

Spencer Creek Riparian Treatments EA No. OR014-99-11

INTRODUCTION

Purpose of and Need for the Proposed Action

In the Spencer Creek Pilot Watershed Analysis, August 1995, restoration treatments for the Riparian Reserves in the Spencer Creek watershed were identified. These proposed treatments were prescribed burning and/or light understory thinnings, along with a reduction of excess ladder and ground fuels in some areas to reduce the threat of catastrophic disturbances. These treatments are also designed to help protect and maintain the areas within the Riparian Reserves where a residual pine component is threatened by excessive stem densities.

In the Lower Spencer Creek Forest Health Treatments Environmental Assessment, OR014-96-02 (Lower Spencer Creek EA), the forest stands within the matrix were described as follows: *Many of the forest stands in the proposed project area can be generally described as multi-aged, multiple canopy stands. Many of the stands that are proposed for treatment contain a residual large tree overstory component of pines, Douglas-fir and true firs, and a dense, stagnated understory component of true firs. Past management practices coupled with the suppression of natural fire have contributed to the overstocking primarily of the understory. This has contributed to a decline in forest health (stand resiliency) and an increased fire hazard in some forested areas. Forest health in this EA is defined as the resiliency of the residual stands to sustain themselves in the process of natural disturbances such as insect outbreaks and wildfire. A more detailed discussion of forest health can be found in the Spencer Creek Pilot Watershed Analysis, pages 4-18 to 4-56, and in the Final Klamath Falls Resource Area Management Plan and Environmental Impact Statement, September 1994 (KFRA FEIS), pages 3-63 to 3-66.*

Since many of the stands within the Riparian Reserves in the Spencer Creek watershed are similar to the matrix lands, the Lower Spencer Creek EA included a proposal in the Proposed Action alternative for vegetation treatments (thinnings) within the Riparian Reserves. These treatments were designed to achieve Aquatic Conservation Strategy objectives such as acquiring desired vegetation characteristics (e.g., maintaining a pine component), controlling stocking, and reducing excess fuels. These treatments were proposed as part of any timber sale that would take place in the area covered by the EA. The BLM interdisciplinary team that was responsible for designing the specific treatment methods for the Riparian Reserves on Spencer Creek was in agreement that treatments should be done. However, there was concern about the level of ground disturbance that would result from mechanical harvesting on some of the steeper slopes above Spencer Creek. The team decided to pursue treating the Riparian Reserves outside of the normal

timber sale process. In the Decision Record for the Lower Spencer Creek EA, a statement was included that no harvesting equipment would be allowed within the Spencer Creek Riparian Reserve area, except on existing roads.

The purpose of this Environmental Assessment is to analyze proposed forest health treatments for the Riparian Reserves on Spencer Creek. The analysis will provide the public with information about these treatments and assist the decision maker in determining if an environmental impact statement needs to be prepared. The Lower Spencer Creek EA will be incorporated by reference where the resources and impacts are substantially the same.

Conformance With Land Use Plans

The proposed treatments are in conformance with the following Plans and Environmental Impact Statements:

- Klamath Falls Resource Area Record of Decision (ROD) and Resource Management Plan (RMP) (June 2, 1995). (KFRA ROD/RMP)

- Final Klamath Falls Resource Area Management Plan and EIS (FEIS) (Sept. 1994). (KFRA FEIS)

- Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl. (April 1994) Also known as the Northwest Forest Plan (NFP).

- Final Supplemental Environmental Impact Statement on Management Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of Northern Spotted Owl (Feb. 1994) (FSEIS).

- Klamath Falls Resource Area Fire Management EA#OR-014-94-09 (June 10, 1994)

- Klamath Falls Resource Area Integrated Weed Control Plan EA (July 21, 1993).

- Spencer Creek Coordinated Resource Management Plan (June 1994)

Additional information supporting this environmental assessment can be found in the Spencer Creek Pilot Watershed Analysis of August 1995 (Spencer Creek WA).

PROPOSED ACTION AND ALTERNATIVES

Alternative 1 (Proposed Action)

The proposed action is the thinning of dense understory patches, mainly white fir, within the Riparian Reserves on Spencer Creek. The proposed treatment area encompasses approximately 70-80 acres in T38S, R6E, Section 21, SW $\frac{1}{4}$ and SW $\frac{1}{4}$, SE $\frac{1}{4}$, and Section 28, W $\frac{1}{2}$, NE $\frac{1}{4}$ (see attached maps). Removal of small trees from under existing larger (20"+ dbh) ponderosa and sugar pines would also be done, as would release cutting of brush and competing trees around smaller individual pines. These thinnings would be done by hand crews using chainsaws to limit the amount of disturbance to the soils, vegetation, and wildlife habitat within the Riparian Reserves. After thinning, the cut material would be bucked and lopped into smaller pieces and piled in openings within the treatment area for burning at a later time.

Within the 320' Riparian Reserve on each side of Spencer Creek (640' total Riparian Reserve), the proposed thinning prescription would be as follows:

No cutting, slash, or disturbance will be allowed within 40' of each side of the active stream channel (80' total no-cut buffer along the stream).

Approximately 170 leave trees per acre conforming to an average 16 foot spacing shall be identified. The largest, healthiest, best-formed leave trees shall be selected in the following species priority: 1) ponderosa pine and sugar pine, 2) Douglas-fir, 3) incense cedar, 4) white fir.

Only 10" dbh and smaller trees will be cut.

Clear under larger (20"+ dbh) ponderosa/sugar pines to 10' out from the dripline or a 25' radius from the tree, whichever is greater.

All cut material will be lopped and/or bucked into 48" or shorter pieces and piled in openings within the treatment area.

Up to 3 white fir thickets per mile of stream will be marked as no-cut to provide habitat. These thickets will each be up to $\frac{1}{4}$ acre in size.

Additional individual leave trees may also be identified for habitat purposes.

Following the thinning, the piled material would be burned in the late fall or early winter during a low wildfire risk period. Planting of pine species in some of the existing openings could be done during the following two spring planting seasons.

Alternative 2

Alternative 2 would have the same treatments as the Proposed Action except that no cutting, slash, or disturbance would be allowed within 80' of each side of the active stream channel (160' total no-cut buffer along the stream).

Alternative 3

Alternative 3 would have the same treatments as the Proposed Action except that no cutting, slash, or disturbance would be allowed within 120' of each side of the active stream channel (240' total no-cut buffer along the stream).

Alternative 4 (Dropped from Consideration)

Alternative 4 would be the use of only prescribed fire to reduce the density of the shade-tolerant patches and individual trees, mainly white fir.

This alternative was dropped from consideration because some of the stands need to be thinned prior to underburning because of the ladder arrangement of fuels and density of stands. Underburning without some type of pretreatment and removal of fuels could result in excessive and unacceptable mortality to desired tree species and potentially significant impacts to other resources including soils, riparian habitat, wildlife, and fisheries habitat.

Alternative 5 (No Action)

Under the No Action alternative, no treatments of the forest stands within the Riparian Reserves on Spencer Creek would be implemented.

AFFECTED ENVIRONMENT

The area proposed for treatment is shown on the attached maps. The proposed treatment area encompasses approximately 70-80 acres in T38S, R6E, Section 21, SW $\frac{1}{4}$ and SW $\frac{1}{4}$, SE $\frac{1}{4}$, and Section 28, W $\frac{1}{2}$, NE $\frac{1}{4}$.

A description of the proposed treatment area and the resources affected is found in the Lower Spencer Creek Forest Health Treatments Environmental Assessment, OR014-96-02, and in the Spencer Creek Pilot Watershed Analysis, August 1995.

ENVIRONMENTAL IMPACTS

The following resources are not present or would not be impacted by any of the alternatives: prime and unique farmlands, mining claims, paleontological resources,

wilderness, roadless areas, research natural areas, special areas (Areas of Critical Environmental Concern), wild and scenic rivers, Native American religious sites, wild horses/burros, rural interface areas, or hazardous materials.

For all alternatives, no direct or indirect disproportionately high or adverse human health or environmental effects to minority or low income populations are expected to result from implementation of the proposed action or the alternatives.

Vegetation/Forest Health Issue

A management recommendation and restoration opportunity identified in the Spencer Creek Pilot Watershed Analysis (see pages 4-113 to 4-121 and page 4-39 of Spencer Creek WA) was the enhancement of the pine and Douglas-fir component (early seral, shade-intolerant species) to improve the health and resiliency of the forested stands. The thinning of the overstocked, primarily understory clumps of second growth around early seral species like the pines and Douglas-fir would have a positive effect. Additional growing space would enhance the resiliency of the residual trees and reduce the ongoing mortality of these species. This would also provide additional water, nutrients, and solar radiation to the residual trees resulting in increased growth rates. This would result in an increase in the number of large trees within the riparian area to provide shade for the stream and future large woody debris.

White fir stands are very sensitive to disturbance, and ongoing mortality may continue after the treatment but should be minimal. Mortality of a limited extent is beneficial as it provides snag recruitment habitat.

Under Alternatives 1, 2, and 3, the positive effects as described above would occur.

Under the No Action Alternative, these positive effects would not be realized. With no treatment the white fir stands would continue to increase in both density and area with resultant negative impacts to the pine and Douglas-fir from the competition for space, light, soil nutrients, and water.

Soil Resources

Potential direct and indirect adverse impacts to soils and soil productivity include compaction, displacement, removal of soil surface cover, and changes in nutrient status. Under Alternatives 1, 2, and 3, the potential for negative impacts to the soil resource would be low due to the use of chainsaws and manual labor. The burning of the piles of cut material would cause some negative impacts to the soils directly under the piles. The high temperatures from the concentrated burning could cause negative impacts to the nutrient capital and organic matter in the soils. The number of piles per acre would be small, however, so the total impact to the treatment area would be minor. Short-term impacts from soil displacement during treatment activities would be minor due to the low impact methods proposed.

There would be no long-term impacts to the soil resources from any of the alternatives, including the No Action alternative.

Water Resources

Direct and indirect short-term impacts to water quality from sedimentation would be minimal under all alternatives due to the low level of soil surface disturbance from the proposed treatments. In the long-term, enhancement of the pine and Douglas-fir trees would provide for development of a canopy of well-spaced, larger trees that would provide shade and recruitment of large woody debris to the stream. This should have a positive effect on the stream temperature from increased shading and the channel-forming processes associated with large woody debris. See the Aquatic Animals section below for more discussion of these effects. These positive effects would be realized under Alternatives 1, 2, and 3 with a diminishing positive effect as the no treatment buffer is increased moving from Alternative 1 through Alternative 3.

Direct and indirect impacts to water quantity would be minimal under all alternatives. Due to the extent of previous timber harvest activities and road construction in the analysis area, it is likely that stream flow increases or changes in the timing of peak flows, if any, have already been realized. Because of this and the type of activity proposed in the alternatives, there would be little or no potential for increasing annual water yields above historic levels.

Riparian Resources

The positive impacts to the vegetation and water resources described above would provide for the enhancement of the habitat for riparian-dependent species along Spencer Creek. The proposed area for treatment is a confined valley bottom reach of Spencer Creek. The riparian zones in this type of reach function to provide large woody debris to the channel and canopy closure for shading. The proposed action would help enhance and restore the component of large, well-spaced trees that provide shade and large woody debris. Additional benefits of the proposed action to wildlife and vegetation are discussed under the Aquatic Animals, Wildlife and Special Status Animal species, and Vegetation/Forest Health Issue sections.

Alternatives 2 and 3 would also provide positive benefits as described above, but on a decreasing level as the no treatment buffer is increased.

The No Action alternative would result in long-term negative effects to the riparian resources. The continued presence of large amounts of shade-tolerant clumps of white fir will result in a decline in forest health (stand resiliency) and an increased fire hazard. This will result in negative impacts to the riparian zones ability to provide large woody debris to the channel and canopy closure for shading.

Aquatic animals

There are no Federal or state threatened, endangered or candidate aquatic species or species known to be in the project area or immediately downstream of the project area that could be impacted by downstream effects. Aquatic species of concern in the area potentially influenced by the project include redband trout, Klamath smallscale sucker, and Pacific giant salamander.

Lost River suckers and shortnose suckers, federally listed endangered species, occur in the Klamath River and the JC Boyle reservoir. Spencer Creek flows into the JC Boyle reservoir which then flows into the Klamath River. The Proposed Action and Alternatives 2 and 3 would not affect water quality or quantity in the Klamath River and therefore would have no effect on these species.

Because of past management practices which included streamside timber harvest and stream cleaning (removal of dead wood from the stream bed), the lack of large woody debris may be limiting fish habitat and sediment transport processes in the watershed (Spencer Creek Federal Pilot WA 1994) in the project reach. Additionally, recent flood events (25-50 year return intervals) have pushed much of the existing dead wood out of the stream banks where it no longer interacts with the channel to provide habitat and channel forming function. Because Spencer Creek has a channel width of over 15 ft. (K. Bail, BLM files), effective large wood for in-channel habitat forming processes is generally over 15" dbh with the root wad attached. Decay-resistant species such as ponderosa pine, lodgepole pine, incense cedar, and Douglas-fir are more desirable than white fir because of their longevity in the aquatic environment. Potential limiting factors for redband trout in the area include lack of large woody debris, reduced stream shading, and lack of pool habitat (Spencer Creek WA, WeCo 1993). Future large woody debris recruitment potential is diminished due to past harvest, increased risk of catastrophic fire, and increased solar radiation from reduced tree canopy height. Spencer Creek is listed as water quality limited for summer water temperature for not meeting the cold water fish spawning and rearing standard.

Long-term impacts to the aquatic environment could be beneficial under alternatives 1, 2, and 3 if objectives for increased residual tree growth, culturing of desirable tree species, and reduced risk of catastrophic fire are realized. Near-term small-diameter woody debris recruitment could be reduced from thinning. Long-term recruitment of large-diameter woody debris may increase from thinning. An increase in a steady supply of large woody debris recruitment for large, desirable tree species could improve habitat complexity and increase the amount of persistent pool habitat in the long term (Beechie et al, in press). Pools provide high quality spawning and rearing habitat for redband trout and can decrease width/depth ratios.

The ability of the different alternatives to positively affect the aquatic environment diminishes as the treatments are moved away from the stream (moving from alternative

one to three). Mature, large, canopy-forming trees within 100 feet of the stream contribute nearly all of the potential stream shading and large-diameter wood entering the aquatic environment.

Short-term impacts to aquatic species from sedimentation would likely be minimal if BMPs for the project are followed. A minor short-term reduction in stream shading could occur from thinning within 100 feet of the stream.

Wildlife and Special-Status Animal species

The proposed area is a multistoried stand with good canopy coverage. These types of areas provide conditions used by northern spotted owls and northern goshawks.

The proposed treatment area is considered summer range for big game. Deer and elk use the riparian zone as travel corridors and also as thermal cover to escape the high temperatures during hot summer days. The structure of a riparian zone allows good air movement and cooler temperatures during the summer. The presence of available water is also an attractant to all wildlife.

The riparian zone currently contains many old-growth pines. These trees are primary habitat features for special-status species listed under the NFP, namely the white-headed woodpecker and the pygmy nuthatch. Maintaining these trees in a healthy condition is important. The area also contains a historic bald eagle nest site. Even though the original nest has blown out, the eagles continue to use the riparian area and may have an alternate nest site in the area that has not been located.

The proposed action seeks to improve the conditions for the old-growth pine and reduce fuel buildup around the older trees. These actions should maintain or improve the habitat conditions for the special-status species listed above. Reduction of fuel loads will reduce potential loss of this habitat due to wildfire.

The no action alternative would have a detrimental long-term effect by maintaining high densities that would reduce the health of the stand and increase the potential for fire damage.

SEIS Special Attention Animal Species (Survey and Manage)

The project area was surveyed in the fall of 1999 and spring of 2000 for Survey and Manage mollusks as per the Survey Protocol for Terrestrial Mollusk Species from the Northwest Forest Plan, Draft Version 2.0 (BLM-Instruction Memorandum No. OR-98-097) specifically for the following species: *Helminthoglypta hertleini*, *Monadenia chaceana*, *Pristiloma arcticum crateris*, *Prophysaon coeruleum*, *Prophysaon dubium*, and *Trilobopsis tehamana*.

None of the mollusk species were found during the surveys. No management

recommendations for mollusk habitat would be included for any of the alternatives.

Special Status Plant Species

Portions of the project area within section 21 were surveyed for special-status vascular plant species in 1987 for the Spencer North Timber Sale, and additional portions were surveyed in 1989 for the South Spencer Timber Sale. Neither of these surveys found any special-status plant species. The entire area was surveyed again in 1995 under a botanical inventory contract. No special-status vascular plant species were found within this project area.

SEIS Special Attention Plant Species (Survey and Manage)

This project was surveyed in the fall of 1999 and spring of 2000 for S&M fungi as per the Survey Protocol Version 1.2 (BLM-Instruction Memorandum No. OR-2000-018) specifically for the seven Protection Buffer and Component 2 fungi including: *Bondarzewia mesenterica* (= *B. montana*), *Otidea leporina*, *O. onotica*, *O. smithii*, *Polyzellus multiplex*, *Sarcosoma mexicana*, and *Sowerbyella* (= *Aleuria*) *rhenana*. None of the target S&M fungi species were found in either the project area or neighboring Unmapped Late Successional Reserves. However, *Gomphus floccosus* (Scaly Chanterelle), *Sarcodon imbricatum* (Hawks Wing), *Mycena lilacifolia*, and *Sarcosphaera coronaria* (Crown cup), which are all Component 3 fungus species, and *Gyromitra montana* (False morel), *Gyromitra melaleucoides*, and *Gyromitra esculenta* which are all Component 3 and 4 fungus species were found within the project area. The NFP states to manage high priority sites for Component 3 organisms and to conduct general regional surveys for Component 4 organisms. There are no specific management recommendations for Component 3 fungi including these fungi species. Since manual treatment methods are to be employed during project work, limited surface disturbance is expected under the proposed alternative. Therefore, no significant impacts are expected for these species, and no specific project design features or mitigation measures are proposed.

The Component 1 and 3 fungal species *Plectania milleri* (Miller's black cup) was found during the surveys. Management recommendations for Component 1 fungi are to manage known sites. All located sites for this species would be protected with a no disturbance thermal clump buffer under Alternatives 1,2, and 3. These protection buffers should provide effective habitat protection for the species.

Bryophyte surveys have not been conducted in the project area, but plans are to conduct these surveys in the spring of 2000. *Tritomaria exsectiformis* and *Marsupella emarginata* var. *aquatica* are Component 2 liverwort species which may have potential habitat in the area. *Buxbaumia viridis* and *Tetraphis geniculata* are Protection Buffer moss species which also may have potential in the area. If any species are found, management would be based upon the most current Northwest Forest Plan guidance for the species and the recommendations of resource specialists. The findings of the surveys

and the management of any sites will be reported in the Decision Record for this Environmental Assessment.

Lichen surveys were not specifically conducted as this resource area has no potential habitat for Strategy 2 lichens. Most of these species are restricted to the wetter climate west of the crest of the Cascade Mountain Range. In addition, no Protection Buffer lichens are listed in the Northwest Forest Plan.

Noxious Weeds

No populations of noxious weed species which are targeted for control within the resource area were located during vascular plant surveys conducted in 1987, 1989, and 1995. Bull thistle (*Cirsium vulgare*) and mullein (*Verbascum thapsis*) were noted in the area associated with disturbed areas. Physical disturbance associated with the proposed project may temporarily increase the abundance of these species. However, this is expected to be minimal due to the manual treatment methods employed, and the limited surface disturbance expected under the proposed alternative. These species tend to decrease in abundance without continued physical disturbance and, therefore, are not targeted for active control actions within the resource area.

Fuel Loads

The overall fire hazard would be reduced by eliminating some ladder fuels and reducing the stocking of dense stands. The cutting, piling, and burning of the cut materials under Alternatives 1,2, and 3 would reduce the amounts of these fuel types in the Riparian Reserves.

Under the No Action alternative fuel loads would not be reduced and would continue to increase in the long-term as the dense stands of white fir increase. High mortality levels in these stands due to competition for water, nutrients, and space would contribute to increased fuel loads. The potential for catastrophic fires would increase as the fuel levels increase.

Cultural Resources

A number of cultural resources inventories have been conducted within or near the current project area. William Cannon (Archeologist, BLM) performed surveys along the south side of Spencer Creek within Sections 21 and 28 (T38S, R6E) during 1989 as associated with the South Spencer Timber Sale. A cultural resources inventory was conducted within portions of Sections 27 and 34 (T38S R6E) by Elizabeth Sobel (Archeologist, BLM) in 1991 as associated with the Aspen Clover Timber Sale. A more recent survey within the project area was conducted by Washington State University in 1995. Portions of all the above listed sections were also investigated. Michelle Durant (Archeologist, BLM) inspected the lower flats of Spencer Creek within Sections 27 and 34 during 1999.

None of the above surveys recorded archaeological sites within or near the current project area. Therefore, no known sites should be impacted by project activities under all alternatives considered. BLM Class III pedestrian methods were employed during the surveys. This generally involves systematically surveying the entire area using a transect interval of 30 meters or less.

Since manual treatment methods are to be employed during project work, limited surface disturbance is expected during the proposed alternative. Under all action alternatives, the potential to encounter, or disturb, subsurface archaeological deposits appears limited based on survey results and the nature of disturbances anticipated. The no action alternative would present the least immediate hazard to any cultural resources which have remained undetected during surface survey. Such sites, if any, could also be impacted from the relatively high temperatures associated with the burning of concentrated piles. Though with the no action alternative, long-term hazards could be greater assuming increased forest fuels which would present a greater risk for catastrophic fires.

No survey can guarantee to locate all archaeological sites within a given project area. If archaeological materials are encountered during project work, activities should be immediately halted and the BLM Archeologist contacted for further evaluation.

Mitigation Measures

The Component 1 and 3 fungus species *Plectania milleri* (Miller's black cup) was found within the proposed project area. All located sites for this species would be protected with a no disturbance thermal clump buffer under Alternatives 1,2, and 3.

PROJECT DESIGN FEATURES

Best Management Practices: The following Best Management Practices would be required under Alternatives 1,2, and 3 to eliminate or minimize impacts to watershed health, channel conditions, and water quality.

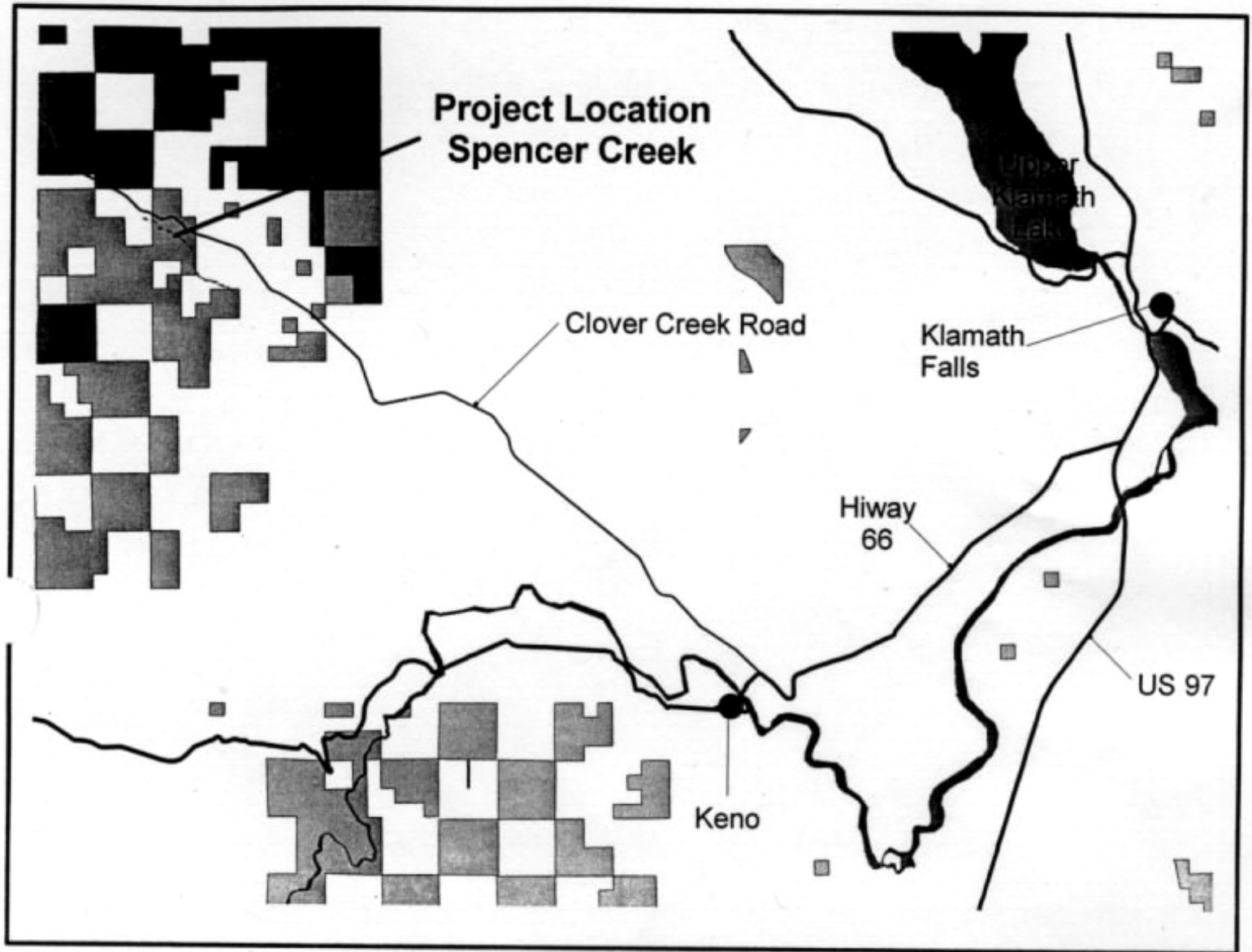
Riparian Reserve Treatment


1. No cutting, slash, or disturbance will be allowed within 40', slope distance, (or appropriate distance based on selected alternative) of each side of the active stream channel, an 80' total no cut buffer along the stream.
2. All refueling and maintenance operations will take place 120' or more from the stream and outside of all thermal clumps. The areas must be selected so that a potential spill would not be capable of running into water. Fuels, if stored on site, must be kept in a lined and bermed location capable of holding the entire stored fuel volume. Adequate spill response materials should be included within the sale contract.

Burning and Fuels Treatment

1. All cut material will be lopped and/or bucked into 48" or shorter pieces and must be piled in landings or other areas identified by the fuels specialist or contract administrator.
2. Slash piles will not be located in draws or concave surfaces which would drain directly into Spencer Creek if overland flow occurs.
3. Burning of slash piles will be restricted to periods when the soil and duff moisture levels are high.


Spencer Creek Riparian Treatments Project Location



 Spencer Creek (Project Section)

 Klamath River

 Towns

 Highways

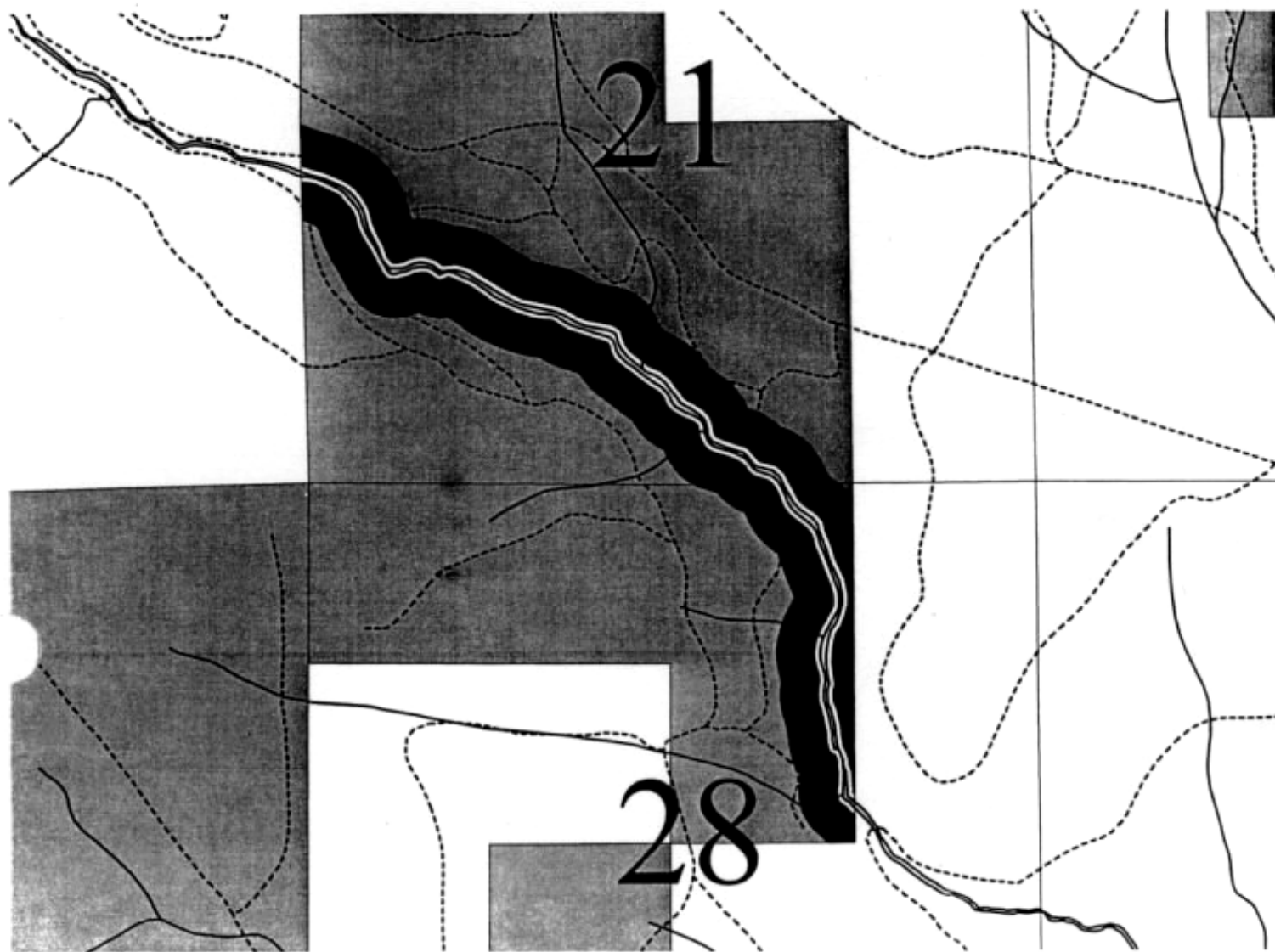
 BLM

 USFS

4 0 4 Miles



Spencer Creek Riparian Treatment Proposed Action



 **Riparian Reserve Treatment Area**

 **40' Buffer**

 **Streams**

 **Roads**

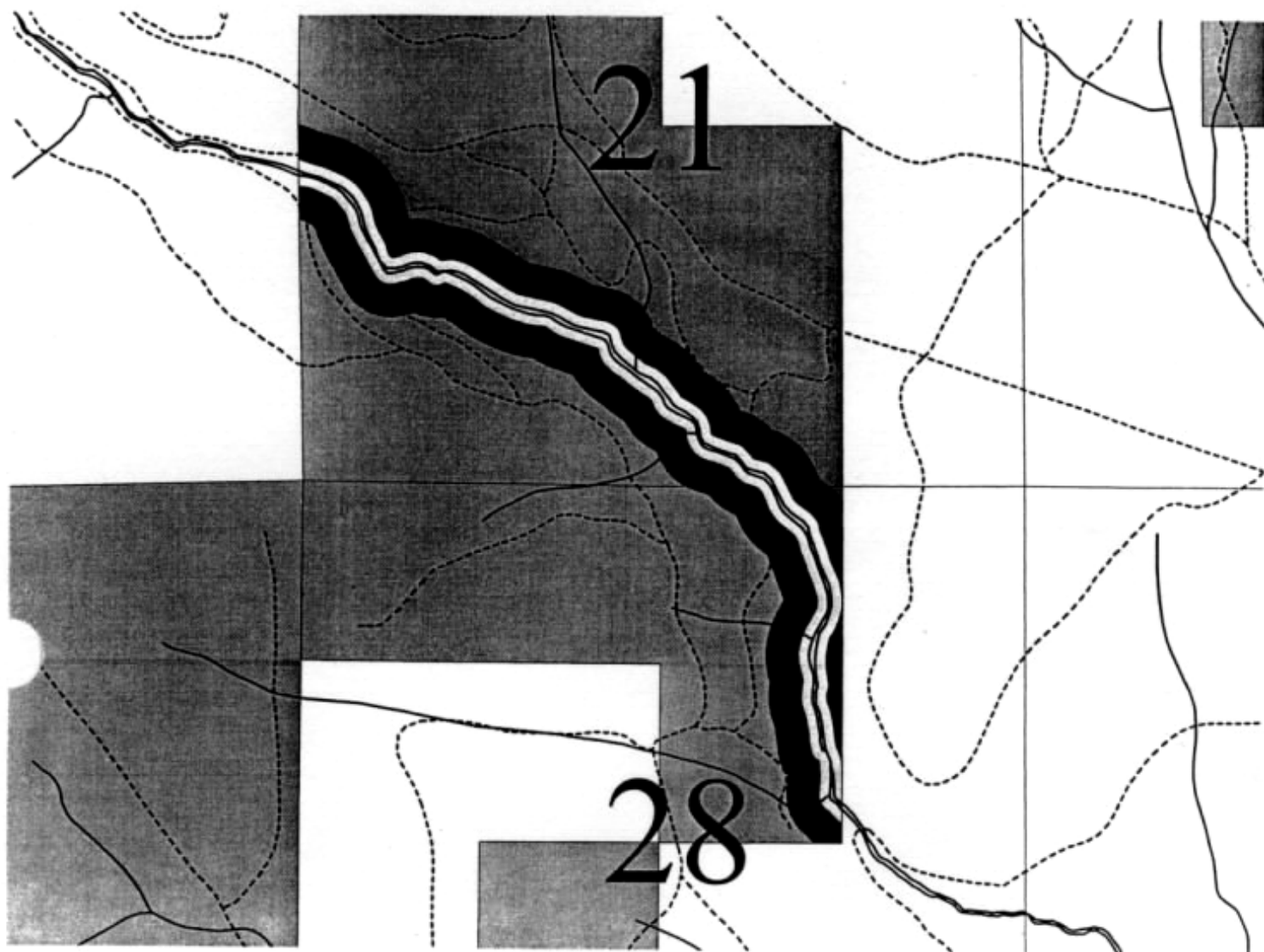
 **BLM**

 **Private**

1000 0 1000 Feet



Spencer Creek Riparian Treatment Alternative 2 80' Buffer



Riparian Reserve Treatment Area

80' Buffer

Streams

Roads

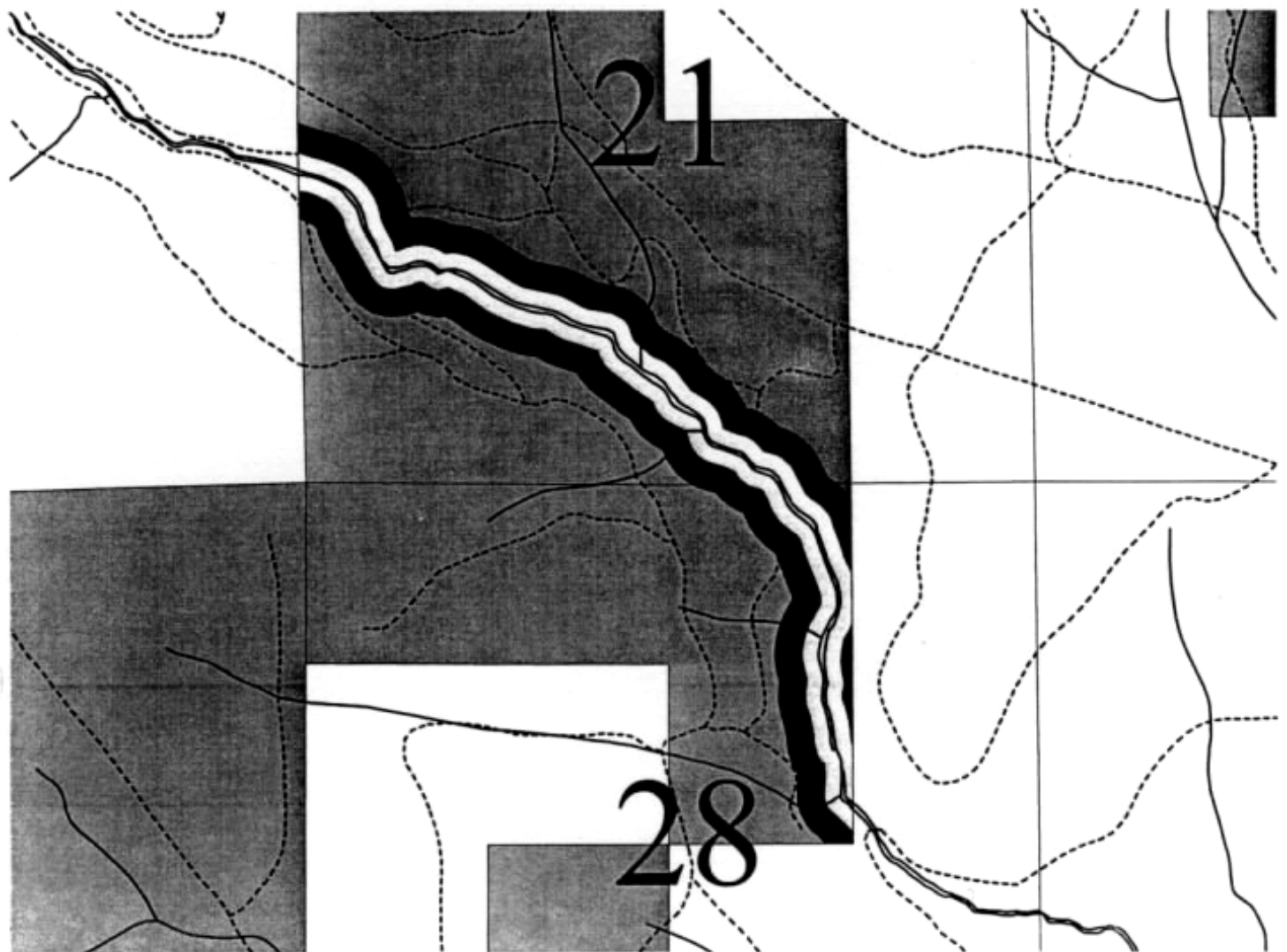
BLM

Private

1000 0 1000 Feet



Spencer Creek Riparian Treatment Alternative 3 120' Buffer



 Riparian Reserve Treatment Area

 120' Buffer

 Streams

 Roads

 BLM

 Private

1000 0 1000 Feet



FINDING OF NO SIGNIFICANT IMPACT (FONSI)

for the
Spencer Creek Riparian Treatments
EA No. OR014-99-11

FONSI DETERMINATION

On the basis of the information contained in the Spencer Creek Riparian Treatments Environmental Assessment (EA) and all other information available to me, it is my determination that the proposed action and alternatives do not constitute major federal actions having a significant impact on the human environment. Therefore, an environmental impact statement is not necessary and will not be prepared.

Signed /s./ Teresa A. Raml

Date 5/25/2000

Teresa Raml
Manager
Klamath Falls Resource Area

**Decision Record
for the
Spencer Creek Riparian Treatments
Environmental Assessment No. OR014-99-11**

New Information

The Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Spencer Creek Riparian Treatments was completed and signed on May 25, 2000. Since that date, surveys for bryophyte species were completed in accordance with the Survey Protocols for Protection Buffer Bryophytes, Version 2.0. No Survey and Manage bryophyte species were found.

Surveys for Survey and Manage mollusk species were completed in the fall of 1999 and the spring of 2000 with no species found. However, during fungi surveys, a site was located for the Survey and Manage species *Prophysaon coruleum*, var. *klamithica* (Blue-grey taildropper). This is a Survey and Manage Strategies 1 and 2 species. The habitat management to be implemented for this species is given below under Mitigating Measures.

During Survey and Manage fungi surveys, several sites for the Component 1 and 3 fungal species *Plectania milleri* (Miller's black cup) were found. Samples of these species were sent to specialists to be analyzed for positive identification. During this process, one of the samples was identified as *Sarcosoma mexicana*. This is a Protection Buffer and Strategy 3 species. The habitat management to be implemented for this species is given below under Mitigating Measures.

In the EA, the determination was made for both the northern spotted owl and the bald eagle that this action would have "no effect" on either of these threatened species and therefore consultation under Section 7 of the Endangered Species Act would not be necessary. A brief summary follows to clarify the "no effect" determination.

There are two historic northern spotted owl sites mentioned in the EA. Both are 1.2 miles or greater from the treatment area. Neither site is currently occupied and neither has been occupied for over 3 years. If either of these owl sites were to become occupied again in their current location it is unlikely that either would use the proposed treatment area. The bald eagle nest mentioned in the EA is 0.8 mile downstream from the proposed treatment area. It is occupied this year but did not nest. One adult and one sub-adult have been seen at the nest site. To date, this site has no known successful reproduction. Due to the distance from the treatment and the timing of year anticipated for this treatment, there should be no effect on this eagle nest site.

Decision

It is my decision to implement the Proposed Action, Alternative 1, from the Environmental Assessment. This alternative will thin the dense understory patches, mainly white fir, within the

designated Riparian Reserves on Spencer Creek. This thinning will be done by hand crews using chain saws. A 40' no-disturbance buffer will be established along each side of Spencer Creek. The thinning prescription detailed in the EA will be used with the following mitigating measures:

Mitigating Measures

No-disturbance thermal clump buffers will be established around the 7 located sites of the Component 1 and 3 fungal species *Plectania milleri* (Miller's black cup) and the 1 located site of the Protection Buffer and Strategy 3 fungal species *Sarcosoma mexicana*. These buffers will extend in a 60' radius around the located sites.

A no-disturbance thermal clump buffer will be established at the 1 located site of the Survey and Manage mollusk species *Prophysaon coruleum*, var. *klamithica* (Blue-grey tailedropper). This buffer will extend in a 60' radius around the located site.

Signed Larry Frazier (Acting For) **Date** 10/02/2000
Teresa A. Raml
Manager
Klamath Falls Resource Area