RECORD OF DECISION

INTRODUCTION

In 1991, three separate environmental analyses encompassing what is now the East End area were prepared. The three analyses were for the I&D Salvage, Bald Mountain Salvage, and DF Salvage timber sales. The analyses identified a need to address the cumulative effects of the three adjacent projects and suggested that significant environmental effects could result from the concurrent implementation of the proposed sales. It was decided to prepare an Environmental Impact Statement to better evaluate the cumulative effects of timber harvest. This provided the Forest with an opportunity to conduct a landscape level analysis, comparing the existing condition of the resources to the Desired Future Conditions (DFC) defined within the Umatilla National Forest Land and Resource Management Plan (Forest Plan). This resulted in a proposal of numerous restoration and habitat enhancement projects which would move the ecosystem closer to the DFC. The Draft EIS for the East End Salvage and Restoration Projects was published on October 9, 1992. Public comments and field verification resulted in additional changes to the alternatives which were published in the FEIS in August of 1993.

This past year has been a dynamic one with many changes in resource concepts and management. The constant flow of new studies and research has raised concerns regarding the abundance and distribution of old-growth stands. The Eastside Forest Ecosystem Health Assessment (Everett et al, 1993) showed that the amount of old growth in some watersheds is significantly below historic levels. In addition, Forest Plan monitoring indicated that there is less old growth in existence that was assumed in Forest Planning. With these concerns and others in mind, Regional Forester, John Lowe, issued a directive which implemented a screening process to insure that timber sale planning and layout were consistent with the National Forest Management Act viability requirements for old growth-associated species. The Decision Notice for the Continuation of Interim Management Direction Establishing Riparian, Ecosystem and Wildlife Standards for Timber Sales was signed on May 20, 1994, implementing the project design standards.

The interdisciplinary team which designed and analyzed the East End projects adapted the FEIS to much of the new information. However, additional modification of the preferred alternative was necessary to maintain consistency with these new Regional design standards. This Record of Decision (ROD) documents my decision and rationale for selecting Alternative B, with modifications, from the Final Environmental Impact Statement (FEIS) for the East End Salvage and Restoration Projects.

PROPOSED ACTION

The Umatilla National Forest has proposed the East End Salvage and Restoration projects which is scheduled for implementation in the spring of 1995. The analysis area is located on the Heppner Ranger District in Grant and Morrow counties. The analysis area included approximately 81,388 acres within the Bear, Cabin, Upper and Lower Ditch, Mallory, Upper and Lower Potamus, Little Potamus, Swale, and Willow Creek subwatersheds. The project boundary includes portions of the Potamus, Skookum, and Texas Butte Roadless Areas. However, as a

result of our analysis, no timber harvest nor road construction was proposed within any portion of these roadless areas. Refer to Figure B.1 of Appendix B for a location map.

PURPOSE AND NEED

Past management practices of fire exclusion and selective harvesting have altered successional patterns and created "unnatural" stands and forest conditions. These conditions have rendered the stands susceptible to episodes of disease, drought, and insect infestations. This has resulted in extensive areas of dead and insect damaged fir trees, and unhealthy stands in a state of decline, which seriously hinders or precludes altogether the ability to meet ecosystem objectives.

The latest insect outbreak has resulted in a loss of live timber, forest productivity, visual quality, and vegetative cover. In addition it has reduced the overall habitat quality for big game and other wildlife. These conditions are present over much of the East End area and are at risk for large scale, high intensity wildfire due to the heavy accumulations and vertical layering of fuels.

Action is necessary to prevent further degradation of forest health and productivity. Action is needed to reverse current trends and begin moving the area towards its desired future condition as specified by the Umatilla National Forest Land and Resource Management Plan (Forest Plan) and towards ecologically sustainable conditions. Action is also needed to facilitate and expedite accomplishment of the three primary purposes resulting from declining forest health conditions in the East End area. These include:

1)Salvage of dead and defoliated trees.
2)Restoration of damaged and degraded forest resources and conditions.
3)Protection from continued insect damage and potentially catastrophic wildfires.

Action is needed to implement the District's Motorized Access and Travel Management Plan. Effective implementation of the plan should help reduce overall resource impacts such as inputs of sediment from roads into streams and big game and other wildlife harassment, while providing for appropriate levels of public and administrative access.

APPLICABLE LAWS, REGULATIONS AND POLICIES

The Final Environmental Impact Statement for the East End Salvage and Restoration Project was prepared to meet the requirements of the National Environmental Policy Act of 1969 (NEPA) and the Council on Environmental Quality implementation regulations (40 CFR 1500). All alternatives were developed to be consistent with the requirements of the Record of Decision for the Pacific Northwest Region, Final Environmental Impact Statement for Management of Competing and Unwanted Vegetation and the associated Mediated Agreement.

This project is responsive to the Forest Service's statutory duties and authorities set out in NFMA and the Umatilla National Forest Land and Resource Management Plan. Specifically, requirements in 36 CFR 219.27, Resource Protection, and the Forest Plan guided the development and analysis of the proposed project. The existing condition of the resources are sufficiently different from the desired future condition in the Forest Plan to justify implementing this project.

Other documents which were used to influence decisions include the Columbia River Basin Anadromous Fish Habitat Management Policy and Implementation Guide, 1991; Blue Mountains Forest Health Report, 1991; Eastside Forest Ecosystem Health Assessment, 1993; Restoring Ecosystems in the Blue Mountains, 1992; Blue Mountains Ecosystem Restoration Strategy, 1993; An Interim Guide to the Conservation and Management of Pacific Yew, 1992. In addition, the selected alternative was modified to be consistent with Amendment No. 8 of the Umatilla National Forest Land and Resource Management Plan and the requirements of the Decision Notice for the Pacific Northwest Region Environmental Assessment for the continuation of interim management direction establishing riparian, ecosystem and wildlife standards for timber sales, May 20, 1994.

DECISION

Based on the analysis documented in the Final Environmental Impact Statement, public comments, and the information provided in the Supplemental Information (ROD, Appendix A), it is my decision to implement a modification of Alternative B. The alternative, as modified, is within the overall range of alternatives and the environmental effects addressed within the Final EIS (for details refer to Appendix A), giving adequate information to make a reasoned choice among alternatives.

The selected alternative will harvest approximately 5.1 million board feet (mmbf) of wood products from 294 acres. The harvest will be primarily dead or insect and disease damaged trees that are host to the western spruce budworm. Host species include grand fir, Douglas-fir, and Englemann spruce. Silvicultural treatments would include 2.5 MMBF (194 acres) of regeneration salvage, .5 MMBF (100 acres) of Irregular Shelterwood and 2 MMBF from the roadside salvage of hazard trees. Actions connected to timber harvest include fuels reduction for preparation to plant (233 acres), whip felling to create planting spots (155 acres), big game and livestock damage control measures (1,536 acres), tree planting within harvest units (294 acres), and subsoiling to prepare the site and implement reforestation (62 acres). Additional connected actions would include the construction of 2.6 miles of temporary road and the reconstruction of 8.3 miles of existing road. No new road construction would occur.

In addition, it is my decision to implement the following restoration projects:

- Rehabilitation planting (underplanting) outside of harvest units (1,242 acres) would be implemented to regenerate stands.
- Seeding and planting of the areas disturbed from harvest, subsoiling and road obliteration to improve diversity and quality of available forage, improve distribution and cover for wildlife and livestock, and to reduce establishment of noxious weeds on disturbed soils. Different mixtures of bunchgrasses, legumes, and hardwoods would be used to meet the overall resource objectives.
- Livestock/big game exclosures and fencing to regenerate 12 to 15 aspen stands (approximately 2 acres per stand), protect spring sources, and riparian/stream bank restoration.
- Development of water sources for wildlife. These projects would include a water holding impoundment in the Gilman Flats area affecting approximately 10 acres, and 3-4 game guzzlers located within the Elder Flats area.

- Fence construction would be implemented to exclude livestock and/or big game from important habitats, and would include spring source fencing, riparian pastures and meadow/stream bank restoration. Approximately 10 miles of temporary or permanent fence (20 structures) would be built. A three mile section of Ditch Creek would be fenced to better regulate livestock use within the riparian zone.
- Riparian planting within Ditch Creek, Stalder Creek, Upper and Lower Ellis Creek, Swale Creek, Mallory Creek, and Potamus Creek to provide quality natural fish habitat. This would include the planting of hardwoods and conifers along a total of seven miles of streamcourse.
- Water tank reconstruction and/or removal within the Potamus and Mallory subwatersheds to improve the distribution of livestock and reduce the impacts of grazing within riparian areas.
- Placement of instream structures and the placement of large wood along approximately two miles of Potamus Creek for the improvement of fish habitat.
- The restoration of several headcuts located within the lower end of Kelly Prairie would be accomplished using logs, rock and earth grade control structures. A temporary electric fence would be constructed along a one mile length of Potamus Creek enclosing the restoration project within Kelly Prairie.
- Large wood would be placed within Wilson Creek and Stalder Creek to provide increased structural diversity and improve stream shading.
- A breached small dam and abandoned road bed will be removed within the Swale Creek floodplain. These two old structures constrict streamflow during periods of high flow.
- Wildlife/big game forage enhancement burns to improve forage, stimulate sprouting of decadent and non-existing shrub species, and increase the variety of palatable plants (15,000 acres).
- The transplanting of trees within the Blue Mountain Scenic Byway to enhance visuals;
- Road obliteration and/or closure for the benefit of watershed, fisheries, and wildlife resources (72.6 miles).

Refer to Appendix B, Figure B.3 and Figure B.4 for location maps of the specific restoration and prescribed burning projects.

To provide for safety along roads which are designated "Open" or "Seasonally Open" under the District Motorized Access and Travel Management Plan (MATM), hazard trees (see Glossary in the FEIS) would be cut and removed through commercial timber sales or firewood sales. In addition, hazard trees along the 5350 road would also be removed. Although the 5350 road is a closed road, frequent administrative use of this road is necessary for approximately the next 5 years in order to fulfill our reforestation obligations. The numerous hazard trees along this main arterial road create a safety concern and removing them will protect employees, contractors, and the relatively high number of recreationists who use this route for non-motorized access.

Modifications to Alternative B that I have decided to implement are:
The key objectives and design elements of the Alternative B have been retained. However, several modifications were made to insure consistency with the Umatilla National Forest Land and Resource Management Plan. These modifications include: (Refer to Appendix A and Appendix

C of this document for a complete description of Alternative B Modified and the rational for the changes).

- Harvest would occur only in catchments with less than 30% of its forested area in the 0-10 age class (including private land), and would not exceed 30% after harvest is complete. This is a modification of Alternative B which could have caused up to 40% of the forested area in a catchment to be in the 0-10 age class.
- No harvest will occur in inventoried old growth stands (old growth in addition to that contained within the C1 or C2 management areas).
- Rehabilitation planting of approximately 1,242 acres would occur to reforest acres which were defoliated during the insect epidemic. These would include hardwood and softwood species such as ponderosa pine, larch, Douglas fir, willow, and alder. This is an addition to the design elements of the Alternative B within the FEIS.
- The Roadside Salvage has been modified to exclude those trees designated BS-3 or BS-4 which are not hazard trees. In addition, hazard trees within the Management Area C5 (Riparian), would be cut and left in place to provide down and woody material within the riparian area (unless the tree falls across the road). The original alternative allowed for their removal.

Mitigation Measures

Mitigation measures are applied to meet Forest Plan Standards and Guidelines and will be followed in the implementation of these projects. Mitigation measures which are both specific to Alternative B Modified and to all Action Alternatives are listed in detail in Appendix A of this document. Mitigation measures will be applied to project design and layout, in timber sale contracts, and permit requirements. In addition to the mitigation measures, the numerous restoration projects implemented with this decision will further move the project area towards the Desired Future Condition defined within the Land and Resource Management Plan. All practicable means to avoid or minimize environmental harm was incorporated into the Modified B alternative. Specific mitigation modifications to Alternative B of the FEIS include:

- The down woody material for wildlife habitat was modified to be consistent with the Pacific Northwest Regional Environmental Assessment and Decision Notice for the continuation of interim management direction establishing riparian, ecosystem and wildlife standards for timber sales (May, 1994). The intent is to provide for, and maintain over time, 100% of the habitat capability supporting species that depend on dead and defective tree habitat.
- All stream classes and riparian areas would be protected by buffers in which no trees would be harvested and no ground based logging equipment would be allowed to operate. The buffer width for streamside riparian protection has been modified from Alternative B of the FEIS. The original Alternative B required 300 feet on all perennial and fish bearing steams and a minimum of 75 feet on each side of intermittent non-fish bearing streams. To be consistent with the Pacific Northwest Regional Environmental Assessment and Decision Notice for the continuation of interim management direction establishing riparian, ecosystem and wildlife standards for timber sales (May, 1994), intermittent non-fish bearing streams would be increased to a distance of 100 feet slope distance (200 feet including both sides of the stream

channel), or the buffer width specified by stream order (refer to Table A.1 on page A5), or whichever is greatest.

Monitoring
Activities and their effects, including effectiveness of mitigation measures, would be monitored. In addition to Forest-level monitoring, the specific monitoring activities that would be performed in the East End project area are listed in detail in Appendix A of this document.

Management Area Adjustments: It is my decision to implement the following management area adjustments under the authority of 36 CFR 219.10. The changes have been determined not to be significant for the purposes of the planning process and represent a non-significant amendment to the Umatilla National Forest Land and Resource Management Plan. This amendment was analyzed and documented within the Environmental Impact Statement for this project, completing the necessary NEPA procedures and the associated public notification required under CFR 219.10.

A field inventory of the Dedicated Old Growth (C1) in 1992 indicated that approximately 148 acres had been harvested and were not suitable for inclusion in the C1 management area. With selection of this alternative, the best available old growth habitat within the vicinity of the stands lost would be reallocated as C1. The areas currently designated as C1 that were found to be unsuitable would be reallocated to the management area surrounding the stand. These changes would not cause a net gain or a net loss in the acres allocated by the Forest Plan to Management Area C1. Refer to Figure B.3 of Appendix B for a map showing the proposed changes.

In addition, a portion of the Nonmotorized Dispersed Recreation Area (A1) immediately adjacent to the Blue Mountain Scenic Byway would be reallocated to Viewshed 2 (A4) to allow greater flexibility in managing the area as a scenic travel corridor rather than as a nonmotorized dispersed recreation area. The remainder of the Hell's Half-Acre (Cutsforth Park) area would remain allocated as A1. Refer to Figure B.3 of Appendix B for a map showing the proposed changes.

Changes to the District Motorized Access and Travel Management Plan (MATM): Roads within the analysis area were reviewed for consistency with the intent of the MATM plan and to determine if changes were needed in the plan based on issues developed and information gathered through the East End analysis. 12.28 miles of additional road would be closed and 6.68 miles of road would be designated as open yearlong. Please refer Appendix C of this document which discusses the changes to the District Motorized Access and Travel Management Plan.

It is with this decision that the corrections to the Final Environmental Impact Statement for the East End Salvage and Restoration Projects set out within Appendix D of this document are incorporated into the FEIS. The corrections include Table 2.4: Roads Changed to Designation "To Be Obliterated" which was inadvertently omitted during the printing of the document; and Table D.2: Road Miles and Densities by Subwatershed which corrects a calculation error within the table.

PUBLIC PARTICIPATION

Scoping was the process used to identify significant issues to the Proposed Action, a reasonable range of alternatives, and determine the extent of environmental analysis necessary to reach an informed decision. The planning process and scoping were initiated in March 1991 with the proposal of the I&D Salvage, DF Salvage, and Bald Mountain Salvage Sales. Newspaper notices, public meetings, open house forums, as well as direct mailings to over 90 interest groups and individuals, provided information concerning the projects and requested issues for analysis.

In February of 1992, these three projects were combined to create the East End Salvage and Restoration Projects. The notice of intent to prepare an Environmental Impact Statement for this project was published in the Federal Register on June 30, 1992. Newspaper notices and letters to over 360 interested groups and individuals were again sent out to provide information about the change. These responses, the concerns of District Specialists, and issues identified during previous activities in the analysis areas, to define the issues and identify those which were essential for alternative development.

A Notice of Availability for comments on the Draft EIS was published in the Register on October 9, 1992. The comment period was extended an additional 30 days with the publishing of an Amendment to the Notice on December 4, 1992. On March 19, 1993, a notice was published to announce the availability of the comments received from the Environmental Protection Agency on the DEIS. The Notice of Availability of the Final EIS for this project was published on November 29, 1993.

Ninety-six letters were received which commented on the DEIS during the comment period. Twenty-three additional letters were received after the extended deadline; these comments were also reviewed and considered.

The interdisciplinary team met with interest groups and other governmental agencies; the hydrologist of the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Culture and Heritage Committee, local timber industry representatives, biologists from the Oregon Department of Fish and Wildlife to describe the proposed action in detail and request issues.

Cooperating Agencies

Oregon Department of Fish and Wildlife contributed to the design of the wildlife security areas. These areas were incorporated into the Action Alternatives (B-E) as mitigation measures for the purpose of reducing big game vulnerability during timber harvesting activities. Refer to Figure B.6 in Appendix B of this document for a map depicting the location of these areas.

American Indian Treaty Rights

The District worked closely with the local Native American people to consider their needs and their rights under the treaties of 1855. Specifically, Confederated Tribes of the Umatilla Indian Reservation and the Confederated Tribes of the Warm Springs Indian Reservation representatives were consulted during the alternative development process. Both of these Tribes assisted by

reviewing and commenting on various parts of the project during the DEIS review period and have continued to provide additional consultation. American Indian rights, including those conferred by the American Indian Religious Freedom Act, would not be effected.

ISSUES

Analysis of the comments showed no new issues or concerns aside from those identified in the DEIS. The key issues which were studied in detail in the DEIS includes: Stand Recovery, renamed "Forest Vegetation Recovery" in the FEIS; Fisheries Habitat and Water Quality; Wildlife Habitat; Wood Fiber Utilization, renamed "Wood Fiber Recovery" in the FEIS; Fire Risk, renamed "Wildfire Risk" in the FEIS; and Visual Quality which was dropped as a key issue and moved to "Other Issues Considered" in the FEIS. This change was made as the public did not identify this as a key issue. Public involvement is further detailed in Chapter 1 of the FEIS under "Scoping Process" and in "Responses To Substantive Public Comments" in Appendix B of the FEIS.

ALTERNATIVES CONSIDERED

Five alternatives were developed and analyzed in the DEIS. This included the proposed action (Alternative D) and a no action alternative. The comments received on the DEIS were analyzed and considered, and as a result, many changes were made in the FEIS, including refinement of the alternatives.

Changes in alternative design and mitigation specifically due to public comment include:

- Additional emphasis to protect and restore water quality.
- The modification of several alternatives to address the concern of harvest of inventoried old growth habitat.
- Additional emphasis on snag retention/replacement to address the habitat needs of primary cavity excavators and other species dependent on old growth habitat.

Many comments claimed the Forest Service failed to consider a wide range of alternatives, observing the proposed alternatives prescribed varying levels of harvest. In response to this, I directed the interdisciplinary team to develop an alternative for the FEIS which focused on restoration projects only. This resulted in the addition and analysis of a sixth alternative in the FEIS, Alternative F.

In addition to public comment, changes to the Final EIS can also be attributed to new information and the interim direction letter which Jeff Blackwood, Forest Supervisor, issued on August 18, 1992 clarifying salvage direction. While the basic intent and design of the alternatives that were in the Draft EIS have remained essentially the same, the estimated acres and volume harvested have changed considerably.

The interim direction letter defined "catastrophic conditions" and limited the size and location of stands that could be harvested in the event of a catastrophe. The direction limits the maximum size of an opening to 200 acres under catastrophic conditions, and limits the amount of a subwatershed that can be in the 0-10 year age class to 40% of the forested acres.

The biggest single factor in the reduction in proposed acres and volume harvested between the Draft and Final EIS was a direct result of additional information which was gathered after publication of the DEIS. Harvest prescriptions proposed in the Draft EIS were based on stand exam information which indicated that there would be an adequate number of live, healthy trees remaining after harvest to prevent it being classified as a created opening as defined by the Forest Plan. However, field verification of the number of live, healthy trees has shown that most of the proposed units would have created openings. Therefore, the unit size was reduced to comply with these standards.

Each of the alternatives and their design rationale are detailed in Chapter 2 of the FEIS. Chapters 2 and 4 of the FEIS disclose the tradeoffs and environmental effects of all alternatives considered in detail. **Alternative B as modified is disclosed in Appendix A of this document**. The alternatives are very briefly described here as follows:

Alternative A: This was a "no action" alternative. None of the proposed salvage or rehabilitation projects proposed would take place at this time.

Alternative B: This was designated the preferred alternative in the DEIS. This alternative would harvest the maximum number of acres in highly defoliated (BS-3 and BS-4) stands, while staying within the interim salvage guidelines outlined in Jeff Blackwood's August 18, 1992 letter. It would produce 25.3 MMBF of salvaged timber resulting in created openings up to 200 acres in size. Roadside salvage would occur along all open and seasonally open roads. Selection and implementation of this alternative would require a Forest Plan amendment which would permit an increase in the amount of area in the 0-10 year age class in four subwatersheds. This alternative responds to issues related to wood fiber recovery, economic impacts, rapid recovery of affected areas, and wildfire hazard reduction.

Alternative C: This alternative would minimize impacts to water quality, fish habitat, and fish populations, while still addressing all the elements of the purpose and need. The main focus is to minimize sedimentation, degradation of riparian conditions, and changes in peak flows. It would produce 2.5 MMBF of salvaged timber. Proposed harvest units would be spatially dispersed and not greater than 40 acres in size. Harvest would only occur in catchments with less than 20% of its forested area in the 0-10 age class, and would not exceed the 20% after harvest is complete. Hazard tree removal would occur along all open roads, seasonally open roads, and timber sale haul roads.

Alternative D - Proposed Action: This alternative would maintain biological diversity across the analysis area while harvesting BS-3 and BS-4 stands. It would produce 7.1 MMBF of salvaged timber resulting in created openings up to 100 acres in size. Harvest would only occur in catchments with less than 30% of its forested area in the 0-10 age class, and would not exceed the 30% after harvest is complete. Within harvest units greater than 20 acres, unharvested patches would be retained to promote stand diversity as the new stand matures. The size of these patches would range from .25 to 5 acres. Roadside salvage would occur along selected high use roads.

Alternative E: This alternative would treat the maximum acreage of BS-3 and BS-4 stands while meeting existing Forest Plan standards and guidelines without using catastrophic condition language. It would produce 7.1 MMBF of salvaged timber resulting in created openings up to 40 acres in size. Harvest would only occur in catchments with less than 30% of its forested area in the 0-10 age class, and would not exceed the 30% after harvest is complete. Within harvest units greater than 20 acres in management areas C4 (Wildlife Habitat) and E2 (Timber and Big Game), unharvested patches would be retained to promote stand diversity as the new stand matures. The size of these patches would range from .25 to 5 acres. Roadside salvage would occur along all open and seasonally open roads. Refer to Table 2.9 for harvest and reforestation outputs.

Alternative F: This alternative would rehabilitate the analysis area without the use of harvest options. Prescribed fire would be used to create diverse vegetation patterns which are fragmented in some areas and unbroken in others. This could result in 10 - 30 acre openings. Thinning of overstocked or unhealthy understories would occur to reduce competition and allow openings for natural regeneration. The restoration projects which were proposed for the other action alternatives would be implemented.

RATIONALE FOR THE DECISION

I have decided to select the modified Alternative B because it provides a "balance" between economic benefits and environmental concerns. The Alternative implements an aggressive restoration program providing a balance of forest stand restoration, wildlife habitat improvement, and watershed restoration. In arriving at my decision, I reviewed the alternatives and the environmental consequences. I paid particular attention to how the alternatives responded to the public issues and management concerns. During the decision process for this project I realized that I would not be able to satisfy all public issues as many of them are mutually exclusive. The response of each alternative to the six key issues was a primary consideration in my decision to modify the preferred alternative. These major issues and their resolution with the selection of Modified B are discussed below. The issues are presented in greater detail in FEIS Chapters I and IV.

Issue 1: Forest Vegetation Recovery: In the fall of 1993, monitoring data showed that stands within the East End project area had experienced a collapse in spruce budworm populations. Field examinations in the fall of 1993 and again in the spring of 1994 determined that some stands had improved and were no longer classified as BS-3 or BS-4 (refer to page 63 in the FEIS for a definition of defoliation classifications). In keeping with the intent of the sale design criteria, I have decided to modify Alternative B to harvest only stands that suffered or continue to suffer high mortality rates. Please refer to Appendix C Tables C.2 and C.5 for the specific units which were dropped from Alternative B.

Although there has been some improvement in stand conditions within the East End project area, the majority of the area continues to suffer catastrophic loss from the spruce budworm infestation. Alternative B, as modified, will reforest 294 acres of dead and insect damaged stands. In addition, rehabilitation planting (planting under the canopy) will occur on 1,242 acres. This underplanting will occur within units which were planned to be harvested under Alternative B and

are no longer classified as a BS-3 or BS-4 stand. These activities will facilitate our achieving the desired conditions described in the Forest Plan.

Issue 2: Fisheries Habitat and Water Quality: Recognizing the poor condition of fish habitat and the fair to poor condition of the uplands, I have modified Alternative B to improve and protect instream and riparian habitat, and upland soil and water conditions, particularly related to restoration of fish runs and maintenance of water quality. To be responsive to this issue, I have modified Alternative B as follows:

- Harvest is limited to those subwatersheds having 30 percent or less of the forest land in timber stand age classes of 0-10 years. Harvest associated with this alternative will not increase the percent of forested land in the 0-10 age class beyond 30%. Four of the catchments within the analysis area are currently above this 30% standard. No new harvest will occur within these four catchments with the implementation of this alternative. [Forest Plan dispersion of openings constraint, Forest Plan, page 4-77].

- Alternative B Modified protects all stream classes and riparian areas by excluding timber harvest activities and ground based logging equipment from within these sensitive areas. The alternative requires a protective buffer consisting of a minimum of 300 feet on each side of perennial and intermittent fish-bearing streams, and a minimum of 300 feet on each side of perennial non-fish bearing streams. In addition to this, I have increased the protective buffer on intermittent non-fish bearing streams to a minimum of 100 feet on each side of the stream.

- Temporary road construction has been reduced from 17 miles to 2.6 miles . This is the least amount of road construction when compared to the other action alternatives. In addition, the alternative was modified to insure that all temporary roads will be located a minimum of 400 feet from Class I and II streams. The 8.3 miles of road reconstruction is limited to resurfacing the road with gravel. These measures will minimize the effect of road induced sediment to streams.

- The harvest units which were identified in the FEIS as a concern for water quality and fisheries habitat (FEIS, Appendix E) have been deferred or modified as necessary to ensure the project would not adversely impact fish habitat and water quality.

- The restoration projects implemented with this decision were designed and incorporated into the Alternative to enhance fish habitat and water quality. Specifically, the riparian planting of alder and hardwoods, the watershed and streambank improvement projects, road obliteration and/or road closures, rehabilitation underplanting outside of harvest units, and livestock/big game exclosures of aspen stands/riparian areas will all result in promoting and enhancing the fish habitat and water quality within the project area.

Issue 3: Wildlife Habitat: Increased road density, loss of quality cover, timing and lengths of hunting seasons, and the number of hunters have resulted in declining deer numbers and the elk herd composition remaining below ODFW Management Objectives. The deteriorating cover situation, as a result of the current insect infestation, is compounding an already serious problem. In addition, the public raised a concern that proposed salvage harvest would threaten the populations of many cavity nesting and old growth dependent species.

Recent research in the area of old-growth and riparian dependent species make it prudent to take a cautious approach to harvesting timber in riparian areas and in areas of late and old seral stands. While abundance, distribution, and interrelationships of all structural vegetation stages are important to the viability of certain species of wildlife and fish, old-growth abundance (and the plant and animal life supported therein) is of principal concern. Alternative B, as modified, is responsive to these issues while retaining watershed character and stands classified as old or late seral until regional landscape-level options have been considered. My decision to modify the alternative is based on the review of Forest Plan monitoring results, the Eastside Forest Ecosystem Health Assessment (Everett et al.), and the environmental assessment for the Continuation of Interim Management Direction Establishing Riparian, Ecosystem and Wildlife Standards for Timber Sales. This alternative provides for species viability in accordance with the National Forest Management Act (NFMA) and is sensitive to maintaining options until such time as the Eastside Ecosystem Management Project completes an ecosystem assessment of the interior Columbia River Basin. Alternative B, with the modifications I have made, respond well to the following wildlife habitat concerns:

- In response to the issues of increased road density, loss of quality cover, and increased vulnerability of big game during hunting seasons, mitigation was incorporated into Alternative B which establishes 9355 acres of wildlife security areas (Figure B.6, Appendix B, FEIS). This mitigation provides wildlife travel corridors and reduces big game vulnerability during hunting seasons. These areas were established as temporary mitigation to exclude motorized vehicles and harvest activities during the implementation of the alternative.
- Alternative B, as modified, provides the most short-term big game cover following timber harvest when compared to the other action alternatives. The reforestation of harvest units together with the rehabilitation planting will result in the re-establishment of cover in defoliated stands. The 2.6 miles of temporary road construction will be obliterated after harvest and associated administrative actions are completed.
- The selected alternative will reduce the big game vulnerability, protect water and fish resources, and allow us to enforce our Access and Travel Management Plan with the obliteration and closure of 72.6 miles of road.
- Approximately 4% of the forested land within the East End project area is Dedicated Old Growth (C1). Current studies have indicated that this may be less than that amount needed to support historic population levels of old growth dependent wildlife species. It is my decision to modify Alternative B to exclude inventoried old growth stands from harvest to reserve these stands until we can better evaluate the needs of old growth dependent species.
- I have modified Alternative B to be consistent with the Environmental Assessment and Decision Notice for the Continuation of Interim Management Direction Establishing Riparian, Ecosystem and Wildlife Standards for Timber Sales. The specific modifications which have made Alternative B responsive to this issue include: (1) maintaining old and late structural stage conditions within the Historic Range of Variability; (2) maintaining connectivity; (3) reducing fragmentation; and (4) applying specific wildlife prescriptions including snags, down

logs, and goshawks protection criteria. Please refer to Appendix C pages C3-C5 for the specific alternative modifications.

- With the application of this regional direction and excluding harvest from inventoried old growth, 100% of the potential primary cavity user population level will be maintained. Structural Diversity within stands will remain high to maintain species diversity. Fragmentation will be minimized by maintaining connectivity between late and old stands in three directions. In addition, silvicultural prescriptions will retain live trees greater than 21 inches in diameter at breast height (DBH) as well as all ponderosa pine, western larch, and lodgepole pine.
- I have selected this alternative as it provides for species viability in accordance with the National Forest Management Act (NFMA) and is sensitive to maintaining options until such time as the Eastside Ecosystem Management Project completes an ecosystem assessment of the interior Columbia River Basin.

Issue 4: Wood Fiber Recovery: The public is concerned that merchantable timber on infested lands should be harvested as it represents a component of the employment and income for local workers, businesses and counties. The public expressed the desire to expand the salvage project to all areas that offer the most efficient and cost effective way to provide for forest recovery and fire protection. Alternative B modified would recover 5.1 million board feet of sawtimber/fiber. The analysis for the East End Salvage and Restoration Projects has demonstrated that the level of harvest proposed within Alternative B Modified is appropriate given the condition of the fish habitat and watershed. The reforestation and restoration projects implemented with this decision will establish defoliator resistant stands and facilitate improved watershed conditions. The selected alternative addresses both commodity and amenity values, and does so in an environmentally sound manner.

The defoliation due to the spruce budworm has resulted in numerous dead trees along public travelways. The hazard tree removal incorporated into this alternative not only addresses my concern for public safety but recovers this resource, providing employment and income to the community.

Issue 5: Wildfire Risk: Dead and defoliated trees have increased fuel loadings placing the project area at risk for high intensity wildfires creating a threat to life, property, and resources. The selected alternative will treat 15,294 acres for fuel reduction. This is approximately 20% of the total analysis area which should substantially reduce the risk of large scale wildfire.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The environmentally preferable alternative is defined by the Council on Environmental Quality as the alternative causing the least impact to the biological and physical environment. This alternative would have the lowest level of ground and vegetation disturbing activities and would best protect, preserve, and enhance historic, cultural, and natural resources.

The environmentally preferable alternative, based on the above definition, is Alternative F as it proposes the lowest level of ground and vegetation disturbing activities while implementing

restoration projects which would move the project area towards the desired conditions described in the Forest Plan.

I did not select the environmentally preferred alternative because I do not believe it provides a "balance" between economic benefits and environmental concerns provided by the selected alternative. Selecting Alternative F would not adequately respond to my concern to provide a balance of forest stand restoration, wildlife habitat, and watershed restoration. Alternative B Modified meets this need by rapidly reforesting 294 acres of dead and insect damaged stands, reaching the desired conditions described in the Forest Plan in a shorter period of time. Alternative F does not address my concern for public safety on the open and seasonally open roads. Alternative B Modified meets this need as it proposes to remove the hazard trees along these public travelways.

In addition, Alternative F does not provide for the wide range of beneficial uses of the project area which is provided for in Alternative B Modified. The selected alternative addresses both commodity and amenity values, and does so in an environmentally sound manner.

FINDINGS REQUIRED BY OTHER LAWS

The FEIS for the East End Salvage and Restoration Projects and the selected alternative as modified complies with the National Forest Management Act because Alternative B Modified:

- Is consistent with the Forest Plan;
- Is consistent with the Decision Notice for the Continuation of Interim Management Direction establishing riparian, ecosystem and wildlife standards for Timber Sales, signed by the Regional Forester, May 20, 1994
- Considers harvest only on suitable lands;
- Has determined that harvest prescriptions proposed are appropriate to meet the objectives and requirements of the Forest Plan; and
- Complies with the seven requirements found in 36 CFR 219.27 regarding vegetative manipulation of tree cover.

The project area does not contain prime farmland, prime rangeland, wild and scenic river areas, or other critical areas. There are no anticipated significant adverse effects on wetlands and flood plains. There are no unusual energy requirements for the selected alternative and it will not change the existing situation for American Indians, women, other minorities, or the civil rights of any American citizen.

An archaeological survey was completed within the East End project area. Each of the proposed projects were evaluated and it was determined that they would not have an effect on the cultural resources within the area.

A Biological Evaluation and Assessment for Endangered and Threatened Wildlife Species was completed for these projects. The assessment determined that the proposed projects will have no impact on any endangered or threatened wildlife species. A Biological Evaluation for Threatened,

Endangered and Sensitive plants was completed. The evaluation determined that these species would not be effected with implementation of Alternative B Modified.

IMPLEMENTATION

Implementation of the selected alternative, Alternative B Modified, may begin 5 days following the close of the appeal filing period if no appeals are received. If this decision is appealed, implementation may begin 15 days after the Appeal Deciding Officer affirms the decision.

APPEAL RIGHTS and PROCEDURES

This decision may be appealed in accordance with the provisions of 36 CFR 215 by filing a written notice of appeal within 45 days of the publication of the legal notice in the East Oregonian Newspaper, Pendleton, Oregon.

Your notice of appeal must be sent to the Appeal Deciding Officer:

John E. Lowe, Regional Forester
USDA Forest Service
Pacific Northwest Region
Attn: 1570 APPEALS
P.O. Box 3623
Portland, OR 97204-3623

Your notice of appeal must also be fully consistent with 36 CFR 215.14 (Content of an Appeal) and you must provide sufficient evidence to the Reviewing Officer to show why my decision should be changed.

CONTACT PERSONS FOR MORE INFORMATION

If you would like more information on the East End Salvage Sales and Restoration Projects FEIS, please contact:

Rene' Crompton
Heppner Ranger District
117 S. Main/P.O. Box 7
Heppner OR, 97836
Telephone: (503) 676-9187

Copies of the FEIS and ROD may be obtained from the Umatilla National Forest Supervisor's Office, Pendleton, Oregon.

Wally J. Murphy

/s/ JOHN P. KLINE
Acting Forest Supervisor
Umatilla National Forest

2-6-95
DATE