

SUPPLEMENTAL INFORMATION TO DECISION RECORD

for the Lower Spencer Creek Watershed Environmental Assessment #OR014-96-02)

The Clover Hookup Timber Sale is analyzed in the Lower Spencer Creek Watershed EA (Environmental Assessment #OR014-96-02). The Decision Record for the Lower Spencer Creek Watershed EA was signed on November 18, 1997. This supplemental information includes updated management guidelines and pretreatment survey information for Threatened and Endangered species, Survey and Manage (S&M) species, and Protection Buffer species addressed in the Klamath Falls Resource Management Plan (RMP) and the Northwest Forest Plan (NFP). This supplemental information will be used to amend some of the Project Design Features addressed in the EA. The amendments to the Project Design Features are primarily management recommendations that are required to protect S&M species addressed in the NFP that were not available at the time the Decision Record was signed. This supplemental information applies only to the Clover Hookup Timber Sale (the second sale proposed under this EA), which is scheduled to be sold August 30, 2000. This supplemental information may also include results of annual implementation monitoring of timber sales and recommended changes to design features as part of an adaptive management strategy. The environmental impacts will be somewhat less than those analyzed in the EA as a result of the additional management recommendations from the supplemental information. More sites will be left undisturbed than analyzed in the EA. Therefore, a supplemental or amended EA or EIS is deemed unnecessary.

New Information

Threatened and Endangered Species

Northern Spotted Owls

Survey Protocol - The sale area has been monitored since 1992 to determine breeding status of local owls.

Survey Results - There has been two active northern spotted owl nest sites within 1.2 miles of the proposed sale area since 1992 (East Miner's Creek owls) and (Miner's Creek owls). The adults at these two different nest sites have reproduced as follows: East Miner's Creek owls have produced 5 young in 9 years and Miner's Creek owls have produced 4 young in 9 years. In 2000, the East Miner's Creek owls were not present and the Miner's Creek owls were present and nested.

Management Recommendations - The Klamath Falls RMP states on Page 38; "Fall no trees withing 1/4 mile of all active northern spotted owl nest sites from approximately March 1 to September 30 to avoid disturbance and harm to young owls." Through yearly monitoring and the consultation process, the seasonal restriction has been changed to March 1 - August 10. All young in the KFRA have fledged by late July and this date gives adequate protection.

Management To Be Implemented - If nesting occurs within the cutting area through the life of the timber sale contract, the above seasonal restrictions will be implemented.

Rationale - These measures meet the pertinent RMP and NFP northern spotted owl protection requirements and mitigate impacts in the immediate vicinity of known owl sites.

Bald Eagles

Survey Protocol - The sale area has been monitored since 1991 to determine the status of nesting eagles.

Survey Results - There has been an active bald eagle's nest site adjacent to the proposed sale area that has been monitored since 1991, except for in 1993. The adults at this site nested and produced 1 young in 9 years.

Management Recommendations - The Klamath Falls RMP states on page 38: "Provide a buffer up to 30 acres around nest sites and restrict management activity near nest sites between January 1 and August 31."

Management To Be Implemented - If nesting occurs within 1/4 mile of the cutting area through the life of the timber sale contract, the above seasonal restrictions will be implemented. In addition, a buffer of up to 30 acres will be provided around an active nest site.

Rationale - These measures meet the pertinent RMP bald eagle protection requirements and mitigate impacts in the immediate vicinity of known bald eagle sites.

Survey and Manage (S&M) Species

Mollusk

Survey Protocol - Pretreatment surveys for S&M species have been completed in accordance with Survey Protocol for Terrestrial Mollusk Species from the Northwest Forest Plan, Draft Version 2.0 (Furnish et al. 1997). One survey visit was completed in the fall of 1998 and one survey visit was completed in the spring of 1999. Surveys were conducted in both the treatment and non-treatment areas including the matrix, district-designated reserve buffers (DDRBs), riparian reserves, thermal clumps, and neighboring district-designated reserves/unmapped late-successional reserves (DDRs/UMLSRs). During surveys performed to established protocols, no S&M mollusks were found within the Clover Hookup project area or neighboring LSRs and DDRs.

Survey Results - No S&M mollusks were found within the Clover Hookup project area. Although the surveys did reveal some mollusks, none were identified as S&M species. During spring 2000 surveys, one site of the S&M slug, *Prophysaon coeruleum* (Blue-Gray Taildropper), was found during surveys for a different project in a neighboring riparian reserve. This is the only known S&M mollusk site in the Spencer Creek watershed, in which Clover Hookup is located.

Management Recommendations - None.

Management To Be Implemented - None.

Rationale - During surveys performed to established protocols, no S&M mollusks were found within the Clover Hookup project area.

Fungi

Survey Protocol - The proposed sale area was surveyed in accordance with Survey Protocols for *Bondarzewia mesenterica* (= *B. montana*), *Otidea leporina*, *O. onotica*, *O. smithii*, *Polyzellus multiplex*, *Sarcosoma mexicana*, *Sowerbyella* (= *Aleuria*) *rhenana*, Version 1.2 (O'Dell 1999). The project area was evaluated for potential habitat through on-site inspections of the entire sale area during the pre-field

review. All potential habitat for the target species was surveyed according to current survey protocols (O'Dell 1999), including the matrix cutting area, thermal clumps, riparian reserves, deferral areas, and one neighboring DDR. Surveys, approximately 2-3 weeks apart, were conducted according to these protocols. One survey was completed in the fall of 1999 before snow covered the ground, and three surveys were completed in the spring of 2000. Neighboring LSR/DDR were surveyed for fungi and other non-vascular and vascular plant species during evaluation of resource conditions within these reserves.

Survey Results - S&M component 1 & 3 fungi species found in the survey area include *Plectania milleri* (Miller's Black Elf Cup) and *Cantharellus formosus* (Yellow Chanterelle). We are to manage all known sites of component 1 organisms. An exception to this management applies to the species *C. formosus*. Although the NFP states to manage known sites of component 1 organisms, the management recommendations for *C. formosus* state that this species does not require any special management and is a candidate for removal from the list of taxa of special concern because it is "commonly found in disturbed, second-growth habitat across its range" (Management Recommendations for Survey and Manage Fungi, Version 2, September 1997).

Gyromitra montana (Snowbank False Morel or Walnut) and *Gyromitra esculenta* (Calf Brain or Brain Mushroom) are S&M component 3 and 4 fungi species, and *Chromosera cyanophylla* (= *Mycena lilacifolia*), *Sarcosphaera coronaria* (Crown Cup), *Albatrellus ellisii* (Greening Goat's Foot), and *Gomphus floccosus* (Scaly False Chanterelle) are component 3 fungi species which were found in the sale area. We are to manage high-priority sites of component 3 organisms.

False truffles (probably in the genus *Rhizopogon*), which may or may not be S&M species, were located within the sale area. These specimens have been sent to the regional mycology lab at the Forest Science Laboratory in Corvallis, Oregon for determination of species.

Management Recommendations

Section C of the Standards and Guidelines for the NFP states that all known sites must be managed for Protection Buffer and S&M component 1 species, and high-priority sites of S&M component 3 species should be managed. The standards and guidelines state that general information is being acquired for component 4 species due to lack of information concerning these species, and no management direction has been developed. Species-specific management recommendations have been developed for Protection Buffer and S&M component 1 fungi species (Castellano and O'Dell 1997). Representatives of component 3 & 4 S&M fungi species were found in thermal clumps, riparian reserves, and in neighboring LSR/DDR and DDRBs. The professional judgement of the local resource specialists is that most of the current sites of these component 3 & 4 species within the matrix area will survive the disturbance and reduced canopy closure associated with the prescribed selection harvest.

Species-specific protection measures for Protection Buffer and S&M component 1 fungi species were developed by regional specialists (Castellano and O'Dell 1997) and primarily involve protection of microsite conditions adjacent to a population. Adequate protection of the microsite may be assessed by local specialists on a site-by-site basis including factors such as slope, aspect, and existing thermal protection. Neighboring BLM Districts (Medford District and Eugene District) have chosen buffer sizes ranging from 60 to over 300 feet depending on microsite conditions and harvest prescription. The BLM-KFRA has elected to establish buffers ranging in size from 60 - 120 feet radius (0.25 to 1.0 acre), depending on site conditions, as adequate protection for certain S&M species of fungi. The larger size buffers which are being implemented by some western Oregon BLM districts is due to the more common practice of regeneration cutting in these areas, heavier commercial thinnings, and the complex effects of the west side's more rugged-dissected topography (including slope steepness, slope position, and aspect) on microclimate within forest stands. The BLM-KFRA utilizes a selection harvest prescription within

Clover Hookup and other timber sale areas that will maintain 60% or higher canopy closure after treatment.

Management To Be Implemented

No-cut buffers have been located around the Protection Buffer and S&M component 1 species *Plectania milleri* (Miller's Black Elf Cup) to preclude ground disturbance. The no-cut buffers encompass the adjacent habitat features and associated microclimate that are thought to support these species at each site. Boundaries of the designated no-cut areas have been defined in the field using changes in habitat condition observed in the field.

For the S&M component 3 and component 4 species, *Gyromitra montana* (Snowbank False Morel or Walnut), *G. esculenta* (Calf Brain or Brain Mushroom), *Chromosera cyanophylla* (= *Mycena lilacifolia*), *Sarcosphaera coronaria* (Crown Cup), *Albatrellus ellisii* (Greening Goat's Foot), and *Gomphus floccosus* (Scaly False Chanterelle), areas that will not be treated including riparian reserves, thermal clumps, no-cut buffers for Protection Buffer and component 1 species, deferral areas, and LSR/DDRs; within and adjacent to this timber sale are considered to provide adequate protection for high-priority sites of these species. The prescription for harvested areas within the timber sale will maintain 60% or higher canopy closure after treatment and will maintain adequate habitat conditions for the continued persistence of these species.

False truffles (probably within the genus *Rhizopogon*), which may or may not be S&M species, were located within the proposed sale area. These specimens have been sent to the regional mycology lab at the Forest Science Laboratory in Corvallis, Oregon for determination of species. Any species identified as S&M component 1 or Protection Buffer will be protected with a no-cut buffer. In addition, any species identified as S&M component 3 and occupying a high-priority site will be protected with a no-cut buffer.

Rationale - Based on available scientific literature and extensive field experience, the local specialists within the resource area consider the above measures adequate to protect the fungi that were found during pre-disturbance surveys.

Considering the harvest prescription and presence of these fungi species within neighboring reserves, the long-term survival of these S&M fungi species in the Clover Hookup project area is highly likely without further site protection or additional thermal clumps. Soil compaction restricts fungi establishment and growth; therefore, Best Management Practices (BMPs) for reducing soil disturbance and soil compaction will be employed.

Bryophytes

Background - *Ptilidium californicum*, *Tritomaria exsectiformis*, and *Marsupella emarginata* var. *aquatica* are S&M component 1 & 2 liverwort species for which there may be potential habitat on the BLM-KFRA, including in the Clover Hookup project area. *P. californicum* was found at the base of a conifer tree near Cold Creek in the vicinity of Lake of the Woods on the Klamath Ranger District, Winema National Forest (NF). *P. californicum* occurs commonly in some areas on the adjacent BLM Medford District, Ashland Resource Area. According to Management Recommendations for Bryophytes (Version 2.0, December 1998), *P. californicum* is a species of S&M concern only in northern California, which is the southern extent of its range, and surveys are only required for this species in California. Cheryl McCaffrey, BLM state botanist, however, has recommended protection for *P. californicum* sites on the Ashland Resource Area. About a half-dozen sites of *T. exsectiformis* have been found on the nearby Deschutes NF. This species prefers decaying logs along springs, seeps, and low-volume streams. It has not been found yet on the Winema NF or BLM-KFRA. *M. emarginata* occurs in submerged water in streams and has been

found in an outlet stream for Waldo Lake, located northwest of Willamette Pass. *Buxbaumia viridis* and *Tetraphis geniculata* are Protection Buffer moss species for which there also may be potential habitat on the BLM-KFRA. *B. viridis* was found in the Cherry Creek Research Natural Area on the nearby Klamath Ranger District, Winema NF.

Survey Protocol - Following the NFP, S&M component 2 species (with the exception of *P. californicum*) and Protection Buffer species require surveys prior to ground-disturbing activities on the resource area. Surveys for component 2 bryophyte species were conducted following Survey Protocols for Survey and Manage Component 2 Bryophytes (Version 2.0, December 11, 1997). Surveys for Protection Buffer bryophytes were conducted following Survey Protocols for Protection Buffer Bryophytes (Version 2.0, December 3, 1999). Areas which may have potential habitat for these species were delineated using aerial photos, topographic maps, and watershed maps. Areas thought to be probable suitable habitat were identified and surveyed; however, little to no probable suitable habitat within proposed treatment areas was found. Periodic sampling for *P. californicum* and other bryophytes was done at the base of tree boles (probable suitable microhabitat for this species in our area) by the resource area's ecologist/bryologist while conducting fungi and mollusk surveys in Clover Hookup. On the BLM-KFRA, potential habitat for liverwort species is most likely to occur in and near riparian areas with perennial water (seeps, springs, and low-volume streams) and in older mixed-conifer stands with a perennially cool, moist microenvironment such as those at Lake of the Woods or at Cherry Creek on the Klamath Ranger District, Winema NF (precipitation over 35 inches/year), high canopy closure, and abundant shade). A non-S&M cousin of *Buxbaumia viridis*, *B. aphylla*, has been found on the Chemult RD, Winema NF in dry mixed-conifer forest on the eastern slopes of the Cascade Mountain Range; but *B. viridis* prefers more mesic forest habitat with high moisture levels, cool temperatures, and shade. *T. geniculata* prefers similar habitat.

Survey Results - Bryophyte surveys in the Clover Hookup project area revealed no liverworts and no probable suitable habitat for S&M liverworts such as seeps, springs, and low-volume streams. Moss species common to upland forest in the Klamath Basin area were found, but no S&M or Protection Buffer moss species. A brief, though not inclusive, list of bryophyte species that were identified in the field or collected and later identified with a microscope was compiled. Bryophyte surveys were also done about 1 - 1.5 miles north of the project area in Spencer Creek, the largest stream on the BLM-KFRA and in the Spencer Creek watershed in which the Clover Hookup project area is located. No S&M or Protection Buffer bryophyte species were found. Only a few non-S&M leafy and thalloid liverworts were found on rocks and decaying logs in the stream channel. The non-lichenized cyanobacterium, *Nostoc*, was found growing as small (dime-sized), blue-green, gelatinous, erect to sub-erect, ear-like lobes on submerged rocks in the stream channel, but this organism is common in streams in the area and not of S&M concern. The scarcity of liverworts found in what would appear to be suitable habitat in Spencer Creek may be due to yearly high-volume flows which cause heavy stream scour and bank erosion and to the openness of the stream corridor that allows heating from the sun in summer afternoons to create a streambank microenvironment that is too warm for many liverwort species. Streams with high-volume flows that cause heavy scour and erosion can eliminate long-term, stable substrates for liverworts and mosses.

Management Recommendations - None.

Management Implemented -None.

Rationale - The Clover Hookup project area does not appear to contain suitable habitat for S&M and Protection Buffer bryophytes, especially liverworts. There are no springs, seeps, or perennial streams in the project area where cutting will occur. Much of the project area is either mesic, upland mixed-conifer forest without springs, seeps, or streams or is xeric, more open mixed-conifer forest with a relatively strong pine component and species of shrubs such as chinquapin (*Castanopsis chrysophylla*), mahala

mat (*Ceanothus prostratus*) and greenleaf manzanita (*Arctostaphylos patula*) indicative of drier habitat. S&M liverworts and Protection Buffer bryophytes generally prefer habitat wetter and cooler than the mesic to xeric forest habitat found in Clover Hookup.

Lichens

Survey Protocol - No S&M component 2 lichens are known to occur in Klamath County based on past surveys done in all DDRs and LSRs on the BLM-KFRA and based on extensive surveys done across the Winema NF over the last four years for the regional air quality monitoring program. No Protection Buffer lichens have been designated in the NFP. Most S&M lichens are restricted to the west side of the Cascade Mountain Range where the much wetter climate supports greater biological diversity of macrolichens compared to the number of species found on the much drier east side of the range. Exceptions to this rule are some areas on the Sisters Ranger District, Deschutes NF, where annual precipitation under the influence of the Three Sisters mountains equals that on the west side of the Cascade Mountain Range and consequently more of a westside macrolichen flora can be found, including several S&M species that otherwise do not occur on the east side of the range.

Survey Results - Although two species of S&M component 4 lichens are known to occur on the BLM-KFRA, none were found within the project area during surveys.

Management Recommendations - None.

Management Implemented -None.

Rationale - No S&M lichens have been found to date in the Clover Hookup project area or in neighboring LSRs and DDRs. An inventory of the lichen flora found on the resource area from sampling in many areas over the last five years has been compiled. Sampling for lichens will continue across the resource area, surveys for S&M species in proposed project areas will be conducted, and new lichen species that are found will be added to the current inventory.

Protection Buffer Species - Great Gray Owls

Survey Protocol - The sale area was surveyed in 1996, 1997, 1998, 1999 & 2000 in accordance to the survey protocol for Great Gray Owl (May 12, 1995 direction from the Regional Interagency Executive Committee Members and California Federal Executives, and BLM Informational Bulletin No. OR-97-311 which described adjustments to the original great gray owl protocol).

Survey Results - No great grey owls were found

Management Recommendations - None

Management Implemented - None

Conclusion For Clover Hookup Timber Sale

The Decision Rationale, signed November 18, 1997 to implement the Proposed Action Alternative (Alternative A) of the Lower Spencer Creek EA (EA #OR-014-96-02) which involves the Clover Hookup Timber Sale is still valid. Harvest of approximately 2,500 thousand board feet (MBF) over approximately 900 acres was proposed in the EA. The impacts from the supplemental information presented above concerning threatened and endangered species, survey and manage species, and Protection Buffer species is sufficiently addressed in the EA and the Decision Rationale. Impacts to northern spotted owls, bald eagles, the blue-grey tail dropper, and Component 1 and Protection Buffer fungi species have been minimized through modifications to the timber sale design including the layout and silvicultural

prescription. The Clover Hookup Timber Sale treatment will be implemented using BLM timber sale procedures and is expected to occur during the next 2 to 3 years.

The Clover Hookup treatment area is within the known range of Northern Spotted Owls, Bald Eagles and the area analyzed in the Northwest Forest Plan. In 1996 the BLM began a programmatic biological assessment for the entire Lower Spencer Creek analysis area. However, in lieu of completing a programmatic biological assessment for the entire analysis area, the lead BLM biologist in June of 2000 decided to write a biological assessment for the proposed Clover Hookup Timber Sale area. The KFRA initiated formal consultation with the U.S. Fish and Wildlife Service in July of 2000. The BLM, through a biological assessment dated July 25, 2000, determined that the proposed action "may affect, and "is likely to adversely affect" northern spotted owls. In addition, the BLM made a determination of "may affect not likely to adversely affect" for bald eagles in the area. The U.S. Fish and Wildlife Service on July 27, 2000 concurred with the BLM's determination for both Northern Spotted Owls and Bald Eagles and issued a non-jeopardy biological opinion for the proposed action.

The habitat within the Clover Hookup sale area is somewhat atypical of habitat generally associated with breeding northern spotted owls and is below the thresholds thought to be sufficient for successful breeding. Nevertheless, the East Miner's Creek owls have successfully produced 5 young in 9 years and the Miners Creek owls have successfully produced 2 young in 9 years. The proposed treatment will retain from 50 to 80 percent of the existing habitat in the sale area using the proposed partial cut prescription. Many of the habitat components including canopy closure, large trees, and downwood will be retained. Some habitat degradation will occur in the Matrix within the home range of both pairs of owls within 1.2 miles of the project area (See Biological Opinion).

The initial Decision Rationale and the supplemental information is consistent with the goals and objectives of the:

- Final Klamath Falls Resource Area Resource Management Plan (RMP) and its Record of Decision (June 1995).
- Final Supplemental Environmental Impact Statement on Management Habitat for Late-Successional and Old Growth Forest Related Species Within the Range of the Northern Spotted Owl (Northwest Forest Plan).
- Klamath Falls Resource Area Fire Management EA (OR-014-94-09)
- Klamath Falls Resource Area Integrated Weed Control Plan EA (OR-014-93-09).

The Lower Spencer Creek Watershed EA analysis area lies within the overlap area of the Northwest Forest Plan and the Interior Columbia Basin Ecosystem Management Project. This decision was considered within the context of both of these management efforts, including the Scientific Assessments associated with ICBEMP. No additional analysis is deemed necessary at this time.

I have determined that a change to the Finding of No Significant Impact (FONSI) for the Lower Spencer Creek Watershed is **not** necessary for these reasons:

The existing EA for the Lower Spencer Creek Watershed fully covers the project as modified by the proposed mitigation and adjustments. There will be no substantial changes to the action as proposed in the EA. The actions as amended are within the scope of the alternatives identified in the EA, and the environmental impacts are within those analyzed in the EA and less than those anticipated for the preferred alternative in that assessment.

There are no significant new circumstances or facts relevant to environmental concerns and bearing on the modification to the proposed action or its impacts which were not addressed in the EA. The EA

anticipated protecting Survey and Manage species in accordance with the Record of Decision for the Northwest Forest Plan and the KFRA RMP. The surveys conducted for this sale satisfy the survey requirements for this sale as amended by the Plan Maintenance Documentation: Decision to Delay the Effective Date for Surveying 7 "Survey and Manage" and Protection Buffer Species, which was approved March 13, 2000, and fulfills the Survey and Manage Commitment identified in the EA.

for Larry Frazier
Teri A. Raml
Manager, Klamath Falls Resource Area

8-1-00
Date