



U.S. Department of the Interior
Bureau of Land Management
Medford District Office
Grants Pass Resource Area

Biscuit Fire Recovery Project Record of Decision July 2004

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BLM/OR/WA/TL04/29+1792

Biscuit Fire Recovery Project

Record of Decision

July 2004

Prepared by:

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Bureau of Land Management
Medford District Office
Grants Pass Resource Area

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Summary

The BLM, a cooperating agency, adopts the Final Environmental Impact Statement (FEIS) prepared by the USDA Forest Service, the lead agency for the Biscuit Fire Recovery Project. The decision is to implement Alternative 7 of the FEIS for the Biscuit Fire Restoration Project. Alternative 7 has been jointly selected by the Forest Service and BLM as best meeting the Purpose and Need as identified in the FEIS for the entire Biscuit Fire Recovery Area. BLM has further determined that Alternative 7 meets all management guidelines in the Medford District Resource Management Plan and the Northwest Forest Plan, and will be implemented as described in Section 1.2 below.

The Draft EIS for this project was published in December 2003, followed by the release of the Final EIS in June 2004. Publication of this Record of Decision (ROD) completes the National Environmental Policy Act (NEPA) process for BLM for timber salvage and watershed restoration projects analyzed in those documents, except as noted below.

Based on the information in the Biscuit Fire Recovery Project FEIS, in the record, and from the letters and comments received from the public about the project, I conclude that the projects in this Record of Decision are consistent with the:

- (1) *Final EIS and Record of Decision for the Medford District Resource Management Plan (RMP)* (June 1995).
 - (2) *Final Supplemental EIS on Management of Habitat for Late-Successional and Old-Growth Forest Related Species within the Range of the Northern Spotted Owl* (February 1994).
 - (3) *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and its attachment A entitled the Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl (NFP)* (April 13, 1994).
 - (4) *Final Supplemental Environmental Impact Statement for Amendment to the Survey & Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines* (March 2000), and the *Record of Decision and Standards and Guidelines for Amendment to the Survey & Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines* (January 2001)
 - (5) *Record of Decision and the Final Supplemental EIS to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines* (March and January 2004);
 - (6) *Record of Decision Amending Resource Management Plans for Seven Bureau of Land Management Districts and Land and Resource Management Plans for Nineteen National Forests Within the Range of the Northern Spotted Owl, and its Final Supplemental EIS for the Clarification of Language in the 1994 Record of Decision for the Northwest Forest Plan amending wording about the Aquatic Conservation Strategy* (March 2004).
 - (7) *Medford District Noxious Weed Environmental Assessment* (April 1998).
 - (8) *Final Supplemental Environmental Impact Statement for Management of Port-Orford-Cedar in Southwest Oregon and Record of Decision and Resource Management Plan Amendment for Management of Port-Orford-Cedar in Southwest Oregon, Coos Bay, Medford, and Roseburg District.* (May 2004).
- Therefore, a plan amendment is not required.

Plan consistency and conformance to applicable laws was addressed in Chapter I of the Final EIS. This decision is also consistent with the Endangered Species Act, The Native American Religious Freedom Act and cultural resource management laws and regulations. It is also consistent with Executive Order 12898 (Environmental Justice).

This decision will not have any adverse impacts to energy development, production, supply and/or distribution (per Executive Order 13212).

We anticipate a salvage timber sale in August 2004. A portion of the Fuel Management Zones within the fire perimeter will be implemented as part of the timber salvage. Some road maintenance, improvements, renovation, and/or decommissioning will be implemented through the salvage timber sale. Non timber sale related activities are effective on the date of this decision. Actual implementation of the restoration projects included in this decision will occur as funding and workforce are available.

Salvage will occur on both Matrix and Late-successional Reserve (LSR) land allocations (Map 1). The Learning Opportunity designation of land management direction will be implemented on BLM lands. Historical data will be provided to researchers involved in this project as requested. Salvage will be precluded on BLM lands within Treatment Area B (Map 2).

All activities discussed in this Record of Decision refer only to BLM lands unless otherwise specified.

1.0 The Decision

1.1 Background

The Biscuit Fire began in the Klamath Mountains on July 13, 2002 after a widespread lightning event swept through northwestern California and southwestern Oregon. Active for one hundred twenty days and encompassing 499,965 acres, it was declared controlled on November 8. Approximately 9,028 acres (2% of the fire area) of BLM administered land was within the fire perimeter. Five primary areas of BLM Lands were affected by the fire and suppression efforts. These are the North Fork Silver Creek watershed, Galice Access/Bear Camp road, the Eight Dollar Mountain ACEC, Woodcock Mountain, and Whiskey Creek. All these areas had varying levels of fire damage with the exception of Woodcock Mountain, where contingency dozer lines were constructed but never utilized, and Whiskey Creek where a ford to a pump chance (area where water can be pumped from a pond or creek for fire suppression purposes) was reopened across a Port-Orford-cedar root disease-infected creek. The majority of the acres burned were from successful burnout operations that occurred from August 4-7 and August 18-20, 2002, which had the effect of stopping further expansion of the Biscuit Fire in the northeast corner of the fire.

Prepared prior to the Biscuit Fire, the Southwest Oregon Late-Successional Reserve Assessment (LSRA) (USDA, USDI, 1995) emphasized that management should focus on the amount and distribution of interior habitat. Interior habitat is identified by number and size of both live and dead (standing and down) trees, on the forest floor and in streams, canopy density, continuity of late-successional habitat and multiple canopy layers. This decision builds on, and is consistent with, objectives delineated in the Northwest Forest Plan and the LSRA.

1.2 Decision

The decision is to implement projects as described in Alternative 7 as shown in the Final EIS for the Biscuit Fire Recovery Project, as modified below (Tables 1 and 2) – salvage will occur on fewer acres than identified in the FEIS and less salvage volume will be recovered. Area salvage operations will be conducted on approximately 195 acres, resulting in approximately 2.75 million board feet (mmbf) of salvage (see Maps 3 and 4). Commercial timber will be removed from approximately five acres of FMZ where a salvage unit intersects the FMZ in T35S-R09W-Section 16. No other commercial timber will be removed from FMZ. The fire salvage timber sale resulting from this decision will be a “scaled” sale and, therefore, the actual volume salvaged may be more or less than the estimated volume. (A scaled sale is sold on the actual volume determined at a scaling site where logs are measured to determine the amount of timber actually removed and is not based on an estimate of the volume.) The effects analyses in the EIS were based on acres affected and snag and coarse woody debris (CWD) retention guidelines, and not the

amount of volume removed. In addition, current salvage estimates are lower than what was identified in the FEIS. The snag retention and salvage guidelines are essentially the same for salvage units regardless of alternative, and therefore, the treatment per acre is the primary variable, and variations in estimated volume do not change the analysis of effects in the FEIS. Reductions occurred as a result of on-the-ground work that reduced the size or eliminated units from salvage because: trees were of merchantable size and species, but had low salvage volume; units had limited merchantable sized trees; accelerated deterioration or low value species; small diameter material; or units were split by Research Natural Area (RNA) or Learning Opportunity boundaries. Most riparian planting occurred under the Emergency Stabilization and Rehabilitation Plan (ESRP). Surveys and monitoring that show that stocking levels within riparian areas have not been met will be planted to meet goals outlined in the FEIS.

This Record of Decision is the decision document for the projects listed in Table 1. Projects include: Reforestation, Road Maintenance, Road Stabilization, Learning Opportunities, construction of Fuel Management Zones and Prescribed Burning. These activities will begin in the fall of 2004.

Table 1. Projects to be implemented with the Record of Decision

| Project | Description |
|-------------------------------|---|
| Reforestation | <ul style="list-style-type: none"> Plant 195 acres of salvage units (2% of the Recovery Area) |
| Riparian Planting | <ul style="list-style-type: none"> Plant as needed - determined through stocking surveys (Fall 2004) |
| Road Maintenance | <ul style="list-style-type: none"> Replace 4 major culverts along North Fork Silver Creek with fish passage culverts |
| Road Stabilization | <ul style="list-style-type: none"> Stabilize 5.24 miles of the North Fork Silver Creek Road |
| Learning Opportunity* | <ul style="list-style-type: none"> Learning Opportunity management designations will be adhered to |
| Prescription burning | <ul style="list-style-type: none"> 3,311 acres of landscape prescribed burning |
| Fuel Management Zones** (FMZ) | <ul style="list-style-type: none"> Construct 14 miles of FMZ (Maps 3 and 4) 400' width Prescribed burning: pile and burn and/or broadcast No commercial timber removed from FMZ |

See definitions and descriptions in the *FEIS, II-10 and Appendix A; **FEIS II-3-6.

Projects listed in Table 2 will be implemented through an advertised timber sale, likely in August, 2004. Projects all relate to timber sale activities and associated road maintenance.

Table 2. Project work to be accomplished in conjunction with an advertised timber sale

| Project | Description |
|---|---|
| Area Salvage | <ul style="list-style-type: none"> • Salvage in high and moderate burn severity areas >10 acres with all dead trees • 195 acres <ul style="list-style-type: none"> ○ 38 acres in two units in Matrix land allocation ○ 157 acres in 9 units in Late-successional Reserve land allocation • Harvest systems: 195 acres helicopter • No salvage in riparian areas • CWD and snags <ul style="list-style-type: none"> ▪ Leave snags and CWD as per dead wood prescriptions in Appendix G of the FEIS ▪ Retain pre-fire CWD and snags |
| Fuel Hazard Reduction | <ul style="list-style-type: none"> • Perform fuels treatment in 195 acres of salvage units as necessary after salvage <ul style="list-style-type: none"> ○ Thin brush and slash, pile and burn salvage debris and brush ○ Underburn as necessary after salvage |
| Road and Landing Construction, and Road Decommissioning | <ul style="list-style-type: none"> • Open 2.6 miles of previously closed roads • Construct 0.1 miles of temporary spur road • Decommission these 2.7 miles of road after use • No new permanent roads • Construct 3 temporary landings |
| Road Maintenance | <ul style="list-style-type: none"> • Maintain or improve 65 miles of road |

1.3 Project Design Features

The Decision incorporates the Design Features (FEIS pg II-34 to II-47) in the salvage and restoration projects. These Design Features and Best Management Practices identified in the Medford District RMP serve as a basis for resource protection in the implementation of these projects. All mitigation measures (FEIS pg II-48 to II-54) will be adopted. Mitigation measures (FEIS II-48-54) and Best Management Practices (FEIS, Appendix K) will minimize the effects of this project. As an example, all significant and potentially significant heritage resources will be protected from adverse effect through avoidance, fuels management activities will follow Oregon Smoke Management Instructions, and impacts to downed wood and snags will be minimized during fuels treatments (FEIS, II-48). Best Management Practices will provide for protection of water quality, fish habitat and site productivity.

There will be no treatments in the North Fork Silver Creek RNA and therefore the botany mitigation for RNA treatments is not applicable to BLM lands. The Port-Orford-Cedar risk key (FEIS, III-149) will be utilized for all activities.

The Record of Decision to Remove Survey and Manage (S&M) Mitigation Measure Standards and Guidelines was signed on March 22, 2004 and became effective on April 21, 2004. As surveys for the Biscuit Fire Recovery Project were in progress when this ROD was signed, Survey and Manage Standards and Guidelines will be followed, and protection measures as per the Standards and Guides for Survey and Manage (S&M) species will be followed. Botany and wildlife surveys have been completed

for all required species. Additional acreage along FMZ that have been determined to be good red tree vole habitat will be treated to avoid reducing the quality of this habitat. This acreage is located in T34S-R09W-Sections 13, 18, 21, 22 and 34, and T35S-R09W-Section 2. Eleven new sites of *Frasera umpquaensis*, a Bureau Sensitive species, were discovered during field surveys in 2004. Protection measures described in the EIS would be applied to these new sites.

Management of Port-Orford-Cedar root disease will follow the Standard and Guidelines provided by the Record of Decision and Resource Management Plan Amendment for Management of Port-Orford-Cedar in Southwest Oregon, Coos Bay, Medford, and Roseburg District (USDI May 2004).

1.4 Plan Conformance

This decision is in conformance with the Medford District BLM Resource Management Plan (USDI, 1995) and The Northwest Forest Plan (NFP) (USDA and USDI 1994), which addresses management of Late-Successional Reserves (LSR) in pages C-9 through C-21, as amended. The Medford District Resource Management Plan incorporated these land use allocations and Standards and Guidelines (S&G). This ROD does not change the land use classifications identified in the Medford District RMP.

Salvage within LSRs is expressly addressed starting on page C-13 of the Record of Decision for the NFP and requires Regional Ecosystem Office (REO) review. Salvage of fire-killed timber is permitted pursuant to those S&Gs. Both salvage and LSR restoration projects were reviewed by the LSR Working Group, a subgroup of REO. They determined that these projects are consistent with LSR management guidelines and, therefore, are consistent with both the NFP and the Medford District RMP as the RMP incorporated these S&G (FEIS, Appendix E, E-47 to E-48). Plan consistency was specifically addressed in Chapter I of the FEIS. Analysis for salvage and restoration projects within Late-successional Reserve and a copy of the letter on review of salvage and restoration projects by the Late-successional Reserve Working Group, a subgroup of the Regional Ecosystem Office (REO), is included in the FEIS (Appendix E, pp E-47 through E-78). Salvage in the Matrix land allocation will also conform to the requirements within the Medford District RMP. All proposed activities are consistent with the ROD and Resource Management Plan Amendment Final Supplemental EIS of Port-Orford-Cedar in Southwest Oregon (USDA FS and USDA BLM, 2004) (See analysis – FEIS, III-145 to 152 and Appendix E, E-70 to E-78).

Scientific uncertainty, particularly in regard to salvage of fire-killed timber, was addressed in the FEIS (Page III-12 to III-18). This uncertainty revolves around two main issues: whether forests will recover faster if no salvage occurs or if salvage and replanting will hasten forest recovery. While acknowledging the diversity of scientific information on this issue, and the attendant uncertainty, the level of salvage proposed is small (approximately 2% of BLM lands in the Recovery Area), and the majority of burned lands will remain untreated. This will impact a relatively small area and result in an acceptable level of uncertainty and risk. Additionally, this may allow us to study forest recovery under varying levels of salvage and reduce the uncertainty in future projects.

In 1995, the Forest Service completed the Silver Creek Watershed Analysis, which analyzed ecological conditions on, primarily, the Forest Service administered lands in the Silver Creek watershed. In January 2004, the North Fork Silver Creek Watershed Analysis (WA) was published by Medford District BLM (USDI 2004) to update the Silver Creek Watershed Analysis with more current, post-fire information for BLM lands. In 1995, the Southwest Oregon Late-Successional Reserve Assessment (LSRA) was published by the BLM and USFS (USDA and USDI 1998). Although watershed analyses are **not** decision documents, both documents provided management recommendations to accelerate development of late-successional forest conditions, reduce road density, and reduce risk of large fires, on BLM and USFS administered lands within the Fish Hook/Galice LSR. The LSRA also addressed salvage of fire-killed

trees. Implementation of the projects in this ROD will contribute to fulfilling many of those recommendations.

The BLM section of the North Fork Silver Creek Watershed was designated as a deferred watershed in the 1995 RMP. Watershed deferrals were approved retroactively starting in January, 1993. In the RMP, deferred areas were identified as having high watershed cumulative effects. Watershed deferrals were a means of allowing recovery processes to occur by only permitting “management activities of a limited nature (such as riparian, fish or wildlife enhancement, salvage, etc.) ...if the effects would not increase cumulative effects.” Activities in this decision will not further degrade this watershed as restoration activities will serve to decrease the effects of past actions and of the Biscuit Fire. Openings have been created by the fire, which has added to the cumulative effects, however, project activities will not exacerbate these effects. Silver Creek is a Tier 1 Key Watershed (RMP), contributing directly to conservation of at-risk anadromous salmonids. This decision will have no effect on the parameters that make this a Tier 1 Key Watershed. Salvage will not alter the existing canopy, thereby continuing the function and processes necessary for the conservation of these species (FEIS III-264 – III-268).

2.0 Alternatives, Including the Selected Alternative

Seven alternatives were developed to meet the purpose and need, address issues raised by the public and respond to the issues identified in Chapter 1 of the EIS. A No Action Alternative (Alternative 1) was included.

The action alternatives contained two major categories of proposed projects, varying by land allocation (Matrix and LSR):

- Salvage within the fire perimeter in the North Fork Silver Creek Watershed and one unit in the Indigo Creek Watershed (Alternatives 2-7).
- Restoration projects located throughout the North Fork Silver Creek Watershed (Alternatives 2-7).

2.1 Alternative 1 - No Action or Continuation of Current Management

No restoration or salvage projects are proposed, but rehabilitation and stabilization projects identified in the Biscuit Fire Burned Area Emergency Stabilization and Rehabilitation Plan (ESRP) and its associated Categorical Exclusion (CE), Biscuit Fire Emergency Stabilization and Rehabilitation Plan (#110-02-38), will be implemented.

2.2 Alternative 2 – Salvage within Matrix Land Allocations

Area salvage is restricted to Matrix land allocations only. Reforestation would occur on Matrix land allocations. Fuel management zones would be created to aid fire suppression in the future and help protect remaining habitat. Learning Opportunities would not be implemented, though small research activities may occur. Restoration activities include road stabilization and culvert replacements.

2.3 Alternative 3 – Salvage within Matrix and LSR Land Allocations

Alternative 3 was developed to address the opportunities for economic recovery in land allocations outside of Inventoried Roadless Areas (IRA). Inventoried Roadless Areas are a Forest Service designation. On BLM lands, salvage is restricted to high and moderate burn severity areas, greater than 10 acres in LSR, where the fire resulted in a stand-replacement event. Fuel management zones would not be

created. Learning Opportunities would not be implemented. Restoration activities include road stabilization and culvert replacements.

2.4 Alternative 4 – Salvage within Matrix Allocations, modeled after Beschta recommendations

Alternative 4 was developed to address concepts raised by the Beschta report and comments received from the public on the Biscuit Fire Recovery Project DEIS. As a result of their recommendations and public concerns, this alternative varies salvage harvest prescriptions, and tree planting spacing. Varying prescriptions across biophysical environments would better mimic the role fire historically played across the landscape. This alternative was modified from the DEIS and does not include the learning study, and limits salvage harvest to certain matrix lands. Restoration activities include road stabilization and culvert replacements.

2.5 Alternative 5 – Salvage within Matrix and LSR Land Allocations, Learning Opportunities

Alternative 5 was developed in response to the need to accomplish restoration projects such as road improvement and repair. This alternative limited salvage harvest in LSR and matrix lands by avoiding areas at higher risk of increasing sedimentation or actions that would decrease soil productivity. Fuel management zones would be created to aid fire suppression in the future and help protect remaining habitat. Learning Opportunities would be implemented. Restoration activities include road stabilization and culvert replacements.

2.6 Alternative 6 - Salvage Logging, modeled after Session recommendations

Alternative 6 would maximize economic recovery through salvage harvest of dead trees, including Matrix and LSR land allocations while still meeting RMP guidelines. Alternative 6 also looked at reforestation of conifers through planting to the physical and economic limits, treating fuels and preparing existing roads to be defensible positions for future fires. Learning Opportunities would not be implemented. Restoration activities include road stabilization and culvert replacements.

2.7 Alternative 7 (Selected Alternative) – Salvage logging in Matrix and LSR land allocations, meeting LSR Standards and Guidelines, Learning Opportunities

Alternative 7 was developed to respond to the need to recover economic value and the need to accomplish restoration projects such as road improvement and repair. This alternative limited salvage harvest to LSR and matrix lands, and on Forest Service lands, provided for additional harvest within Inventoried Roadless Areas (IRA). The BLM does not have an IRA designation so there are only minor differences between this alternative and alternative 5 for BLM. Salvage avoids areas at higher risk of increasing sedimentation or actions that decrease soil productivity. Fuel management zones would be created and landscape scale burning would be implemented to aid fire suppression in the future and help protect remaining habitat. Learning Opportunities would be implemented. Restoration activities include reforestation, road stabilization and culvert replacements.

3.0 Environmentally Preferred Alternative

Council on Environmental Quality (CEQ) regulations [40 CFR 1505.2 (b)] require the ROD to specify the alternative or alternatives which were considered to be environmentally preferred. Environmental preferability is judged using the goals suggested in the National Environmental Policy Act of 1969 (NEPA), which is guided by the CEQ. “The environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA’s Section 101. Ordinarily, this

means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources” (CEQ, “Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations” [40 CFR 1500-1598], *Federal Register* Vol. 46, No. 55, 18026-18038, March 23, 1981: Question 6a.). NEPA’s Section 101 establishes 6 goals (see Table 4). This table depicts the application of the Section 101 goals to projects considered in the Biscuit Fire Recovery Project FEIS.

Table 4. Application of Section 101 Goals to Alternatives

| Section 101 Goals | Alternatives | | | | | | |
|---|--------------|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. Fulfill the responsibility of this generation as trustee of the environment for succeeding generations; | | X | | X | X | | X |
| 2. Assure for all Americans productive and aesthetically and culturally pleasing surroundings; | | X | X | X | X | X | X |
| 3. Attain the widest range of beneficial uses of the environment without degradation or other undesirable and unintended consequences; | | | X | X | X | | X |
| 4. Preserve important natural aspects of our national heritage and maintain an environment which supports diversity and variety of individual choice; | | X | X | X | X | | X |
| 5. Achieve a balance between population and resource use, which permits high standards of living and a wide sharing of life’s amenities; and | | | X | X | X | | X |
| 6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources. | | | X | X | X | | X |

Restoration projects are designed to restore, improve, or maintain conditions for future generations. Salvage provides for the recovery of the economic value of some fire-killed trees while balancing other beneficial uses of the environment and still meeting LSR management objectives. Research will provide information to allow future generations to make more knowledgeable decisions. Each alternative was compared against these goals to determine the environmentally preferred alternative.

Alternatives 4 and 5, and alternative 7 for BLM lands are the environmentally preferred alternatives. Alternatives 5 and 7 differ by salvage in varying land allocations on Forest Service lands. Alternative 7 proposes salvage on Inventoried Roadless Areas (IRA) which is a Forest Service land allocation; BLM does not have IRA. The identification of alternatives 4, 5 and 7 as the environmentally preferred alternatives for BLM lands uses the following rationale to determine which alternative best meets NEPA’s Section 101 goals:

Goal 1. All alternatives, with the exception of Alternatives 1 and 6, have some level of restoration which will improve conditions in the watershed to the benefit of future generations. Alternative 3 will rely on broadcast burning and pile and burn activities to treat salvage-generated fuels. Alternative 3 does not create FMZ, resulting in less protection of resources from future wildland fires. Alternatives 5 and 7, through the creation of FMZs will provide the highest levels of protection against future wildfire.

Goal 2. Alternatives 2-7 provide various levels of products while protecting the aesthetically and culturally pleasing surrounding. It is anticipated the greater the harvest level, the greater the amount of disturbance, and associated impacts, would occur. Alternative 6 has the highest harvest level and will

result in the most disturbances. Alternatives 2 and 4 will best meet Goal 2 because salvage will disturb fewer acres, compared to other salvage alternatives, and alternative 4 more carefully weighs the ecological principles of good forest management.

Goals 3 and 5. The risk of undesirable or unintended degradation is higher in alternatives with higher levels of salvage and restoration activities but these also present the highest potential for beneficial uses. The projects are designed to limit or reduce the risk of degradation and provide a wide range of beneficial uses while balancing population and resource uses within a Late-Successional Reserve. Alternative 1 will have no short-term degradation, but the beneficial uses achieved through the restoration and salvage activities proposed in other alternatives will not be provided. Alternative 2 and 4 will provide a lesser range of beneficial uses and, by restricting recovery of timber value to Matrix land allocations, will not provide the balance of population and resource use. Alternative 3, 5 and 7 will recover some of the economic value of the dead timber and provide restoration benefits. Alternative 6 will have a high range of beneficial uses through the recovery of the value of the dead timber, and will have a lower level of restoration activities, but will not provide the balance required to fully meet Goal 5. Alternative 4 will disturb the fewest acres from both a timber salvage and restoration standpoint, but could also result in a longer vegetative recovery period for obtaining old-growth characteristics within the fire perimeter. It is anticipated salvage activities in Alternative 6 will result in degradation of late-successional habitat. Alternative 3, 4, 5 and 7 will best meet Goals 3 and 5 by providing the widest range of beneficial uses while balancing population and resource uses, including recovering the value of the dead timber, restoration activities throughout the watershed, and research.

Goal 4. Restoration activities are designed to restore or maintain natural aspects of the environment. Proposed restoration activities designed to reduce the intensity and severity of future fires, improve habitat for fish and wildlife, and reduce potential of degradation from existing conditions will allow for greater protection of natural aspects within the watershed. Alternative 1 will provide short-term preservation of the existing natural environment but slower recovery of the watershed. Alternatives 2, 3, 4, 5 and 7 will best meet Goal 4 by providing a moderate level of restoration. Alternative 6 will provide a higher level of salvage, little restoration and potentially lead to degradation of the late-successional habitat from the salvage. Alternative 4, with its restoration emphasis based on the report by Beschta, et al., will allow for the most natural recovery of degraded conditions; however, it may not provide for accelerated development of late-successional forest conditions or enhanced protection of remaining late-successional forests within the LSR.

Goal 6. Salvaging recovers the economic value of some fire-killed trees. If salvage does not occur, this value will be lost over time due to deterioration, as has already occurred to some degree. Alternatives 2 and 4 will provide only minimal recovery of the timber value. Alternative 6 will provide the highest return; however, this alternative could result in greater harm to sensitive resources. Alternatives 3 and 5 best meet Goal 6 by providing a high level of recovery of timber value through salvage of the dead timber without degrading late-successional habitat. While Alternative 7 differs in its impact on Forest Service lands, it meets Goal 6 at the same level as Alternative 3 and 5 for BLM lands.

For BLM lands, alternatives 4, 5 and 7 provide a balanced level of restoration, salvage, and research and, are, for BLM lands, identified as the environmentally preferred alternatives.

4.0 Rationale for Selected Alternative

On BLM lands, alternatives 3, 5 and 7 propose salvage on essentially the same number of acres on BLM lands. On Forest Service lands, alternative 7 includes additional salvage within Inventoried Roadless Areas (IRA), which is strictly a Forest Service designation. The BLM does not have an IRA land

allocation. Alternative 7 has been jointly selected by the Forest Service and BLM as best meeting the Purpose and Need as identified in the FEIS for the entire Biscuit Fire Recovery Area. After on the ground work, it has been determined that on BLM lands, alternatives 5 and 7 would all result in the same level of salvage activity. Although the FEIS shows different volumes for each of these alternatives, on the ground work has determined that the volume would be the same for each of these alternatives. The volume is less than that shown in the FEIS for either alternative (FEIS, II-27 and II-35). Alternative 3 would salvage the same number of acres, but does not provide for opportunities for protection of communities and forest resources from future high intensity fire through construction of FMZ.

Alternative 7 in the FEIS has been selected by BLM as the alternative to be implemented on BLM lands. The rationale for choosing this alternative is based on how well this alternative appeared to meet the Purpose and Need for action (Chapter 1, FEIS).

This alternative will recover economic value on about 195 acres (2% of the burn area) from salvage timber harvest, producing about 2.75 million board feet (mmbf). This alternative will meet the needs of terrestrial species at a high level while salvage, and fuel reduction and protection opportunities are developed through the creation of fuel management zones. Road improvements and closures, including renovation of 5.24 miles of existing roads would aid watershed recovery. Learning Opportunities will be implemented. Salvage will occur in Learning Opportunity Pathway A, salvage will be deferred in Pathway B, and salvage and landscape burning will occur in Pathway B (Map 2; management treatments described in FEIS, A-11 – A13). The Learning Opportunity would advance our knowledge on the best approach to adopt to restore late-successional habitat in future projects.

The interdisciplinary team (IDT) looked at salvage harvest on a site-specific basis, and developed a strategy to reduce impacts. The objective of this alternative is to emphasize economic recovery through salvage harvest, and identify resource protection and restoration activities in the short term, while reducing long term resource risks. On Forest Service lands, this alternative allows salvage on selected portions within Inventoried Roadless Areas (IRA).

While salvage harvest is important for creating jobs and generating revenue, it is also important to protect unique areas. Protection measures include implementing no-harvest buffers on perennial and intermittent streams (FEIS III-264-267) as well as the Mitigation Measures and Best Management Practices addressed above (Section 1.3). The salvage proposed is in a relatively small portion of the fire area, which would provide for some economic benefit to communities while affecting a small portion of BLM lands within the fire area.

As stated in the FEIS, the needs are:

1. Recover the economic value from burned timber
2. Reduce risk to nearby communities and forest resources from future high intensity fire
3. Revegetate burned conifer stands and other burned plant and animal habitats.

All action alternatives meet the Purpose and Need, but some address them to a greater or lesser extent.

• **Recover the economic value from burned timber:** Alternative 3, 5 and 7 provide for recovery of economic value of timber burned in the fire while still meeting management objectives for LSR, and restoration and protection of water quality, and fisheries and wildlife habitats of concern. Alternative 7 provides the best balance in achieving these needs, while also providing protection for other resources as well as providing for more options to restore fire to this fire adapted ecosystem. Alternative 6 provides for a higher level of recovery of economic value from burned timber, but at a higher cost to forest resources. Alternatives 2 and 4 provide for lower levels of economic recovery of burned timber, particularly on BLM lands. Alternative 7 would recover economic value from burned timber while retaining adequate levels of large woody material to provide for species dependent on snags and downed wood (FEIS, III-

182-183 Appendix G, G-1-6, G-10 (Desired Condition); G-18-22 (Dead Wood Retention Prescription); Appendix E, pg E-68 and E-69 (Northwest Forest Plan Standards and Guidelines for salvage in LSR)). Helicopter yarding and other Design Features would further protect forest resources and minimize soil disturbance and compaction, and damage to riparian areas (FEIS, III-264-268 and Appendix K, Best Management Practices).

Delay of harvest for approximately two years has resulted in a loss of volume due to decay (FEIS, III-405). However, harvest of approximately 2.75 mmbf of fire-killed trees would still provide an economic benefit to the local economy, with Alternative 7 providing the second highest level of employment to the area (FEIS, III-396-399 and III-401-407).

• **Reduce risk to nearby communities and forest resources from future high intensity fire:**

Alternatives 5 and 7 reduce fuel loadings in salvage areas as well as construct 14 miles of FMZ to protect forest resources and adjacent communities, and protect the values inherent in the Wild and Scenic Rogue River. FMZ provide areas to potentially stop the spread of wildfire and reduce risk of stand replacing fires within remaining late-successional habitat. They also allow for more options for managers to allow wildfires to continue to burn, assisting in returning fire to its natural function in these fire adapted ecosystems (FEIS, III-173-176). FMZ construction and the potential to restore low-intensity fire on this landscape has been identified in the FEIS as the most important issue affecting the potential for maintaining or restoring habitats of concern (FEIS, III-47, III-174). These alternatives also provide for prescribed burning on 3,311 acres to further reduce the likelihood of stand destroying fires and will aid in protecting the investment the BLM has made in restoring burned forests. No FMZ construction is proposed under Alternative 3, six miles is proposed under Alternative 4, 10 miles under Alternative 2 and Road Associated Fire Lines (RAFL) are proposed under Alternative 6. Neither of these options provides as much protection to forest resources or forest adjacent communities as Alternatives 5 and 7. FMZ construction, along with associated prescribed burning provides BLM with a proactive opportunity to reduce the risk of high intensity fire impacting the values of the Wild and Scenic Rogue River.

• **Revegetate burned conifer stands and other burned plant and animal habitats:** Alternatives 5 and 7 provide a good opportunity to aid in restoration of late-successional forest habitat by providing various management strategies to promote development of late-successional habitat and other plant and animal habitats. These alternatives propose additional habitat restoration including stabilization of 5.24 miles of the lower North Fork Silver Road (Road 35-9-1) and replacement of four culverts with “fish and amphibian friendly” designs. Coarse woody debris and snag retention guidelines (RMP) will be met or exceeded, even within salvage areas. Alternative 6 salvages more acres than the other alternatives including within riparian reserves. Alternative 6 also reforests the greatest number of acres of any alternative, but with relatively higher environmental effects. Alternative 7 provides for the next highest level of reforestation, but with substantially reduced ecological effects, and along with Alternative 5, provides the best option for restoring late-successional habitat (FEIS III-179).

Alternatives 2 and 4 would salvage only in Matrix land allocations which would reduce the impact to site productivity as more coarse wood will remain on the landscape in LSR. However, this will necessitate that wildland fires be suppressed until coarse wood levels decline to levels in which fires could be allowed to burn without undue risk to forest resources and surrounding communities. Alternative 3 does not include development of FMZ which would also necessitate fire suppression and reduce the options to reintroduce fire as a natural process in these fire adapted ecosystems. As with Need 2, Alternatives 5 and 7 would provide for the best opportunity to reintroduce fire as a natural process in the fire-adapted ecosystems in the Recovery Area and protect remaining and developing late-successional forest habitat. Consequently, Alternative 2, 3 and 4 would not develop the desired long-term condition of late-successional habitat as quickly as the selected alternative. Alternative 7 would also comply with the LSR objectives for salvage and needs for large dead wood (FEIS, Appendix G). This is consistent with the FEIS design that focuses on recovering some economic value of fire-killed trees while meeting LSR and watershed objectives. Additionally, salvage in LSR was addressed in the FEIS and reviewed by the

Regional Ecosystem Office (REO); the REO concurred with the Rogue-Siskiyou National Forests and Medford District BLM that salvage in this project is consistent with the Northwest Forest Plan (FEIS, E-47-48).

The multiple approaches to restoring late-successional habitat addressed in the Learning Opportunities in Alternative 3, 5 and 7 would advance our knowledge on the best approach to adopt to restore late-successional habitat in future projects.

Most reforestation activities on BLM lands have already been completed under the ESRP. Additional reforestation will occur on salvaged lands. Therefore, alternatives 3, 5, 6 and 7 provide the most reforestation opportunities on BLM lands. Protection and restoration of site productivity is also a large part of reforestation. Snag and coarse wood retention in salvage units would protect soil resources and other ecosystem functions (FEIS, Appendix G, G-1-5). Outside of salvage units, all large material will remain. Future fuels treatments would aid in long-term protection of remaining forest habitat, and in retaining young trees on the landscape for future forests.

4.1 Summary

In summary, in the fire area as a whole, Alternative 7 provides the 2nd highest level of economic benefit while providing for protection of forest and riparian resources. It provides for a high level of reforestation, and FMZ construction provides for protection of late-successional habitat and nearby communities and resources. Additionally, FMZ construction and associated landscape scale burning, included in alternative 7, provides the best option to allow managers an opportunity to restore fire to its natural role in this fire-adapted landscape.

5.0 Monitoring

Monitoring will be done in accordance with the monitoring plan in the Medford District RMP. Three types of monitoring are discussed: implementation, effectiveness, and validation monitoring. All projects will be monitored to ensure they are implemented consistent with objectives identified in the FEIS and Design Features from the FEIS. The monitoring plan includes components identified in the LSRA Monitoring (USDA and USDI 1998). Proposed projects have been reviewed by REO and determined to be consistent with objectives for managing LSR.

6.0 Public Involvement

6.1 Summary of Public Involvement

Public involvement was sought to identify the desires, expectations, and concerns of interested and affected publics regarding this project and the use of available resources. The “public” included all individuals, agencies, businesses, and organizations interested in, or affected by the project.

The Notice of Intent to prepare an Environmental Impact Statement and conduct public scoping was published in the Federal Register on March 19, 2003. A letter seeking input on the EIS was mailed to approximately 500 individuals, landowners, organizations, organizations, tribal governments, and government agencies. A website specific to the Biscuit Fire EIS was published to the Internet. In all, 456 letters were received within the 30 day scoping period. Additional comments were received after the formal scoping period and the Biscuit Fire Recovery Project Outreach and Communications group participated in numerous meeting with interest groups, county fairs

and other venues, sharing information on the Biscuit Fire Recovery Project with over 2,000 people.

The public comment period for the Biscuit Fire Recovery Project Draft Environmental Impact Statement (DEIS) began November 22, 2003 and ended January 20, 2004. The DEIS was distributed to more than 600 individuals, businesses, groups, organizations, libraries, elected officials, and government agencies. The DEIS was available at local and university libraries and on the Forest Service Biscuit Fire website. Five public meetings were held and approximately 400 individuals attended those meetings. Over 23,000 comment letters were received in the form of e-mails, postcards, faxes, and letters.

The Environmental Protection Agency published the Notice of Availability for the Final EIS on June 4, 2004. The Biscuit Fire Recovery Project Final EIS was released on June 4, 2004 and the 30-day public review period ended July 6, 2004. One comment letter was received from the World Wildlife Fund.

6.2 Responses to Comments on the Final EIS

One comment letter was received during the public review period for the Final EIS. The BLM took a hard look at all the comments received. Comment review looked for the presence of new information that had not been considered in the Final EIS or would justify a modification to the document. The one comment letter received did not address any new information and is addressed below.

The BLM and Forest Service received a letter from the World Wildlife Fund and the Conservation Biology Institute (WWF) which requested that a Supplemental Environmental Impact Statement be prepared because of significant new information not addressed in the FEIS. The WWF sent a report by the Conservation Biology Institute in collaboration with World Wildlife Fund and Wildwood Environmental Consulting, Inc., *Living in Fire Prone Natural Landscapes - Reducing the Risk to Rural Communities from Wildfire - An approach to mapping fire hazards at an intermediate scale to identify and prioritize fire management activities in the urban-wildland interface. (June 2004)*. It is available on the following website: <http://www.consbio.org/cbi/pubs/reports.htm>

While the information in the report is interesting, it provides no new information that would require preparation of a Supplemental Environmental Impact Statement. The report relies on data primarily from the Siskiyou National Forest and designated ecologically sensitive areas based mainly on current Siskiyou National Forest designations.

The report addresses lands outside the Biscuit Fire Recovery Area, which is outside the scope of the Biscuit Fire Recovery Project FEIS. Information and issues from the National Fire Plan are addressed in the FEIS (FEIS I-14) and incorporated into project design.

Additionally, most of the area addressed in the report as high or very high fire hazard, and likely a high priority for treatment, is BLM lands within the Illinois Valley. The report says that the highest priority area for fuels treatment is the WUI buffer zone in the Illinois River Valley. The BLM is addressing this fuels reduction in forest management projects in the Illinois Valley and will continue fuels reduction in the Illinois Valley under the auspices of the National Fire Plan and the Medford District RMP. Since 1998, the BLM has completed, or is planning, fuels reduction on over 7,000 acres in the Illinois River Valley.

6.3 Coordination with Other Agencies and American Indian Tribes

The USDA Forest Service was the lead agency on the Biscuit Fire Recovery Project EIS. The BLM was a cooperating agency. The BLM provided a liaison to the Forest Service during preparation of the DEIS. The BLM provided comments to the DEIS and assisted in writing the FEIS.

Consultation with the Confederated Tribes of the Grand Rode Community, Confederated Tribe of the Siletz Indians of Oregon, and The Smith River Rancheria (Tolowa) occurred prior to this decision. Suggestions and comments brought forward during these consultations were carried through in this decision. These included the use of low intensity prescribed fire in this area that historically has experienced shorter fire return intervals. This decision is guided by the federal government's treaty responsibility to these Tribes.

6.4 Endangered Species Act Section 7, and Magnuson-Stevens Fishery Conservation and Management Act Consultation

Consultation with the US Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration– Fisheries (NOAA Fisheries) is required under Section 7 of the Endangered Species Act (ESA) for Threatened and Endangered (T&E) species.

Section 7(a)(2) of the Endangered Species Act (ESA) requires Federal agencies to consult with the USFWS and/or NOAA Fisheries to ensure their activities will not jeopardize the continued existence of listed species or adversely modify designated critical habitat.

Additionally NOAA Fisheries was consulted under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) regarding actions in the proposed project that may adversely affect essential fish habitat (EFH).

6.4.1 Coho Salmon (*Oncorhynchus kisutch*)

NOAA Fisheries listed the Southern Oregon/Northern California (SONC) coho salmon as threatened under the ESA on May 6, 1997 and designated critical habitat on May 5, 1999. Consultation was sought for the SONC coho salmon from the Rogue River-Siskiyou National Forest and the Medford Bureau of Land Management District (Action Agencies). A BA was submitted to NOAA Fisheries on January 15, 2004 for coho salmon, coho salmon critical habitat, and EFH for coho and chinook salmon for all of the proposed actions described in Alternative 7 of this FEIS with the exception of prescribed landscape burning. Consultation has not been initiated for any prescribed landscape burning actions. The Rogue River-Siskiyou National Forest and the BLM Medford District concluded consultation on Alternative 7 with NOAA Fisheries on April 5, 2004. NOAA Fisheries concurred with the BLM's determination that the proposed project is "May Affect, Not Likely to Adversely Affect (NLAA)" for SONC coho salmon.

There is no effect to coho from prescribed burning on BLM land. Therefore, no consultation is required. Due to the distance between coho or coho critical habitat and proposed activities on BLM lands, there is no effect to coho from prescribed burning on BLM land. Riparian functions in coho critical habitat will be maintained and there are no expected increases in water temperature or turbidity, therefore, no consultation is required on BLM lands for this activity.

NOAA Fisheries was consulted with under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) regarding actions in the proposed project that may adversely affect essential fish habitat (EFH). NOAA Fisheries determined that "the conservation measures that the Action Agencies included as part of the proposed action to address ESA concerns are also adequate to avoid, minimize, or

otherwise offset potential adverse effects to designated EFH” (NOAA Fisheries Letter of Concurrence April 5, 2004).

6.4.2 Northern Spotted Owl (*Strix occidentalis caurina*), Other Listed Wildlife Species, and Listed Botany Species

The only species found within the Biscuit Fire Recovery Project area requiring consultation with USFWS are the northern spotted owl (*Strix occidentalis caurina*) and the marbled murrelet (*Brachyramphus marmoratus marmoratus*). All rare plant surveys were completed and no Federally listed species were discovered. Some Bureau Special Status species were discovered during field surveys and protection measures described in the EIS will be applied.

Section 7 consultation with the USFWS for wildlife and botany T&E species was requested in a programmatic Biological Assessment prepared by the Medford District BLM, Rogue River National Forest, and Siskiyou National Forest. The consultation was for proposed federal projects in southwest Oregon for fiscal years 2004-2008. The USFWS issued a Biological Opinion (BO) (log# 1-15-03-F-511) on October 20, 2003. All Project Design Criteria in this BA/BO will be followed for all activities. The full text of the BO is available on the internet at: <http://www.or.blm.gov/Medford/planning/planningdocs.htm>.

Formal consultation was reinitiated on March 16, 2004 for the Biscuit Fire Recovery Project. A Letter of Concurrence was received on March 19, 2004 and because of the addition of site preparation on Forest Service lands during the critical breeding season for the spotted owl and marbled murrelet, an amended Letter of Concurrence was received on March 31, 2004. The USFWS concurred that for the spotted owl, marbled murrelet and all listed plants, that all project activities “may affect, but are not likely to adversely affect” these species. They also concurred that site preparation “may affect and is likely to adversely affect” the spotted owl due to disturbance on 153 acres for the spotted owl. However, there is no site preparation planned on BLM lands and all activities on BLM lands will occur outside of the critical nesting period. Therefore, there is no effect of disturbance from BLM activities. BLM lands in the project area are outside of the range of the marbled murrelet. No listed plants were discovered on BLM lands during surveys of the project area.

Potential effects to bald eagles (listed as threatened) were assessed (FEIS, pp III-191 through III-194). These assessments concluded that project activities “may affect, but are not likely to adversely affect” this species. There are no bald eagles on BLM lands in the project area, and therefore, there is no effect to bald eagles for BLM activities.

7.0 Implementation Process

Projects will be implemented as described in Section 1.2. Non timber sale projects will be implemented directly from this Record of Decision.

Economic recovery of fire-killed trees (salvage) will be implemented through advertised timber sales.

The restoration projects outlined in this decision will be implemented over the next 10 years, subject to availability of funding and personnel. These projects will be implemented directly from this Record of Decision.

8.0 Administrative Remedies

This decision is a forest management decision. Administrative remedies are available to persons who believe that they will be adversely affected by this Decision. Administrative recourse is available in accordance with BLM regulations and must follow the procedures and requirements described in 43 CFR § 5003 - Administrative Remedies.

In accordance with the BLM Forest Management Regulations 43 CFR § 5003.2(a&b), the effective date of the decision, as it relates to an advertised timber sale(s), will be when the first Notice of Sale for such a sale appears in a newspaper of general circulation in the area where the lands affected by the decision are located. This newspaper is the Grants Pass Daily Courier. Publication of the first notice of sale establishes the effective date of the decision for those portions of this decision record included in the timber sale and timber sale prospectus. The date initiating the protest period is the date of publication of the first notice of sale, in accordance with 43 CFR § 5003.3.

In accordance with the BLM Forest Management Regulation 43 CFR § 5003.2 (a&c), the effective date of this decision, as it pertains to actions which are not part of an advertised timber sale, will be the date of publication of the Notice of Decision in The Grants Pass Daily Courier. Publication of this notice establishes the date initiating the protest period provided for in accordance with 43 CFR § 5003.3. While similar notices may be published in other newspapers, the date of publication in the Grants Pass Daily Courier will prevail as the effective date of this decision.

Any contest of this decision should state specifically which portion or element of the decision is being protested and cite the applicable CFR regulations.

9.0 Bibliography

Beschta, RL, CA Frissell, R Greswell, R Hauer, JR Karr, GW Minshall, DA Perry, and JJ Rhodes. 1995. Wildfire and Salvage Logging: Recommendations for Ecologically Sound Post-fire Salvage Management and Other Post-fire Treatments on Federal Lands in the West. 14 pp.

Sessions, J., R. Buckman, M. Newton and J. Hamann. 2003. The Biscuit Fire: management options for forest regeneration, fire and insect risk reduction, and timber salvage. Unpublished report, on file, College of Forestry, Oregon State University, Corvallis, OR.

USDI Bureau of Land Management. 2004. Record of Decision and Resource Management Plan Amendment for Management of Port-Orford-Cedar in Southwest Oregon, Coos Ban, Medford, and Roseburg Districts.

USDI, Fish and Wildlife Service. 2004. Re-initiation of formal consultation on proposed Biscuit Fire Recovery and Ashland Watershed Protection Projects; Letter from Craig Tuss, Field Supervisor, Roseburg Field Office: 19 March 2004.

USDI Bureau of Land Management. 2004. North Fork Silver Creek Watershed Analysis. Medford District Bureau of Land Management, Grants Pass Resource Area.

USDI US Fish and Wildlife Service. 2003. Rogue River/South Coast Biological Assessment FY-04-08 for Activities that may affect listed species in the Rogue River/South Coast Province for Medford District, Bureau of Land Management, Rogue River and Siskiyou National Forests, 11 July 2003. 94 pp. Biological Opinion (FWS) 1-15-03-F-511, 20 October 2003

USDI Bureau of Land Management. 2002. Biscuit Fire: Burned Area Emergency Stabilization and Rehabilitation Plan (ESRP). Medford District BLM, Medford, Oregon.

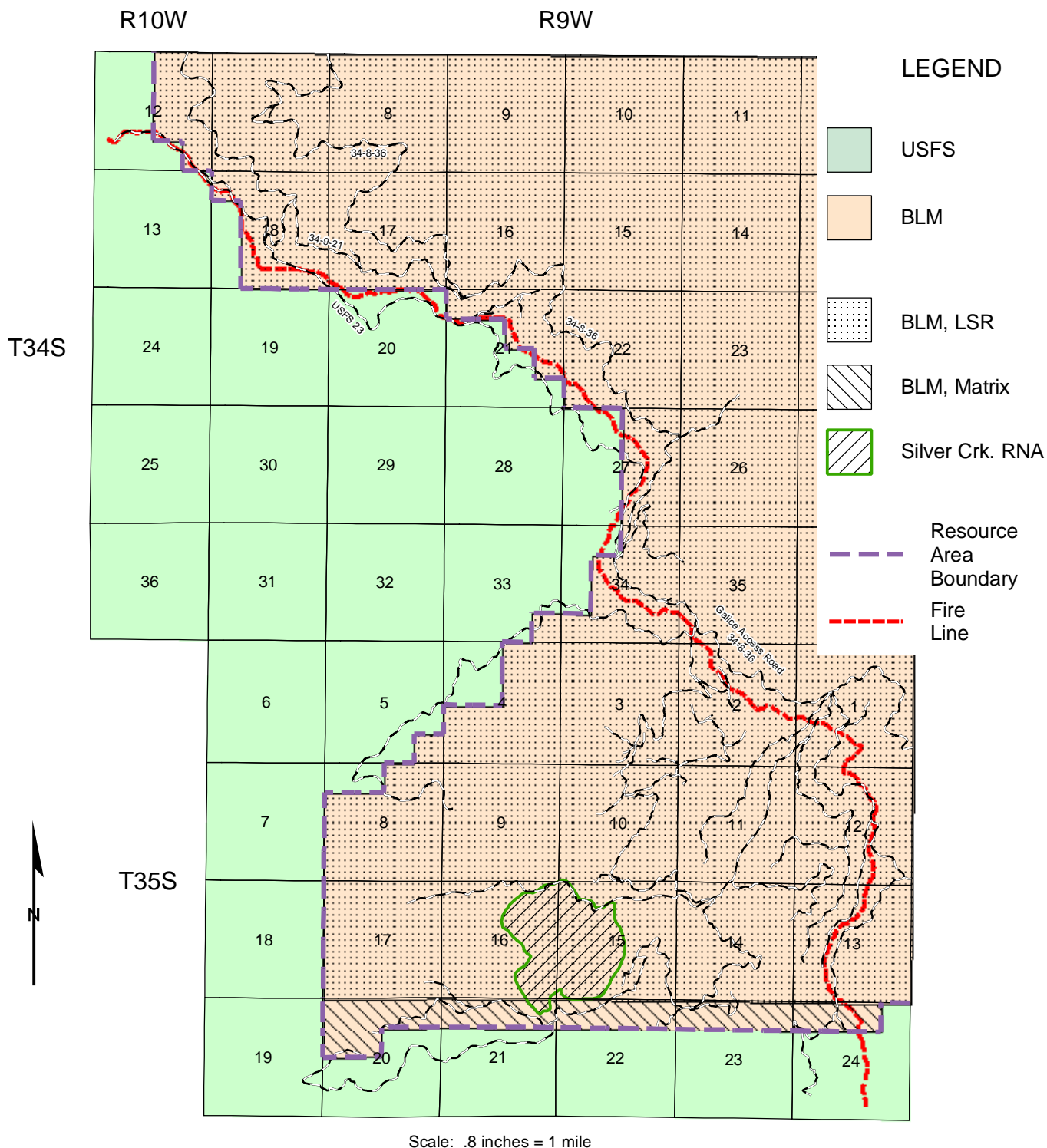
USDA, USDI. 2004. BLM Final Supplemental Environmental Impact Statement for Management of Port-Orford-Cedar in Southwest Oregon.

USDA. 1995. Silver Creek National Watershed #9 Watershed Analysis. Siskiyou National Forest.

USDA, USDI. 1995. Southwest Oregon Late-Successional Reserve Assessment, Siskiyou National Forest and Medford District Bureau of Land Management.

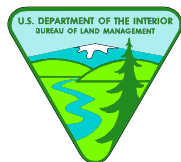
USDA, USDI. 1994. Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species within the Range of the Northern Spotted Owl. Record of Decision (Vol. I) and Standards and Guidelines (Vol. II).

USDI. 1995. Medford BLM Record of Decision and Resource Management Plan.



Map 1

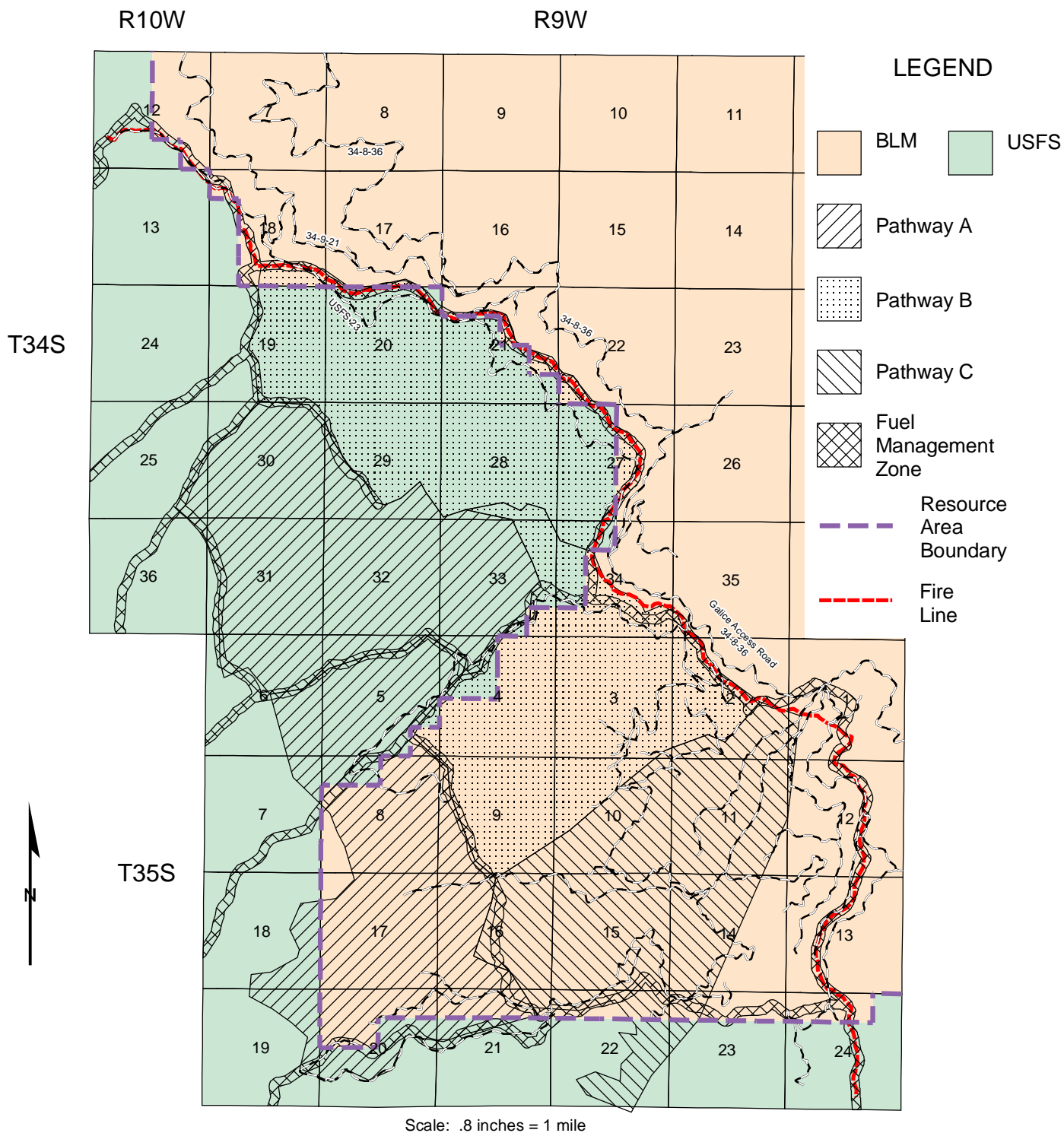
Land Use Allocations Biscuit Fire Recovery Project, BLM Lands



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May, 2004

John McGlothlin
Medford District, BLM



Map 2

Learning Opportunity Pathways and Fuel Management Zones Biscuit Fire Recovery Project, BLM Lands



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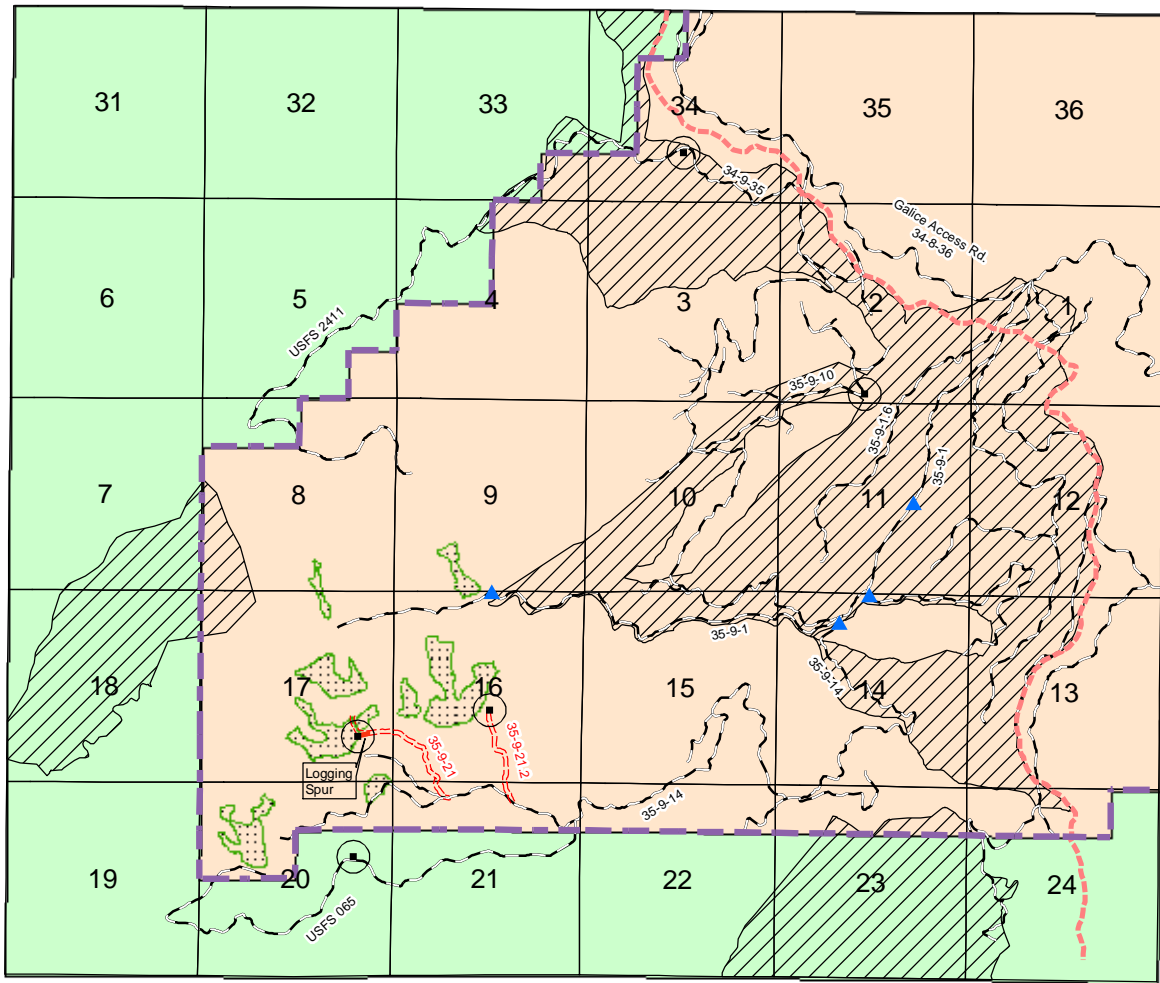
July, 2004

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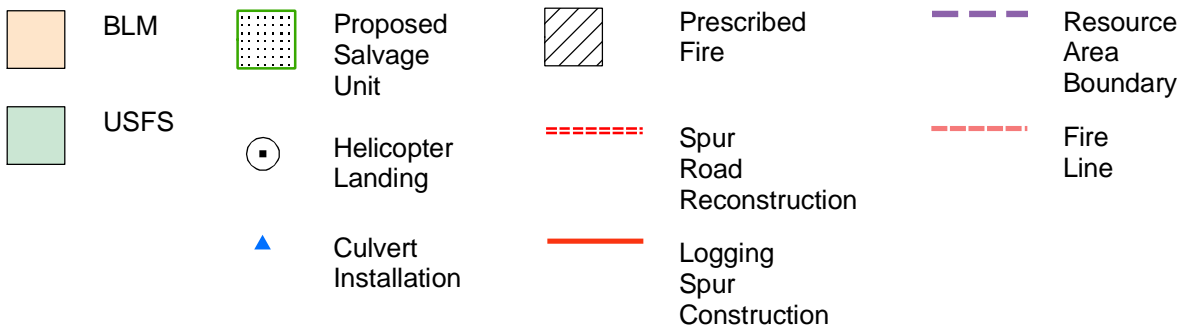
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Scale: 1 inch = 1 mile

Map 3

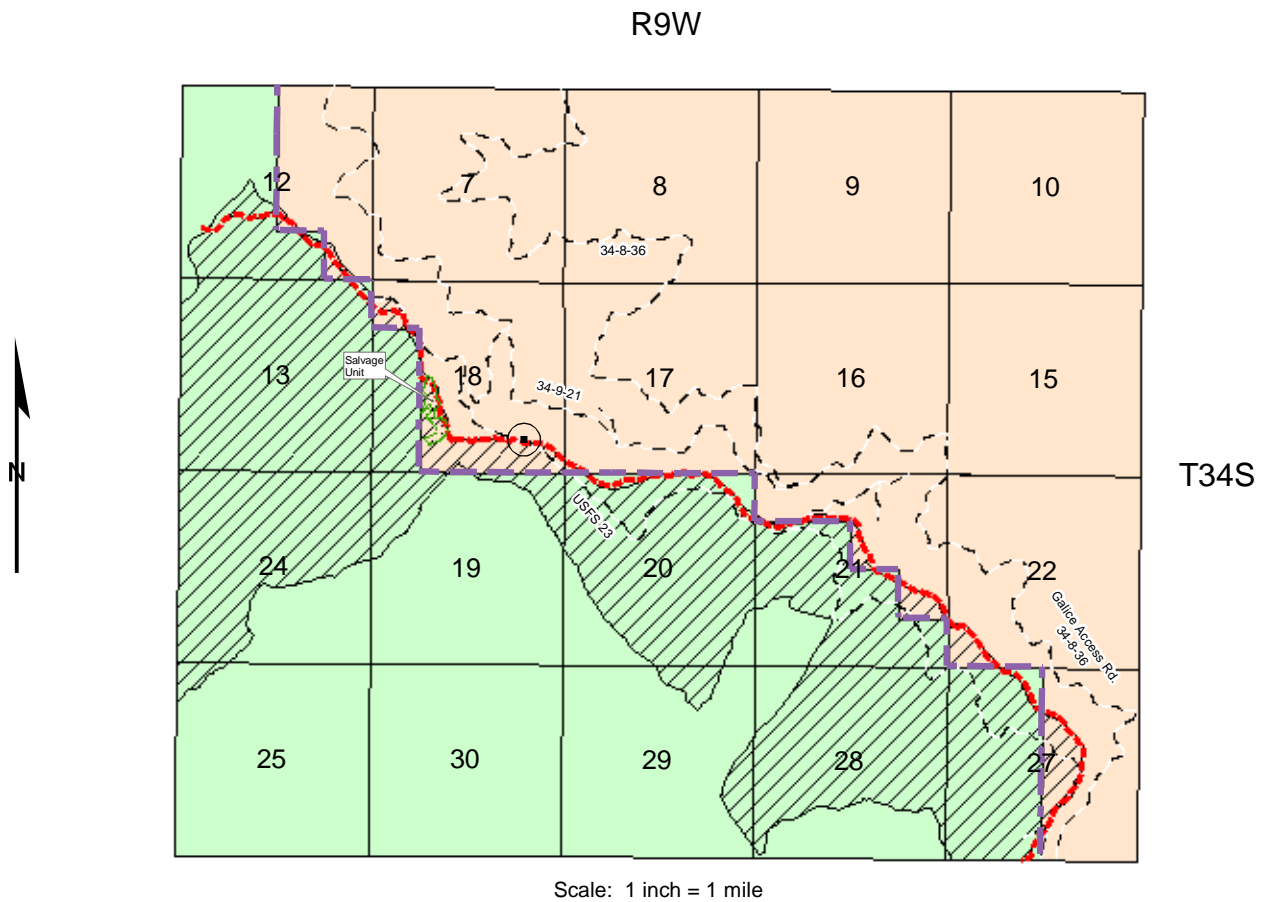
Management Activities Silver Creek Area Biscuit Fire Recovery Project, BLM Lands



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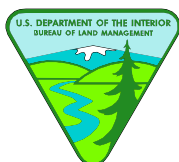
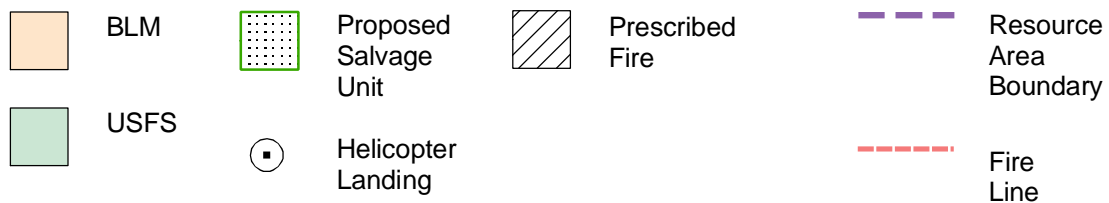
June, 2004

John McGlothlin
Medford District, BLM



Map 4

Management Activities Bear Camp Area Biscuit Fire Recovery Project, BLM Lands



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June, 2004

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