creates a natural "pinch point" that precludes unauthorized quad use originating at the trailhead. Installation of bridges or widening of the trail and elimination of this "pinch point" would exacerbate the problem of unauthorized quad use.

Widening the trail will affect Class III and other users. Currently the trail offers excellent single track trail characteristics which are in short supply. Recreationists who appreciate single track trails will be negatively affected by widening the trail. There is a high probability that widening the trail would entice many Class III enthusiasts to travel at much greater rates of speed

Visual resources would be affected in the short term during trail construction activities. Increased equipment, disturbed soils and vegetation, and noise would all be present during construction creating contrasts in form, texture, and color. The wider trail width would affect the visual resource in the long term, even though the impacts would soften over time. Generally, a wider trail width requires more exposure of soils and rock formations when cuts are necessary. Side casting would not be permitted when visible from the river or other known observation points. Trail modifications

would draw the attention of a casual observer thus violating the management objectives of the Class II visual allocation. Careful layout and design can mitigate some of the visual impacts.

Environmental consequences that are unique to Alternative 2. A. follow:

Safety is improved greatly by building bridges across the SFWW near crossings # 1 and # 2 thereby eliminating a narrow section of trail with a side slope of approximately 50%-70%. The trail would be rerouted to the south side of the river and follow the old road grade which is on a flat bench. A second bridge would bring the trail back to the north side of the river and again follow the old road grade. Alternative 2. A. greatly reduces the safety risk by installing two bridges which cross the SFWW and by avoiding a "most difficult" section of existing trail. The new section of trail accessed by the bridges would then meet "easiest" standards. The section of trail between crossings # 1 and # 2 would be abandoned and rehabilitated to its original condition as much as possible. Alternative 2. A. would be the safest route for landowners and the recreating public, whether motorized or non-motorized. The tread width and sideslope would be enough to meet or exceed standards for an "easiest" Class I or Class III trail.

The bridges would be located within the first mile of the trail past the trailhead. This first mile receives up to 90 percent of the use that occurs. Public use of these bridges would reduce the risk of someone trying to ford the river on foot. It is anticipated that the bridges would be very popular for their aesthetic values. Visitors truly enjoy being able to experience the values of a river from the vantage point of a bridge.

Installation of these bridges would introduce a human use impact to the south side of the river which does not currently exist. Prior to the bridge removal in 1996, the flat bench between the bridges was a popular destination site. It offers great settings for picnicking and fishing. It is likely that increases in such use will have an affect on riparian values. Currently, this bench has recovered well from previous human use impacts. Re-installation of the bridges will probably cause that trend to reverse.

The trail segment between crossings # 1 and # 2 would be eliminated with the installation of bridges. Therefore, the segment of trail that would require the most significant cut slope and be the most visually intrusive would be avoided. Installation of bridges introduces a cultural modification that would detract from the nearly pristine condition of the river. The bridges themselves would draw the attention of a casual observer thus violating the management objectives of the Class II allocation. However, by utilizing design techniques the contrasts in form, line and color can be reduced and softened.

Long-term impacts include:

- increase in unauthorized use
- visual resource impacts
- change in trail experience
- human use impacts on south side bench

- improved safety

No cumulative effects are known.

Monitoring

The main objective and goal for this alternative would be to monitor the trail use and condition on a regular basis. It would be imperative to have a monitoring program to known the extent and impacts of unauthorized use.

Monitoring for this alternative should include:

- Monitoring all users on a continual basis, especially weekends and during heavy use periods
- Monitoring the condition of the trails for maintenance and use
- Monitoring all vegetation in the riparian area to make sure there are no additional impacts.
- Monitoring all signing and informational boards to make sure it is appropriate. Replace all signing as necessary.

Cumulative Impacts

There should be fewer impacts to fish habitat, fish species and riparian vegetation due to the elimination of vehicles crossing the river and the road/trail outside of the designated trail being re-vegetated. However, these benefits may be offset by the expected increase in visitor use on the south side of the river.

Alternative 2. B. Reconstruct the Existing Trail on the North Side of the River to Accommodate Class I OHV's Restrict Class I Use to Property Owners. No Class I OHV Bridges Would Be Constructed.

Vegetation

The reconstruction of the trail and location of a new trail section above the current steep section near the trailhead would have short-term impacts to the vegetation along the trail; see Vegetation section for Alternative 2. B. specific to the trail upgrade. The long-term impact of the widening upgrade to the trail is that there would be an increase in all modes of recreational travel because the trail is better and safer, both authorized and unauthorized forms (Class I OHV use by the public). Impacts would be similar to those from Alternative 2. A., except that the south side of the river would not receive the increased use/impacts.

Hydrology/Water Quality

The upgrade of the trail to Class I OHV (quads) would involve short term construction impacts, which would be mitigated by careful construction practices. Other than the short term and specific impacts discussed in other sections, the alternative would not affect the hydrology of the stream, including shape, form or temperature. Increases in unauthorized OHV quad use could create bare soil and erosion that would increase sedimentation into the stream.

Fisheries

Fish Habitat

The modification to eliminate the installation of the bridges at the first two crossings will keep the existing steep section of the trail that is currently producing sediment to the river, and thus potentially impacting fish gravels. The entire existing trail would be reconstructed to meet OHV width standards with only one exception. A portion of the steep section between the first and second stream crossings would be reconstructed above the existing trail to meet OHV standards. This would be re-constructed along the path of a temporary trail used after the 1996 flood before the FS built the current trail section. There are several springs that will be dissected with the new trail creating further instability of the entire slope. No major vegetation will need to removed because most of the trees and shrubs were removed with the initial construction. There will be clearing of trees that have fallen over the trail. The trail will move the OHV riders further away from the river and with proper construction could create fewer impacts than widening the trail at its present location. However, there will continue to be impacts from creating trails across an area that is steep and has so many wet areas from springs. Proper drainage features including culverts, absorbent materials or other drainage features may be necessary to protect the springs, water quality and stability of the area.

The existing trail on the steep section will continue to stay open for all other users. The impacts created on the present trail will continue to exist. Presently there is water flowing from springs over the trail and into the river. This portion of the trail will continue to contribute sediment to the river.

Alternative 2. B. will not create any further loss of vegetation than was already explained in Alternative 2 for the widening of the entire trail to OHV standards. There will be no loss of vegetation on the south side of the river because no bridges will be installed. There may be some shrub removal on the new trail but there will be no vegetation removed that is producing shade to the river.

Fish Species

The only affect to any fish species with Alternative 2. A. would be to habitat (See above under Fish Habitat). The biggest potential to affect any fish species will be to the fish spawning gravels from sedimentation created during construction and continued use. It is not predicted to exceed the turbidity standards.

There is minimal risk that the effects from this alternative would impact spawning, rearing, life stages, or migration for bull trout, summer steelhead or Chinook salmon with this alternative.

Wildlife

Threatened (Bald Eagles) and BLM Sensitive (Goshawk)

The construction activities to upgrade the trail on the north side of the river would not affect bald eagles. If there are goshawk nests in the ACEC, any construction activities occurring during the March 1 -August 30 time period would potentially make the goshawks abandon a selected nest site, causing potential egg or chick loss. This is most critical between March 1 and about June 15.

The increase in use on the trail by authorized OHV's (property owners) or unauthorized OHV's (the recreating public who do not abide by the trail designation would also create a level of noise and disturbance less conducive to goshawk nesting and rearing of young.

Terrestrial and Aquatic

Construction activities would cause short-term physical impacts to amphibians and existing habitat along the trail, and would disturb songbirds and large and small animals. These activities would occur during the mid to late summer, so would not extend to the critical wintering area.

Archaeological and Historic Resources

There should be no effect to archaeological or historic resources from widening the USFS trail at its present location and confining Class I (quad) OHV use by property owners to the existing trail route. The segment of proposed new trail would avoid archaeological sites, if any are found, and would thus have no effect.

Native American Treaty Rights and Traditional Uses

The alternative would not limit tribal access to the area to exercise traditional fishing or resource gathering. As described in the Fishery analysis, the alternative would have minimal affect on fish habitat or fish populations, and is unlikely to limit future traditional fishing opportunities. There could be a local reduction of riparian plants at spots where the existing OHV trail approaches the SFWW river bank; however, widening the existing trail would not reduce overall habitat for riparian cultural plants. The alternative should have only minor effects on cultural plants that may be located on rocky hillsides, since widening the trail and establishing a new Class I OHV route on the north slope of the river would affect only about 1/5 acre of upland habitat, which is otherwise abundant on the steep slopes in the ACEC.

Wild and Scenic River Potential

Impacts from Alternative 2. B. would be the same as from Alternative 2. A.

Recreation Resources & Scenic Values

Alternative 2. B. would allow the trail to be reconstructed to Class I standards and remain fully on the north side of the SFWW. As in Alternative 2. A., only the landowners would be authorized to use Class I vehicles. The general public would be

limited to non-motorized access or using Class III vehicles only. Landowner access via full-sized vehicles would be eliminated. Under this alternative no bridges would be built to avoid the most difficult section of trail.

Implementation of Alternative 2. B. would reduce safety of trail users when compared to Alternative 2. A. The most difficult section of trail and/or the reroute would be more hazardous than a trail that utilizes bridges and stays on a flat bench. The section of trail crossing the steep slope and area of seeps would require more maintenance.

Impacts from widening the trail across the steep sideslope section (north side between crossings 1 and 2) would have an impact on visual resources. The cutbank into the rock face would draw the attention of the casual observer. Sidecasting of waste materials would be prevented but the change in line and texture would be an impact.

Other impacts to recreation resources would be the same as described under Alternative 2. A.

Long-term impacts to recreation and visual resources remain the same as Alternative 2. A. No cumulative effects are known.

Monitoring

Monitoring is the same as for Alternative 2.A. make sure it is appropriate. Replace all signing as necessary, when it has been removed.

Cumulative Impacts

There should be less impacts to fish habitat, fish species and riparian vegetation due to the elimination of vehicles crossing the river and the road/trail outside of the designated trail being re-vegetated. However, these benefits may be slightly offset by the extra quad trail being opened and its added sedimentation potential.

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APPENDICES

Appendix 1. Spill Prevention Plan for Vehicular Access of the SFWW

Appendix 2. Maps

Appendix 3. Photos

Appendix 4. Water Quality Restoration Plan for the South Fork of the Walla Walla.

Appendix 5. Bibliography