WHITE PAPER

USDA Forest Service Pacific Northwest Region Umatilla National Forest

**WHITE PAPER F14-SO-WP-SILV-53**

# Eastside Screens Chronology[1]

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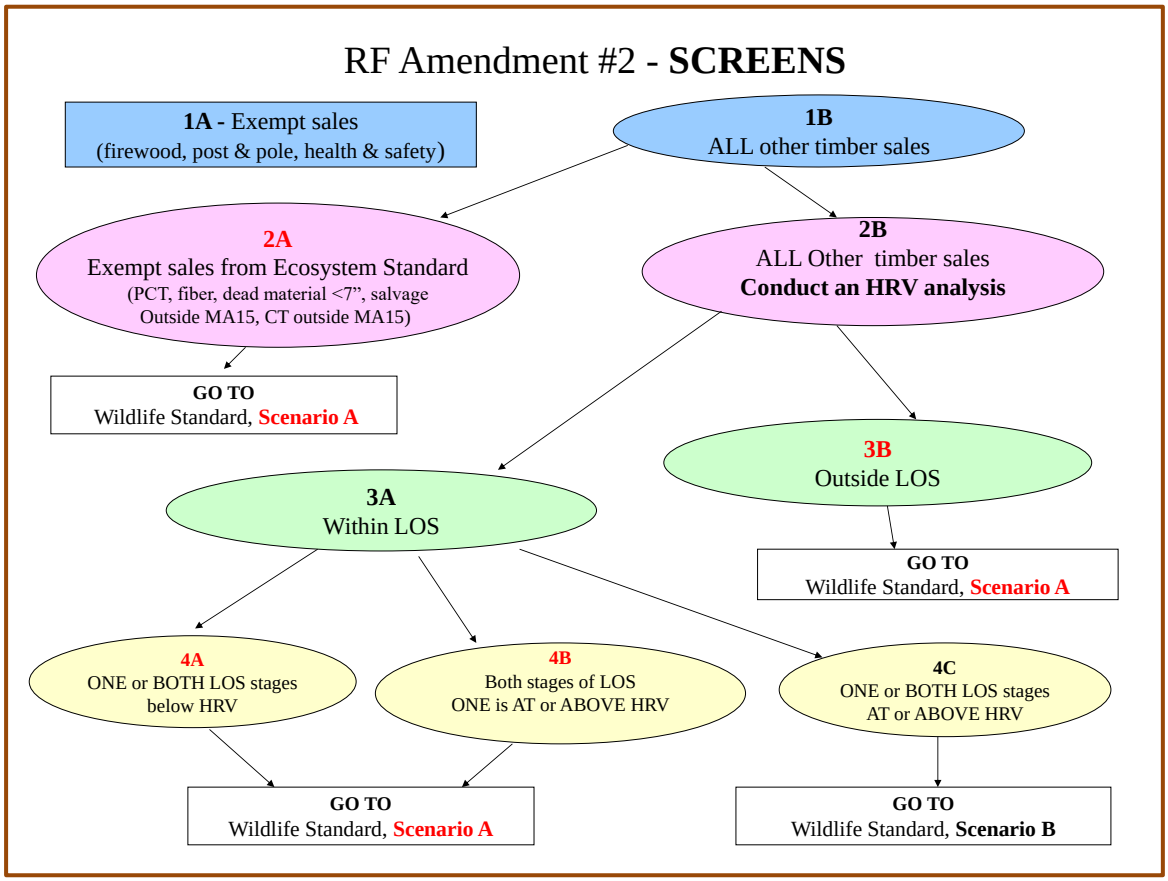
Initial Version: **JULY 2007**
Most Recent Revision: **APRIL 2013**




[1] White papers are internal reports; they receive only limited review. Viewpoints expressed in this paper are those of the author – they may not represent positions of USDA Forest Service.

## INTRODUCTION

On March 30, 1993, Natural Resources Defense Council (NRDC) delivered a petition to Regional Forester John Lowe, USDA Forest Service (Pacific Northwest Region), requesting that timber harvest activity cease for all old-growth forest occurring on national forest lands located east of the Cascade Mountain crest in Oregon and Washington (a geographical area known as the Eastside).

Premise of NRDC's petition was that adequate habitat was not being provided for certain old-growth associated species – species specifically mentioned in the petition were American marten, northern goshawk, and pileated woodpecker (along with several smaller woodpecker species). Forest Service biologists reviewed data in the petition (much of which was based on FS research), and they concluded that current old-growth harvest activity could pose a threat to continued viability for these wildlife species.

The viability review, along with the petition itself, suggested a high probability of litigation, and potential for an injunction affecting all timber harvest east of the Cascades.

Less than a week after NRDC's petition, the President's Forest Conference was held on April 2, 1993 in Portland. This conference, chaired by President Clinton and Vice President Gore, laid groundwork for an Eastside Ecosystem Assessment Project (EEMP; name changed to Interior Columbia Basin Ecosystem Management Project, ICBEMP).

In late April 1993, a month after the NRDC petition, a group of university and U.S. Forest Service research scientists released an "Eastside Forest Ecosystem Health Assessment" in draft form; this assessment is known as 'Everett Report' because it was directed by Dr. Richard Everett, a scientist located at the Wenatchee Forestry Sciences Laboratory (Everett et al. 1994).

In response to NRDC's petition, President's Forest Conference (and assurances about EEMP), and Everett Report, Pacific Northwest Region of the USDA Forest Service issued interim direction in August 1993 requiring that timber sales prepared and offered by Eastside national forests be evaluated to determine their potential impact on riparian habitat, historical vegetation patterns, and wildlife fragmentation and connectivity.

This interim direction, which quickly became known as the Eastside Screens, was designed to 'defer' timber harvest in mature and overmature forest stands until long-term standards and guidelines were produced by EEMP (ICBEMP). It was assumed that interim direction (e.g., Eastside Screens) would need to be in place for 12 to 18 months, long enough to complete an Eastside Ecosystem Management Project. [EEMP was eventually chartered on January 21, 1994, many months later than anticipated.]

## Early Screens History

[The following account, contained in brackets on next two pages, provides Paul Hessburg's perspective about genesis and early history of the Eastside Screens (Paul is a research landscape ecologist stationed at Wenatchee Forestry Sciences Laboratory):

"In May of 1993, RF John Lowe was faced with a large number of legal appeals to awarded and pending timber sale contracts because projects included cutting units in remaining old forests. We (Richard Everett, Mark Jensen, Patric Bourgeron (then TNC), Bernard Bormann, me) had just completed the Eastside Forest Ecosystem Health Assessment and released our refereed draft reports. (These were later published as 25-30 PNW Station GTRs and Research Papers in 1994 and 1995).

One of the key findings of the EFEHA was that late successional and old forest area and connectivity had been hard hit by 20$^{th}$ century harvest of large trees, and the data showed that if managers wanted to maintain native species and processes that depended on these forests, future vegetation management should likely avoid harvesting large trees.

In response, John Lowe and his special assistant Tim Rogan asked us to craft an interim screening process for timber sales (planned and offered), and a consistent logic for excluding units with large trees in them. The logic should be motivated by the key findings of the EFEHA. We did that.

The screening process was intentionally designed to be a short term measure (12-18 months) that would shift the harvest emphasis away from large fire tolerant trees (21 inches was a negotiated settlement), and towards small and medium sized fire and insect intolerant trees that had filled in the forests during the era of fire exclusion. The EFEHA also called for adaptive management and collaboration with stakeholders to be the key mechanism for making forward progress with ecological and social systems restoration.

We gave them a multi-step screening process that enabled them to quickly assess the historical area and connectivity of area of old forests within project areas. The process included 8 steps. Rogan threw away seven of them and recommended that they just screen out old-forest harvest units.

The screening process asked District IDTs to assess what the pattern, abundance, and variability of all successional conditions would ordinarily be (for each potential vegetation type) for the watersheds in question, and others just like them. If the current abundance of old forests was significantly less than that amount, then projects would leave old forests alone. If the patterns and abundances of other successional stages

were also out of whack, these factors would primarily shape vegetation management projects.

Further, the screening process stated that more in-depth landscape evaluations should ultimately replace the screens in order to determine all key habitat departures with HRV (at this time, a consensus was still lacking on the centrality of climate change, and of the FRV). These key departures would form the basis of landscape prescriptions that remedied key departures and moved landscape conditions a few steps closer to restored patterns and processes.

The conservation groups stood down from their lawsuits on the basis of this screening process and the RFs hint of a future landscape evaluation protocol. John Lowe later retired, and the incoming RF had no particular commitment to Lowe's prior agreements with the environmental community.

"They are wondering if you have some measure or approach to assess the effectiveness of Eastside screens." The screens worked. John Lowe got his sales offered, the environmental groups backed off, and we felt used. Eastside ecosystems and native species continued to take it on the chin because many other needs were not addressed. Simply halting/slowing the harvest of old forests did not restore dysfunctional landscape conditions, which is still the current need.

As we stated at the time we built the screens, if native species and processes are part of our ongoing management focus, we recommend replacing the screens with robust HRV (and now FRV) departure analyses for vegetation and habitat conditions, fish, and streams.

Terrestrial and aquatic landscapes throughout the eastside are still out of whack, and the central problems and causes vary from place to place. Landscape analysis would frame those key local departures to guide the ecological restoration component. These considerations can then be strengthened with the important social and economic considerations. The intended outcome would be socio-ecological restoration.

Right now, the question of how do we keep the mills from going under appears to be prime. Landscape evaluations could focus the landscape needs and provide a sound ecological basis for harvest and burning Rxs. Refocusing Forest Plans would take time. Building the needed empirical and simulation data sets would take time. It would not likely happen with a high pressure approach.

Another key finding of the EFEHA was that many pine and larch forest have been overharvested by repeated prior entries. This amounts to spending the capital in a savings account. If restoring habitats and processes was going to frame a part of ongoing

management decisions, it was likely that harvest expectations would need to be pared back for some time. That has happened, but current efforts are not shaped to restore fire and climate adapted conditions to landscapes, according to the local needs. That is the persistent ongoing need."]

## Eastside Screens Forest Plan Amendment

Eastside national forest Supervisors received a letter from Regional Forester John Lowe, dated May 14, 1993, directing them to send no more than three representatives (ecologist, silviculturist, fuels planner) to a workshop in Portland, scheduled for July 20-21, 1993. The workshop would provide Forest 'teams' with information needed to evaluate FY 1993 timber sales by using an ecosystem/old-growth conservation screen.

An actual Screening process was issued by the Regional Office as a 2-page, file designation 2430/2600 memorandum to Eastside Forest Supervisors, dated August 18, 1993. Accompanying the memo was 19 pages of enclosures related to three Screens: Riparian Area Direction; Ecosystem Screen; and Wildlife Screen. This memo, and its enclosures, was the genesis of what would eventually become an Eastside Screens amendment to Forest Plans for all Eastside national forests.

Umatilla National Forest (and other affected Forests) screened its Fiscal Year 1993 timber sale program by using a process described in the August 18th memo. Umatilla NF screened 36 FY93 timber sales – pre-Screens volume was 69.7 million board feet; post-Screens volume was 15.9 million board feet. This means that 23% of the FY93 sale volume 'made it through' the Screens process and was available to offer, sell, and award.

An August 18, 1993 Screens process was litigated (as described later in this white paper), causing the Regional Office to complete an environmental analysis for the process. Main litigation issues involved whether the Screens violate National Forest Management Act consistency requirements, and whether they should be viewed as a significant amendment to Eastside forest plans.

Interim direction known as Eastside Screens was used to amend Eastside forest plans when Regional Forester John Lowe signed a Decision Notice to implement Regional Forester's Forest Plan Amendment #1 (USDA Forest Service 1994) – Continuation of Interim Management Direction Establishing Riparian, Ecosystem and Wildlife Standards for Timber Sales (DN approved on May 20, 1994).

Regional Forester's Forest Plan Amendment #1 is amendment #8 to the Umatilla National Forest Land and Resource Management Plan.

A slightly revised version of the Eastside Screens was issued as Regional Forester's Forest Plan Amendment #2 when Regional Forester John Lowe signed a Decision Notice

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on June 12, 1995 (USDA Forest Service 1995).

Regional Forester's Forest Plan Amendment #2 is amendment #11 to the Umatilla National Forest Land and Resource Management Plan.

Eastside Screens consist of six items: three general items (items 1 to 3), a riparian standard (item 4), an ecosystem standard (item 5), and a wildlife standard (item 6). The Eastside Screens are provided as appendix 2 of this white paper.

After Eastside Screens were issued, Pacific Northwest Regional Forester appointed an Eastside Screens Oversight Team (Norris 2005) and charged them with reviewing and monitoring Screens implementation. The team's objective has always been to ensure that Eastside Screens are being applied consistently across all Eastside national forests.

An Oversight Team provides clarification and interpretation for Eastside Screens by periodically reviewing timber sale projects on each national forest, producing a letter describing their findings, and then circulating the letter to other Eastside national forests as a 'lessons learned' communication tool.

Letters from Eastside Screens Oversight Team, which are signed by Regional Forester or the Region's Director of Natural Resources, are not considered advisory because they are *used as administrative direction for Eastside Screens implementation*.

This white paper provides a chronological list of events involving Eastside Screens, a Regional Forester's Forest Plan Amendment affecting every Pacific Northwest Region national forest located east of the Cascade Crest in Oregon and Washington. The chronological list is presented in a tabular format, next. The list also includes a short summary for each letter produced by an Eastside Screens Oversight Team.

| Date | Event |
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| March 30, 1993 | **NRDC Petition.** A petition was delivered by Natural Resources Defense Council, representing 22 organizations in total, to John Lowe, Regional Forester of Pacific Northwest Region of USDA Forest Service. Petition sought to halt timber harvests in old growth areas on national forests of eastern Oregon and eastern Washington. Premise of petition is that Pacific Northwest Region was not providing adequate habitat for certain wildlife species (marten, goshawk, and pileated and other woodpeckers) associated with old growth forests. |
| May 14, 1993 | **Eastside Screens Workshop.** Regional Office issues 1-page letter, and 11 pages of enclosures, announcing a workshop, scheduled for July 20-21, 1993 in Portland, to "give Forest teams the |

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| | information needed to screen the remaining FY '93 timber sales against ecosystem/old-growth conservation criteria."<br>Source: RO 1900/2430 file designation memo dated May 14, 1993; Subject: Ecosystem Screens for FY '93 Timber Sales;<br>To: Forest Supervisors, Eastside Forests |
| July 8, 1993 | **Screening Process Report.** Draft report prepared for an Eastside Screens workshop scheduled for July 20-21 in Portland. Eleven-page report is entitled "An ecologically based screening process for FY93-94 Eastside Oregon and Washington vegetation management projects" and authored by P.F. Hessburg, R.L. Everett, M.E. Jensen, W.J. Hann, and P.S. Bourgeron. Objective of report is as follows: "The Pacific Northwest Region asked the Eastside Ecosystem Health Assessment Team of PNW Research Station to develop a screening process for FY93 timber sale projects that would be used by the Region in assessing the consistency of eastside projects with ecosystem management principles. The Region also requested that the screening process should place special emphasis on how projects may influence the abundance and distribution of old forest structures and be further refined and applied to FY94 sales that are currently being designed." [This report was used as primary source material, as a handout to work from, for a workshop on July 20-21.] |
| July 20-21, 1993 | **Eastside Screens Workshop.** Eastside Screens 'roll-out' workshop is conducted by Regional Office in Portland, OR. Dave Powell (Forest Silviculturist), John Keersemaker (Forest Health Coordinator), and Les Holsapple (Forest Fuels Planner) attend this workshop as Umatilla NF representatives.<br>[Note: At the time, employees on Umatilla NF referred to this workshop as 'Everett Training' because it was thought that its main objective was to disclose major findings and implications from an Everett Report, being released then (in draft form) by Pacific Northwest Research Station. Richard Everett, lead scientist for Everett Report, was heavily involved in a July 20-21 Portland workshop.] |
| July 22, 1993 | **Screens Heads-Up Notes.** John Keersemaker, Umatilla NF Forest Health Coordinator, issues 3-page document entitled "Eastside timber sale screening process: Heads up notes." This document |

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| | was released the day after a Umatilla NF contingent (Holsapple, Keersemaker, Powell) returned from a 2-day workshop in Portland to be instructed on concepts and mechanics of a new timber sale screening process to be applied to fiscal year 1993 (not yet sold or awarded) and 1994 timber sales. This document provides an excellent synopsis of what was covered during the Portland workshop, and how workshop material (and a new screening process) was expected to affect Umatilla NF's ongoing timber sale program (and effects were expected to be severe!). Document also summarizes what the 'political' (internal) ramifications of this policy change would be, and whether Regional Forester Lowe was fully aware of the new policy's implications. |
| July 30, 1993 | **Hall's Structural Stage Report.** Fred Hall, Senior Plant Ecologist for Pacific Northwest Region, issues 5-page report: "Structural Stages by Plant Association Group, Malheur and Ochoco N.F." It defines four timbered plant association groups (PAGs), and characterizes them by using structural stages defined in table 4 of Regional Forester's May 14, 1993 letter announcing a screening process for FY 1993 timber sales. A table at end of this report summarizes these characteristics for each PAG: tree size, stand age at end of a stage, number of years in a stage, and percentage of total stand age in a stage. |
| August 4, 1993 | **Eastside Strategies Meeting.** Forest Supervisor, S.O. staff members, and District representatives gather at Umatilla NF Supervisor's Office for discussion about 'Eastside Management Strategies.' Shirley MacLean, executive assistant for Forest Supervisor, recorded 5 pages of typewritten notes from this strategy session. Topics discussed covered a wide gamut, but centered on Screens and imminent timber sale restrictions tied to old-growth and riparian habitat/corridors. [One reason for the meeting was that Supervisor Blackwood had just returned from a 2-day meeting in Seattle where Eastside management strategies had been discussed.]<br>Source: Umatilla NF 1360 file designation memo dated August 4, 1993; Subject: Eastside Management Strategies; To: the files |
| August 5, 1993 | **Streamside Riparian Emphasis Areas Direction.** Regional Forester John Lowe issues 1-page letter and 3 pages of enclosures |

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| | describing how timber sales will handle streamside riparian emphasis areas (REAs). For new 'starts' (no previous work), REAs will be avoided completely during sale planning, as described in enclosure 1. For sales where preparation work was substantially complete or in progress, the sales were to be screened by using a process provided in enclosure 2.<br>[Material in this letter and its enclosures was incorporated in Screens process (Aug. 18, 1993) as a riparian screen.]<br>Source: RO 2430 file designation memo dated August 5, 1993; Subject: Interim approach for timber sale preparation in streamside riparian emphasis areas; To: Forest Supervisors, Eastside Forests |
| August 9, 1993 | **Blue Mountains Ecosystem Screen Direction.** Area Ecologist for Blue Mountains, Charlie Johnson, issues 4-page letter, along with 8 pages of enclosures, providing sub-Regional direction about how certain aspects of an Eastside Screens process would be implemented for Malheur, Umatilla, and Wallowa-Whitman National Forests. This letter documents results of an expert-panel process conducted during August 3-5, 1993 and involving participation by 50 employees of three Blue Mountain National Forests. An expert-panel process was initiated after a July 20-21, 1993 workshop in Portland (see information for workshop date above).<br>Source: Wallowa-Whitman NF 2060 file designation memo dated August 9, 1993; Subject: Ecosystem Screens; To: Wallowa-Whitman, Umatilla, and Malheur Forest Supervisors |
| August 18, 1993 | **Eastside Screens Released.** Regional Office issues 2-page letter and enclosures establishing Eastside Screens and describing how this new Forest Plan direction would be implemented for all remaining fiscal year 1993 timber sales located on Eastside national forests. Enclosure 1 (1 page) is a project screening decision tree; enclosure 2 (4 pages) is a screening procedure for timber sales where preparation work is substantially complete or in progress; enclosure 3 (8 pages) is a paper entitled "An ecologically-based screening process for FY '93-'94 eastside Oregon and Washington vegetation management projects" (dated July 8, 1993); and enclosure 4 (6 pages) is a wildlife screening procedure and direction for timber sales. |

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| | Source: RO 2430/2600 file designation memo dated August 18, 1993; Subject: Interim Approach for Sale Preparation, Eastside Forests; To: Forest Supervisors, Eastside Forests |
| August 20, 1993 | **Umatilla NF Screens Strategies.** Forest Supervisor Jeff Blackwood issues 2-page letter describing both short-term and long-term strategies for Umatilla NF regarding Eastside Screens and facilitating their use on the Forest. Much of the 'prep' work for completing the first round of timber sale screenings (for fiscal year 1993's timber sale program) would be completed in the Supervisor's Office by the Forest's Ecosystem Management Implementation Team (EMIT). This letter also directs District Rangers to complete database updates (for EVG and activity databases) by December 31, 1993, in order to ensure that information will be available to screen future fiscal-year sales. This item consists of three parts, all scanned into one electronic file: (1) 2-page letter from Supervisor Blackwood; (2) agenda for a Umatilla NF Screening Process Meeting held on August 26, 1993 in the Supervisor's Office; and (3) a 2-page Screening Questions Clarification document dated August 26, 1993, which was prepared and distributed after a process meeting concluded and following an Eastside R-6 Screens conference call also held on August 26th.<br>Source: SO 2430/2600 file designation memo dated August 20, 1993; Subject: Interim direction for timber sale preparation (timber sale screens); To: District Rangers. Also included: 1-page agenda for Screening Process Meeting, August 26, 1993; and 2-page Screening Questions Clarification document, dated 8/26/93. |
| Sept. 1, 1993 | **RO Screens Q&A Document.** Regional Office issues 9-page letter providing answers to questions raised during first two weeks after release of an Eastside Screens timber-sale procedure described in their memorandum dated August 18, 1993.<br>Source: RO 2430/2600 file designation memo dated September 1, 1993; Subject: Questions and Answers in Regards to the Screening Process for Sale Preparation; To: Forest Supervisors: Colville, Okanogan, Umatilla, Ochoco, Wallowa-Whitman, Malheur, Deschutes, Winema, and Fremont NF's |
| Sept. 19, 1993 | **Eastside Screens Litigation.** *Prairie Wood Products v. Espy*, 936288 TC (D. Or.) (Judge Hogan); Plaintiffs – timber mills, |

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| | individual guide, and timber industry association – file suit to challenge a "screening process." Complaint contends that screening process was established in violation of NFMA, and it seeks an injunction against its use. Specific contentions are that the process is: 1) inconsistent with Forest Plans; 2) violates Forest Plan amendment requirements; 3) increases threat of fire, insects, and disease; 4) re-designates suitable timberlands without amending existing Forest Plans; 5) violates riparian area regulations; 6) was developed without interdisciplinary analysis; 7) was developed without public participation; 8) disregarded specific vegetation and site conditions; 9) failed to comply with mandatory procedure for formulating standards; and 10) is an arbitrary and capricious agency action. |
| Sept. 27, 1993 | **RO Review of Screens Implementation.** Regional Office issues 1-page letter, and 11 pages of enclosures, describing results of a review of Eastside Screens implementation issues; review was conducted during September 9-13, 1993 by an Oversight Team consisting of Lisa Norris, Tom Atzet, and Dick Shaffer, all of whom were Regional Office employees. Enclosures provide an Oversight Team Report.<br>Source: RO 2430/2600 file designation memo dated September 27, 1993; Subject: Interim Approach for Sale Preparation, Eastside Forests; To: Forest Supervisors, Eastside Forests |
| Oct. 6, 1993 | **Umatilla NF Results of Screening FY93 Sales.** Umatilla NF sends 4-page letter to Regional Forester documenting results of a screening process applied to fiscal year 1993 timber sales not yet auctioned or awarded. Letter includes tables for 36 total timber sales on four Ranger Districts; each table includes the following items: Sale Name; Acres; Pre-Screen volume (MMBF); Post-Screen volume (MMBF); Proposed sale date; and Comments.<br>Source: SO 2430/2600 file designation memo dated October 6, 1993; Subject: Interim approach for sale preparation, Eastside Forests; To: Regional Forester |
| Oct. 28, 1993 | **Umatilla NF Screens Results Talking Points.** Talking points and Umatilla N.F. figures; Timber sale screening process. This item consists of 1-page summary (talking points) describing results of a timber sale screening process applied to fiscal year 1993 timber |

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| | sales. It also includes a 2-page news release from PNW Regional Office entitled "Eastside Timber Available," and a 1-page Internal Use only document from the RO entitled "Answers to expected media questions concerning Regional news release on Eastside Screening results" (both RO items are dated Oct. 27, 1993). |
| Dec. 6, 1993 | **SO HRV Sources Letter.** Deputy Forest Supervisor (Phil Kline) issues 2-page letter on subject of historical range of variation. Letter describes sources of HRV ranges that had recently been used (in September 1993) to screen all fiscal year 1993 timber sales. During the screening process, Ranger District employees expressed concerns about HRV-range sources and whether they were accurate and appropriate for Umatilla NF. This letter describes how the Forest's Ecosystem Management Implementation Team hoped to use historical sources (maps mainly) to refine HRV ranges for future screening processes on Umatilla NF. Letter included copies of mid-1930s maps and accompanying county-level reports as enclosures.<br>Source: SO 2060 file designation memo dated December 6, 1993; Subject: Historical range of variation; To: S.O. Staff and District Rangers |
| Dec. 27, 1993 | **Eastside Screens Litigation.** *PWP v. Espy.* Government filed brief opposing Preliminary Injunction and supporting motion for summary judgment. Plaintiffs reply brief was filed on January 14, 1994; Government response to plaintiffs' brief was filed on January 28, 1994. |
| January 10, 1994 | **Eastside Screens Litigation.** *PWP v. Espy.* Plaintiffs filed several discovery requests; court agreed that government could withhold certain documents. |
| January 25, 1994 | **Umatilla NF Screens Negotiations With NRDC.** Acting Forest Supervisor Phil Kline issues 2-page letter, with 1-page enclosure, describing results of negotiations with Karen Coulter and Asante Riverwind, acting as representatives of NRDC, regarding salvage sales scheduled to be sold as part of East End EIS project, Heppner Ranger District. FEIS identified a preferred alternative that would have completed salvage harvest of 25.3 million board feet of timber and constructed 17 miles of temporary road. After running |

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| | this project through Eastside Screens, along with consideration of public comments and changed conditions, preferred alternative was modified to only harvest 3.8 million board feet and construct 4.7 miles of road. This letter describes results of a field review of an East End timber-sale unit on November 29, 1993, where unit size had been reduced and new marking guides had been applied. Agreement could not be reached with NRDC representatives, and Acting Forest Supervisor Kline's recommendation was to release the project for sale, as modified to reflect changes relating to public comments and Eastside Screens process.<br>Source: SO 2430/1950 file designation memo dated January 25, 1994; Subject: East End EIS, NRDC negotiations; To: Regional Forester |
| February 3, 1994 | **Eastside Screens Litigation.** *PWP v. Espy.* A hearing was held to address summary judgment issues only. |
| May 20, 1994 | **Regional Forester's Forest Plan Amendment 1.** John Lowe signs a Decision Notice for continuation of Interim Management Direction Establishing Riparian, Ecosystem and Wildlife Standards for Timber Sales. This decision amended Land and Resource Management Plans for Colville, Deschutes, Fremont, Malheur, Ochoco, Okanogan, Umatilla, Wallowa-Whitman, and Winema National Forests in Oregon and Washington to incorporate interim management direction as new standards and guidelines. New management direction was same procedure, in slightly modified form, as described in Region 6's August 18, 1993 memorandum and its enclosures.<br>This decision is known as Regional Forester's Forest Plan Amendment No. 1 (it is Amendment #8 to Umatilla NF Land and Resource Management Plan). |
| May-June, 1994 | **RF Forest Plan Amendment 1 Appeals.**<br>Appeal of Regional Forester John Lowe's May 20, 1994 decision by Kettle Range Conservation Group (94-13-00-0033)<br>Appeal of Regional Forester John Lowe's May 20, 1994 decision by Natural Resources Defense Council (94-13-00-0034)<br>Appeal of Regional Forester John Lowe's May 20, 1994 decision by Malheur Timber Operators (94-13-00-0038) |

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| June 1, 1994 | **Eastside Screens Litigation.** *PWP v. Espy.* Government filed a Notice of Completion of Environmental Assessment, FONSI, and Decision Notice for continuation of modified version of a "screening process through amendment to Forest Plans." |
| June 30, 1994 | **Eastside Screens Litigation.** *PWP v. Espy.* Supplemental briefs were filed by both parties in response to court's order for additional briefs about potential impact of an EA and Forest Plan amendments on pending motions. |
| October 19, 1994 | **Eastside Screens Litigation.** *PWP v. Espy.* Court issues an order enjoining Forest Service from applying the August 1993 interim screens version to remaining 1993 sales until it complies with Forest Plan amendment and public participation requirements. |
| October 1994 | **Eastside Screens Monitoring.** John Lowe chartered a team to review implementation of Eastside Screens interim direction. Review was designed to determine which timber sale projects were not being implemented due to interim Forest Plan direction, and to determine steps to remedy this situation. Many concerns were related to an inability under current standards to harvest insect- or disease-affected stands.<br>As input for this process, Regional Forester asked Forest Supervisors to estimate implementation effects of Eastside Screens interim direction on risk of losing late and old structure stands to insects, disease, and other forms of deterioration. |
| November 4, 1994 | **SO/RO Screens Impact Letters.** Umatilla NF planning staff officer, Lyle Jensen, issues 1-page letter, along with 2-page enclosure, providing Umatilla NF responses to a letter from the Region's Forest Insects and Diseases (FID) staff unit in the Regional Office. The FID letter requested responses to 3 questions: (1) How many acres of LOS on the Forest are at risk by deferring treatment 6 years?; (1)(a) Of these acres, how many would you plan to treat if the Screens were altered to allow for treatment?; (2) How many acres of LOS have deteriorated to a point where overstory vigor cannot be reversed by understory treatments?; and (3) On how many acres of LOS could treatment be deferred for more than 6 years without significant risk?<br>[Note: 6-year timeframe used in these questions because RO now |

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| | believed that EEMP/ICBEMP project would take much longer than originally anticipated 12-18 month period and, therefore, Screens interim direction would be in place much longer than expected.] Source: SO 3400/2400/1500 file designation memo dated November 4, 1994; Subject: Umatilla NF response to Eastside Screen Questions; To: D. Bridgewater, RO and H. Maffei, Deschutes NF, and RO 3400/2400/5100 memo dated October 28, 1994; Subject: Eastside Screens; To: Screens Coordinators |
| February 8, 1995 | **Screens Implementation Monitoring Report.** Regional Forester issues 2-page letter and 17 pages of enclosures describing results of implementation monitoring for Regional Forester's Forest Plan Amendment No. 1, considering an 8-month period since its issuance by decision in May 1994. [This report was produced by a Screens implementation monitoring team chartered in October 1994.] A 17-page enclosure is a Monitoring Report prepared by a team consisting of Jim Schuler, Lisa Norris, Ken Denton, Mike Hilbrunner, Mary Erickson, and Miles Hemstrom. Report describes a monitoring process and objectives, and it provides seven findings from a monitoring team. Interested publics were sent a copy of the monitoring report on February 10, 1995. Report concluded that Regional Forester will take steps to modify the screens, primarily by concentrating on development and use of an historical range of variability analytical technique, and silvicultural activities to maintain health of old growth stands. Source: RO 1920 file designation memo dated February 8, 1995; Subject: Monitoring Report for Eastside Interim Management Direction for Preparation of Timber Sales; To: Forest Supervisors, Okanogan, Colville, Wallowa-Whitman, Malheur, Ochoco, Deschutes, Fremont, Umatilla, and Winema NFs |
| March 14, 1995 | **IDT Assembled for Screens Revision.** An interdisciplinary team (IDT) is assembled to analyze a revision of Eastside Screens interim direction for timber sale preparation. Proposed action is to revise a stand structure classification used for historical range of variability portion of an ecosystem standard, and to clarify certain aspects of an interim wildlife standard. Also, a monitoring report (February 8, 1995) found that Screens did not provide adequate flexibility to deal with severe forest health problems affecting |

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| | certain old-growth stands. Therefore, Regional Forester proposed additional environmental analysis to determine if more flexibility could be provided to maintain healthy old-growth stands affected by Screens, and to consider any other 'new information' raised in the monitoring report. |
| April 7, 1995 | **Eastside Screens Revision.** Scoping period for revised version of the Eastside Screens interim direction is extended to April 20, 1995. Talking points issued for the Screens revision process emphasized key messages relating to adaptive management: (1) Screens amendment is a prime example of adaptive management – we monitored what we're doing, and we're making changes based on new information; (2) monitoring report clarifies Screens implementation, thus ensuring consistent management for healthy ecosystems; (3) just because it's old-growth doesn't mean it's healthy – thinning trees that would not have naturally occurred without fire suppression can improve long-term health of old-growth; and (4) Regional Forester will convene two teams to consider (a) the role of watershed analysis in implementing riparian standards, and (b) the role of green-tree replacements as a management measure for future snags. |
| June 12, 1995 | **Regional Forester's Forest Plan Amendment 2.** "Decision Notice for the Revised Continuation of Interim Management Direction Establishing Riparian, Ecosystem and Wildlife Standards for Timber Sales" is signed by Regional Forester John Lowe. This revised version of Eastside Screens management direction changed forest structural stages used with an interim ecosystem standard, and it clarified an interim wildlife standard.<br>This decision is known as Regional Forester's Forest Plan Amendment No. 2 (it is Amendment #11 to Umatilla NF Land and Resource Management Plan). |
| June 27, 1995 | **Umatilla NF PACFISH and Screens Interpretations.** Umatilla NF issues 4-page document entitled "Pacfish and Timber Sale Screens Interpretations." Purpose of this document is to provide a record of Umatilla NF interpretations for Pacfish and Eastside Screens direction (Forest Plan amendments). It includes a 2-page item providing interpretations for Pacfish, and a 2-page item providing Eastside Screens interpretations. Forest-level |

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| | 'interpretations' are designed to ensure consistent implementation of policy and direction across multiple ranger districts. |
| Sept. 25, 1995 | **RO Screens Review – Ochoco NF.** Regional Office issues 2-page letter describing an Eastside Screens implementation review for Ochoco National Forest, which occurred on August 28, 1995. Memo provides seven findings resulting from an Eastside Screens Oversight Team visit to Ochoco NF: (1) Forest is generally implementing intent of the Screens; (2) Forest could move quickly with Screens implementation due to their Viable Ecosystems process; (3) Amended Screens (RF Plan Amendment #2) allowed revised determinations of what qualifies as late-old structure; (4) Local definitions of 'large trees' and 'common large trees' provides flexibility for LOS determinations; (5) Ochoco NF is generally deficient in both types of LOS (single-story and multi-story); (6) Ochoco NF is interested in harvesting some trees > 21" dbh; and (7) Green-tree replacements for snags are generally not a problem for ponderosa pine, Douglas-fir, and grand fir stands on the Forest. Source: RO 2430/2600 file designation memo dated September 25, 1995; Subject: Ochoco NF Screens Implementation Review; To: East-Side Forest Supervisors |
| October 6, 1995 | **RO Screens Review – Malheur NF.** Regional Office issues 2-page letter describing an Eastside Screens implementation review for Malheur National Forest, which occurred on September 22, 1995. Memo discusses issues related to snags, riparian management, and roadless areas in context of Eastside Screens. Source: RO 2430/2600 file designation memo dated October 6, 1995; Subject: Regional Forester Amendment #2 Implementation – Malheur NF; To: Forest Supervisors, Colville, Deschutes, Fremont, Malheur, Ochoco, Okanogan, Umatilla, Wallowa-Whitman, Wenatchee, and Winema NFs |
| Oct. 31, 1995 | **RO Screens Review – Fremont NF.** Regional Office issues 3-page letter describing an Eastside Screens implementation review for Fremont National Forest, which occurred on October 13, 1995. Memo discusses thinning projects in LOS stands, development of a local definition for LOS, snags, and other Eastside Screens implementation issues. Source: RO 2430/2600 file designation memo dated October 31, |

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| | 1995; Subject: Regional Forester Amendment #2 Implementation – Fremont NF; To: Forest Supervisors, Colville, Deschutes, Fremont, Malheur, Ochoco, Okanogan, Umatilla, Wallowa-Whitman, and Winema NFs |
| Nov. 14, 1995 | **RO Screens Review – Umatilla NF.** Regional Office issues 4-page letter describing an Eastside Screens implementation review for Umatilla National Forest, which occurred on October 18, 1995. Memo presents findings related to use of salvage definitions, snags and down logs, use of group selection cutting, harvest of 21" dbh or larger trees, salvage sales in relation to mapped old growth, and connectivity corridors.<br>Source: RO 2430/2600 file designation memo dated November 14, 1995; Subject: Regional Forester Amendment #2 Implementation – Umatilla NF Trip; To: Forest Supervisors, Colville, Deschutes, Fremont, Malheur, Ochoco, Okanogan, Umatilla, Wallowa-Whitman, and Winema NFs |
| Nov. 14, 1995 | **RO Screens Review – Wallowa-Whitman NF.** Regional Office issues 3-page letter describing an Eastside Screens implementation review for Wallowa-Whitman National Forest, which occurred on October 17, 1995. It discusses timber sales falling under scenario A of Wildlife Screen, developing a local definition for LOS, interactions between Eastside Screens and allocated old growth, green-tree retention for future snags, connectivity corridors as wildlife habitat, and other Screens issues.<br>Source: RO 2430/2600 file designation memo dated November 14, 1995; Subject: Regional Forester Amendment #2 Implementation – Wallowa-Whitman NF Trip; To: Forest Supervisors, Colville, Deschutes, Fremont, Malheur, Ochoco, Okanogan, Umatilla, Wallowa-Whitman, and Winema NFs |
| August 1, 1997 | **RO Screens Review – Ochoco NF.** Regional Office issues 1-page letter and 2-page enclosure describing review team findings relating to site-specific Forest Plan amendments, as implemented by Ochoco National Forest, involving Regional Forester's Forest Plan Amendment No. 2. The review, which occurred on July 9-10, 1997, "was to respond to concerns that the Ochoco National Forest was not following the intent of the eastside screens." An enclosure to this letter provides Review Team findings, presented as four |

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| | findings pertaining to Ochoco National Forest, and two findings pertaining to Regional Office. Letter required that an action plan be developed and submitted to Regional Office by August 22, 1997.<br>Source: RO 2430/2600 file designation memo dated August 1, 1997; Subject: Review of Forest Plan Amendments of the Regional Forester's Amendment No. 2 for Eastside Forests; To: Forest Supervisor, Ochoco NF |
| October 2, 1997 | **RO Review of Screens Amendments.** Regional Office issues 1-page letter and 1-page enclosure describing review of Forest Plan amendments involving Eastside Screens (Regional Forester's Forest Plan Amendment No. 2). This letter directs Eastside forests to only consider site-specific Forest Plan Amendments to scenario A of the interim wildlife standard when: (1) a clear and compelling case can be made for biological or ecological urgency to cut large trees in the short term (i.e., next 5 years); and (2) an amendment is unique or uncommon and is not being commonly applied across landscapes (watershed and larger).<br>Source: RO 2430/2600 file designation memo dated October 2, 1997; Subject: Eastside Screens Amendments; To: Eastside Forest Supervisors<br>Note: This memo was subsequently rescinded by a Regional Office memorandum of June 11, 2003. |
| Dec. 23, 1997 | **RO Review of Screens Amendments.** Regional Office issues 4-page letter and 2-page enclosure describing their review of about 36 site-specific Forest Plan amendments to Eastside Screens (Regional Forester's Forest Plan Amendment No. 2). Review team visited Malheur, Umatilla, and Wallowa-Whitman National Forests. Letter describes eight circumstances or questions encountered by the review team, most of which pertain exclusively to scenario A of interim wildlife standard, and it provides the team's response to each circumstance or question.<br>Source: RO 2430/2600 file designation memo dated December 23, 1997; Subject: Review of Forest Plan Amendments of the Regional Forester's Amendment No. 2 for Eastside Forests to Cut 21" Trees or do Regeneration Harvests in Scenario A; To: Forest Supervisors, |

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| | Colville, Deschutes, Fremont, Malheur, Ochoco, Okanogan, Umatilla, Wallowa-Whitman, Wenatchee, and Winema NFs<br>Note: This memo was subsequently rescinded by a Regional Office memorandum of June 11, 2003. |
| August 27, 1998 | **RO Screens Review – Colville NF.** Regional Office issues 2-page letter and 3-page enclosure describing an Eastside Screens implementation review for Colville National Forest, which occurred on June 16-17, 1998. Letter describes criteria for evaluating new science, regeneration harvest issues for scenario A of the interim wildlife standard, whether HRV calculations should include private land, criteria for when beetle-infested trees could be considered dead and available for salvage harvest, and snags issues.<br>Source: RO 2430/2600 file designation memo dated August 27, 1998; Subject: Screens Review, Colville NF; To: Forest Supervisors, Eastside Forests |
| Sept. 10, 1998 | **RO Screens Review – Fremont-Winema NF.** Regional Office issues 2-page letter and 3-page enclosure describing an Eastside Screens implementation review for Winema and Fremont National Forests, which occurred on July 21-23, 1998. Letter discusses that trees over 21 inches in diameter cannot be harvested to reduce intertree competition, fragmentation issues associated with scenario B of interim wildlife standard, circumstances under which timber harvest activities could occur in LOS stands, criteria related to a professional determination of tree death (specifying a 5-year timeframe) for dying trees, and how hazard or danger trees can be handled for recreation areas and other situations with public safety concerns.<br>Source: RO 2430/2600 file designation memo dated September 10, 1998; Subject: Screens Review, Winema and Fremont NF's; To: Forest Supervisors, Eastside Forests |
| Dec. 11, 1998 | **Umatilla NF Direction for HRV Analyses.** Umatilla National Forest Supervisor issues 2-page letter and 5-page enclosure providing Forest-specific guidance about how Eastside Screens structural stage classification will be used when conducting an Historical Range of Variability analysis for timber sale planning, as required by an Ecosystem Screen. Letter provides ranges of percentages, by structural stage and biophysical environment, which |

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| | analysts were directed to use during an HRV analysis ("It is my expectation that all future HRV analyses conducted on the Umatilla National Forest will utilize the historical percentages provided in Table 1 of the enclosed paper"). The letter and its enclosure also describes how plant association groups or potential vegetation groups are used as biophysical environments for Eastside Screens.<br>Source: SO 2430/2600 file designation memo dated December 11, 1998; Subject: Historical percentages for use with HRV analyses; To: District Rangers<br>Note: This memo was subsequently rescinded by a Supervisor's Office memorandum dated October 5, 2010. |
| February 2, 1999 | **RO Screens Review – Okanogan NF.** Regional Office issues 3-page letter describing Eastside Screens implementation review for Okanogan National Forest, which occurred on August 14, 1998. Memo discusses a wide range of Screens implementation issues by using a question-and-answer format; a total of 11 Screens questions are answered in this letter.<br>Source: RO 2430/2600 file designation memo dated February 2, 1999; Subject: Regional Forester Amendment #2 Implementation – Okanogan NF; To: Forest Supervisors, Colville, Deschutes, Fremont, Malheur, Ochoco, Okanogan, Umatilla, Wallowa-Whitman, and Winema NFs |
| June 11, 2003 | **RO Revised Guidance for Screens Implementation.** Regional Office issues 1-page letter and 2-page enclosure providing revised guidance for implementing Eastside Screens. Letter summarizes science findings and practical experience occurring after Regional Office issued two memoranda in 1997 (their October 2 and December 23 letters). The 1997 letters had an intended effect of reducing amendments to Eastside Screens. This June 11, 2003 letter concluded that the 1997 letters had gone too far: "I therefore encourage you to consider site-specific Forest Plan amendments where this will better meet LOS objectives by moving the landscape towards HRV, and providing LOS for the habitat needs of associated wildlife species." Letter specifically rescinds RO memos of October 2 and December 23, 1997, and it provides five examples of situations where site-specific Forest Plan amendments may be appropriate. |

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| | Source: RO 2430/2600 file designation memo dated June 11, 2003; Subject: Guidance for Implementing Eastside Screens; To: Forest Supervisors of the Colville, Deschutes, Malheur, Ochoco, Umatilla, Wallowa-Whitman, Wenatchee-Okanogan, and Winema-Fremont National Forests |
| Sept. 5, 2003 | **Umatilla NF Revised Guidance for Screens Implementation.** Umatilla National Forest Supervisor issues 2-page letter, and 5-page enclosure, providing Forest-specific guidance about how five examples from a Regional Office memo of June 11, 2003 might be implemented for Umatilla National Forest.<br>Source: SO 2430/2600 file designation memo dated September 5, 2003; Subject: Guidance for Implementing Eastside Screens; To: S.O. Staff and District Rangers |
| Nov. 10, 2003 | **RO Screens Review – Wallowa-Whitman NF.** Regional Office issues 2-page letter describing an Eastside Screens implementation and field review of Mt. Emily Fuel Reduction and Tremble Aspen Restoration projects on Wallowa-Whitman National Forest. This letter, which examined several projects in light of the Region's June 11, 2003 memo encouraging site-specific Forest Plan amendments to ease Eastside Screens implementation, provides advice about how Wallowa-Whitman NF might want to proceed regarding fuels treatment and aspen restoration projects that would likely require Forest Plan amendments.<br>Source: RO 2430/2600 file designation memo dated November 10, 2003; Subject: Eastside Screens Team Report, Field Review of Mt. Emily Fuel Reduction and Tremble Aspen Restoration Projects; To: Forest Silviculturist, Wallowa-Whitman National Forest |
| June 10, 2005 | **Screens Wildlife Guidance for Postfire Planning.** Lisa Norris, an original author of Eastside Screens when she was working in Regional Office as Wildlife Program Manager, issues 3-page letter providing her perspective on intent of wildlife portion of Eastside Screens regarding retention and management of dead and dying trees. Her letter, reiterating that a Wildlife Screen was not intended to maintain large areas of dead and/or dying forests, was prepared for Malheur National Forest as they were working on salvage-sale projects following several wildfires that occurred during 2002. |

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| | Source: SO 1900/2430 memo dated June 10, 2005 (Mount Hood National Forest Supervisor's Office); Subject: Review of the Easy Fire Recovery Projects FEIS in relation to Eastside Screens direction; To: Forest Supervisor, Malheur National Forest |
| July 1, 2005 | **RO Guidance for Defining Conifer Mortality.** Regional Office issues 1-page letter and 17-page enclosure providing guidance about how to define and determine conifer mortality. Letter was designed to address concerns about assessment of insect-, disease- and fire-related mortality, or pending mortality, for Late and Old Structural (LOS) components; and for development of post-fire marking guides. Letter refers to Eastside Screens interpretation letters of August 27, 1998 and September 10, 1998, which described how criteria developed by Forest Pest Management (FPM) personnel could be used for tree mortality determinations. It also discussed Scott Guidelines as a tool for making tree mortality determinations. Enclosure is a draft version of a paper called "Understanding and Defining Mortality in Western Conifers" (dated May 2005); it was ultimately published in April 2007 issue of Western Journal of Applied Forestry with this title: "Understanding and Defining Mortality in Western Conifer Forests" (Filip et al. 2007).<br>Source: RO 2400 file designation memo dated July 1, 2005; Subject: Defining Conifer Mortality; To: Forest Supervisors |
| July 26, 2005 | **RO Screens Review – Umatilla NF.** Regional Office issues 2-page letter providing answers to two questions raised during planning process for Lower Sheep project on Walla Walla Ranger District of Umatilla National Forest. Memo addresses harvest of 21" trees in skyline corridors for scenario A situations of interim wildlife standard, and it provides a Regional Office response to a Ranger District document describing how the Lower Sheep project was consistent with Eastside Screens Forest Plan amendment.<br>Source: RO 2430/2600 file designation memo dated July 26, 2005; Subject: Screens Question on Lower Sheep Project; To: Forest Supervisor, Umatilla NF |
| Aug. 22, 2006 | **Umatilla NF Interpretation About Danger Trees and Screens.** Umatilla NF Screens Coordinator, David Powell, issues a 2-page briefing paper entitled "School Fire Salvage Recovery |

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| | Project: Eastside Screens direction for danger (hazard) trees." This briefing paper and its associated determination were prepared in response to concerns about whether stand-alone danger-tree timber sales, or danger-tree units within larger timber sales, are subject to an Eastside Screens forest plan amendment. Determination made was as follows: "In my role as the Umatilla National Forest Screens Coordinator, and after reviewing the parent language from item #2 of the Eastside Screens forest plan amendment and an Eastside Screens oversight letter dated February 2, 1999, I conclude that danger-tree timber sales, or the danger-tree component of timber sales with more than one timber sale objective, to be exempt from the Eastside Screens forest plan amendment." |
| Oct. 5, 2010 | **Umatilla NF Direction About Range of Variation Analyses.** Umatilla National Forest Supervisor issues 6-page letter providing Forest-specific guidance about how species composition (forest cover types), forest structure (structural stages), and stand density (tree density classes) will be used when conducting a range of variation (RV) analysis for forest vegetation project planning. A structural stage RV analysis is required by the Ecosystem Screen portion of an Eastside Screens Forest Plan amendment. Letter provides ranges of percentages, by ecosystem component (composition, structure, density) and biophysical environment, which analysts are directed to use during an RV analysis for timber sales and similar forest vegetation projects. It also provides considerations about interactions between RV concepts and climate change, and it describes how RV analyses fit within a broader planning framework.<br>Source: SO 1920-2-1 file designation memo dated October 5, 2010; Subject: Range of variation direction for forest vegetation project planning; To: S.O. Staff and District Rangers<br>Note: This memo specifically rescinds a Umatilla NF Supervisor's Office memorandum dated December 11, 1998 (Blackwood 1998). |

## APPENDIX 1: EASTSIDE SCREENS REFERENCES

This appendix includes primary references dealing with Eastside Screens events described in this white paper. **Not all materials mentioned in this white paper are included below**.

All these materials are on file with: Umatilla National Forest, Supervisor's Office, Pendleton, OR 97801. For Forest Service employees, they are available in PDF format from an intranet website: Screens Website


**Blackwood, J.D. 1993 (October 6).** Interim approach for sale preparation, Eastside Forests; file designation 2430/2600 memorandum to Regional Forester. Pendleton, OR: USDA Forest Service, Umatilla National Forest, Supervisor's Office. 4 p.

**Blackwood, J.D. 1998 (December 11).** Historical percentages for use with HRV analyses; file designation 2430/2600 memorandum to District Rangers. Pendleton, OR: USDA Forest Service, Umatilla National Forest, Supervisor's Office. 8 p.

**Blackwood, J.D. 2003 (September 5).** Guidance for implementing Eastside Screens; file designation 2430/2600 memorandum to S.O. Staff and District Rangers. Pendleton, OR: USDA Forest Service, Umatilla National Forest, Supervisor's Office. 7 p.

**Devlin, R.J. 1998a (August 27).** Screens review, Colville NF; file designation 2430/2600 memorandum to Forest Supervisors, Eastside Forests. Portland, OR: USDA Forest Service, Pacific Northwest Region. 5 p.

**Devlin, R.J. 1998b (September 10).** Screens review, Winema and Fremont NF's; file designation 2430/2600 memorandum to Forest Supervisors, Eastside Forests. Portland, OR: USDA Forest Service, Pacific Northwest Region. 5 p.

**Filip, G.M.; Schmitt, C.L.; Scott, D.W.; Fitzgerald, S.A. 2007.** Understanding and defining mortality in western conifer forests. Western Journal of Applied Forestry. 22(2): 105-115. doi:10.1093/wjaf/22.2.105

**Goodman, L. 2005 (July 1).** Defining conifer mortality; file designation 2400 memorandum to Forest Supervisors. Portland, OR: USDA Forest Service, Pacific Northwest Region. 18 p.

**Johnson, C.G. 1993 (August 9).** Ecosystem screens; file designation 2060 memorandum to Wallowa-Whitman, Umatilla, and Malheur Forest Supervisors. Baker City, OR: USDA Forest Service, Pacific Northwest Region, Wallowa-Whitman National Forest. 4 p (and 6 exhibits).

**Joyner, C.N. 2005 (July 26).** Screens question on Lower Sheep Project; file designation 2430/2600 memorandum to Forest Supervisor, Umatilla NF. Portland, OR: USDA Forest Service, Pacific Northwest Region. 2 p.

**Kline, J.P. 1993 (December 6).** Historical range of variation; file designation 2060 memorandum to S.O. Staff and District Rangers. Pendleton, OR: USDA Forest Service, Umatilla National Forest, Supervisor's Office. 2 p.

**Lowe, J.E. 1993 (May 14).** Interim ecosystem screens for FY '93 timber sales; file designation 1900/2430 memorandum to Forest Supervisors, Eastside Forests. Portland, OR: USDA Forest Service, Pacific Northwest Region. 12 p.

**Lowe, J.E. 1993 (August 18).** Interim approach for sale preparation, Eastside Forests; file

designation 2430/2600 memorandum to Forest Supervisors, Eastside Forests. Portland, OR: USDA Forest Service, Pacific Northwest Region. 21 p.

**Lowe, J.E. 1993 (September 1).** Questions and answers in regards to the screening process for sale preparation; file designation 2430/2600 memorandum to Forest Supervisors: Colville, Okanogan, Umatilla, Ochoco, Wallowa-Whitman, Malheur, Deschutes, Winema, and Fremont NF's. Portland, OR: USDA Forest Service, Pacific Northwest Region. 9 p.

**Lowe, J.E. 1993 (September 27).** Interim approach for sale preparation, Eastside Forests; file designation 2430/2600 memorandum to Forest Supervisors, Eastside Forests. Portland, OR: USDA Forest Service, Pacific Northwest Region. 12 p.

**Lowe, J.E. 1995 (February 8).** Monitoring report for Eastside interim management direction for preparation of timber sales; file designation 1920 memorandum to Forest Supervisors: Okanogan, Colville, Wallowa-Whitman, Malheur, Ochoco, Deschutes, Fremont, Umatilla, and Winema NF's. Portland, OR: USDA Forest Service, Pacific Northwest Region. 19 p.

**Lowe, J.E. 1995 (September 25).** Ochoco NF screens implementation review; file designation 2430/2600 memorandum to East-Side Forest Supervisors. Portland, OR: USDA Forest Service, Pacific Northwest Region. 2 p.

**Lowe, J.E. 1995 (October 6).** Regional Forester Amendment #2 implementation – Malheur NF; file designation 2430/2600 memorandum to Forest Supervisors: Colville, Deschutes, Fremont, Malheur, Ochoco, Okanogan, Umatilla, Wallowa-Whitman, and Winema NFs. Portland, OR: USDA Forest Service, Pacific Northwest Region. 2 p.

**Lowe, J.E. 1995 (October 31).** Regional Forester Amendment #2 implementation – Fremont NF; file designation 2430/2600 memorandum to Forest Supervisors: Colville, Deschutes, Fremont, Malheur, Ochoco, Okanogan, Umatilla, Wallowa-Whitman, and Winema NFs. Portland, OR: USDA Forest Service, Pacific Northwest Region. 3 p.

**Lowe, J.E. 1995 (November 14).** Regional Forester Amendment #2 implementation – Umatilla NF trip; file designation 2430/2600 memorandum to Forest Supervisors: Colville, Deschutes, Fremont, Malheur, Ochoco, Okanogan, Umatilla, Wallowa-Whitman, and Winema NFs. Portland, OR: USDA Forest Service, Pacific Northwest Region. 4 p.

**Lowe, J.E. 1995 (November 14).** Regional Forester Amendment #2 implementation – Wallowa-Whitman NF; file designation 2430/2600 memorandum to Forest Supervisors: Colville, Deschutes, Fremont, Malheur, Ochoco, Okanogan, Umatilla, Wallowa-Whitman, and Winema NFs. Portland, OR: USDA Forest Service, Pacific Northwest Region. 3 p.

**MacLean, S. 1993 (August 4).** Eastside management strategies; file designation 1360 memorandum to the files. Pendleton, OR: USDA Forest Service, Umatilla National Forest, Supervisor's Office. 5 p.

**Martin, K. 2010 (October 5).** Range of variation direction for forest vegetation project planning; file designation 1920-2-1 memorandum to S.O. Staff and District Rangers. Pendleton, OR: USDA Forest Service, Pacific Northwest Region, Umatilla National Forest, Supervisor's Office. 6 p.

**Norris, L.K. 2005 (June 10).** Review of the Easy Fire Recovery Projects FEIS in relation to Eastside Screens direction; file designation 1900/2430 memorandum to Forest Supervisor, Malheur National Forest. Sandy, OR: USDA Forest Service, Mt. Hood National Forest. 3 p.

**Powell, D.C. 2006 (August 22).** School Fire Salvage Recovery Project; Briefing paper: Eastside Screens direction for danger (hazard) trees. Unpublished briefing paper. Pendleton, OR: USDA Forest Service, Umatilla National Forest, Supervisor's Office. 2 p.

**Schmitt, C.L.; Filip, G.M. 2005.** Understanding and defining mortality in western conifers. R6-FHP-1-05. Portland, OR: USDA Forest Service, Pacific Northwest Region. 17 p. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev2_025730.pdf

**USDA Forest Service. 1993 (October 28).** Talking points and Umatilla N.F. figures; timber sale screening process. Unpublished typescript document. Pendleton, OR: USDA Forest Service, Umatilla National Forest, Supervisor's Office. 4 p. (includes 2-page news release and 1-page 'Answers to Expected Media Questions' document, both dated Oct. 27).

**USDA Forest Service. 1994.** Continuation of interim management direction establishing riparian, ecosystem and wildlife standards for timber sales; Regional Forester's Forest Plan Amendment #1. Portland, OR: USDA Forest Service, Pacific Northwest Region.

**USDA Forest Service. 1995.** Revised interim direction establishing riparian, ecosystem and wildlife standards for timber sales; Regional Forester's Forest Plan Amendment #2. Portland, OR: USDA Forest Service, Pacific Northwest Region. 14 p. http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5211858.pdf

**USDA Forest Service; U.S. Department of Interior, Bureau of Land Management. 1994.** Environmental assessment for the implementation of interim strategies for managing anadromous fish-producing watersheds in eastern Oregon and Washington, Idaho, and portions of California (PACFISH). Washington, DC. 68 p [plus 5 appendices, a biological evaluation, and a proposed finding of no significant impact]. http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5211885.pdf

**Williams, R.W. 1997 (August 1).** Review of Forest Plan amendments of the Regional Forester's Amendment No. 2 for Eastside Forests; file designation 2430/2600 memorandum to Forest Supervisor, Ochoco NF. Portland, OR: USDA Forest Service, Pacific Northwest Region. 3 p.

**Williams, R.W. 1997 (October 2).** Eastside Screens amendments; file designation 2430/2600 memorandum to Eastside Forest Supervisors. Portland, OR: USDA Forest Service, Pacific Northwest Region. 1 p.

**Williams, R.W. 1997 (December 23).** Review of Forest Plan amendments of the Regional Forester's Amendment No. 2 for Eastside Screens to cut 21" trees or do regeneration harvests in scenario A; file designation 2430/2600 memorandum to Forest Supervisors: Colville, Deschutes, Fremont, Malheur, Ochoco, Okanogan, Umatilla, Wallowa-Whitman, and Winema NFs. Portland, OR: USDA Forest Service, Pacific Northwest Region. 6 p.

**Williams, R.W. 1999 (February 2).** Regional Forester Amendment #2 implementation – Okanogan NF; file designation 2430/2600 memorandum to Forest Supervisors: Colville, Deschutes, Fremont, Malheur, Ochoco, Okanogan, Umatilla, Wallowa-Whitman, and Winema NFs. Portland, OR: USDA Forest Service, Pacific Northwest Region. 3 p.

**APPENDIX B**

REVISED

INTERIM MANAGEMENT DIRECTION
ESTABLISHING RIPARIAN, ECOSYSTEM AND WILDLIFE STANDARDS
FOR TIMBER SALES

REGIONAL FORESTER'S FOREST PLAN AMENDMENT #2

6/12/95

REGIONAL FORESTER'S EASTSIDE FOREST PLAN AMENDMENT NO. 2
ALTERNATIVE 2, as adopted

1. All timber sales, except as identified below, will be designed to incorporate the interim riparian, ecosystem and wildlife standards.
2. The following types of sales will not be subject to the interim standards: personal use firewood sales; post and pole sales; sales to protect health and safety; and sales to modify vegetation within recreation special use areas. NEPA and required consultation under Section 7 of the Endangered Species Act must be completed.
3. Five other types of sales will not be subject to the interim ecosystem standard, but must apply the interim riparian and wildlife standards: precommercial thinning sales; sales of material sold as fiber; sales of dead material less than 7-inch dbh, with incidental green volume (ref. RO 2430 ltr, 8/16/93); salvage sales, with incidental green volume, located outside currently mapped old growth (ref. RO 2430 ltr. 8/16/93); and commercial thinning and understory removal sales located outside currently mapped old growth.
4. Interim riparian standard: Timber sales (green and salvage) will not be planned or located within riparian areas as described below:
    a. Perennial and intermittent fish-bearing streams: consists of the stream and the area on either side of the stream extending from the edges of the active stream channel to the top of the inner gorge, or to the outer edges of the 100-year floodplain, or to the outer edges of riparian vegetation, or to a distance equal to the height of two site-potential trees, or 300 feet slope distance (600 feet including both sides of the stream channel), whichever is greatest.
    b. Perennial nonfish-bearing streams: consists of the stream and the area on either side of the stream extending from the edges of the active stream channel to the top of the inner gorge, or to the outer edges of the 100-year floodplain, or to the outer edges of riparian vegetation, or to a distance equal to the height of one site-potential tree, or 150 feet slope distance (300 feet, including both sides of the stream channel), whichever is greatest.
    c. Intermittent non-fish bearing streams: consists of the stream channel from the edges of the stream channel to the top of the inner gorge, or to the outer edges of the riparian vegetation, or to the extent of landslides or landslide-prone area, or to a distance of 100 feet slope distance (200 feet, including both sides of the channel), whichever is greatest.

       See FSM 2526 9/80 R-6 Supp 42 for definitions of Perennial and Intermittent stream.
    d. Ponds, lakes, reservoirs, seeps and springs, bogs and wetlands consist of the body of water or wetland and/or seeps/spring source and the area to the outer edges of the riparian vegetation, or to the extent of the seasonally saturated soil, or to the extent of moderately and highly unstable areas, or to a distance equal to the height of one site-potential tree, or 150 feet slope distance from the edge of the maximum pool elevation of constructed ponds and reservoirs or from the edge of the wetland, pond or lake, whichever is greatest.
5. Interim ecosystem standard:
    a. Characterize the proposed timber sale and its associated watershed for patterns of stand structure by biophysical environment and compare to the Historic Range of Variability

(HRV). The HRV should be based on conditions in the pre-settlement era; however 1900s photography may be acceptable. HRV should be developed for large landscapes across which forest types, environmental settings, and disturbance regimes (fire and insects/disease) are relatively uniform. Each component watershed should not be expected to reflect the average conditions for the larger landscape, but the sum of conditions across watersheds within the area for which HRV is developed should reflect ranges of conditions determined in the HRV evaluation. Note: LOS, a term used in the interim wildlife standard, refers to the structural stages where large trees are common, i.e. Multi-stratum with Large Trees, and Single-stratum with Large Trees. See Table 1.

b. Ecosystem characterization steps to determine HRV:

   1) Describe the dominant historical disturbance regime, i.e. the disturbance types and their magnitudes and frequencies.

   2) Characterize the landscape pattern and abundance of structural stages (Table 1) maintained by the disturbance regime. Consider biophysical environmental setting (Table 2) across the large landscape to make this determination.

   3) Describe spatial pattern and distribution of structural stages under the HRV disturbance regime, and

   4) Map the current pattern of structural stages and calculate their abundance by biophysical environmental setting.

c. Characterize the difference in percent composition of structural stages between HRV and current conditions (Table 3). Identify structural conditions and biophysical environment combinations that are outside HRV conditions to determine potential treatment areas.

**Table 1**. Structural stages for use with HRV analysis. Structural stage is not necessarily associated with stand age or to seral (species composition) development.

| Structural Stage | Definition | Description |
|---|---|---|
| Stand Initiation | Growing space is reoccupied following a stand replacing disturbance, typically by seral species. | One canopy stratum (may be broken or continuous), one dominant cohort[2] of seedlings or saplings. Grass, forbs, or shrubs may also be present with early seral trees.[3] |
| Stem Exclusion: Open Canopy | Occurrence of new tree stems is excluded (moisture limited). Crowns are open grown. Canopy is discontinuous. This structure can be maintained by frequent underburning or management. | One discontinuous canopy stratum. One cohort of trees. New tree stems excluded by competition. Trees may be poles or of small or medium diameter. Understory shrubs, grasses, or forbs may be present. |
| Stem Exclusion: Closed Canopy | Occurrence of new tree stems is excluded (light or moisture limited). Crowns are closed and abrading. | Canopy layer is closed and continuous. One or more canopy strata may be present. Lower canopy strata, if present, is the same age class as the upper stratum. Trees may be poles or of small or medium diameter. Understory shrubs, grasses, or forbs may be present. |
| Understory Reinitiation | A second cohort of trees is established under an older, typically seral, overstory. Mortality in the overstory creates growing space for new trees in the understory. Large trees are uncommon. | The overstory canopy is discontinuous. Two or more canopy layers are present. Two or more cohorts of trees are present. Overstory trees may be poles or of small or medium diameter. Understory trees are seedlings, saplings or poles. |
| Multi-stratum, without large trees | Several cohorts of trees are established. Large overstory trees are uncommon. Pole, small, and medium sized trees dominate. | The overstory canopy is discontinuous. Two or more canopy layers are present. Large trees are uncommon in the overstory. Horizontal and vertical stand structure and tree sizes are diverse. The stand may be a mix of seedlings, saplings, poles, or small or medium diameter trees. |
| Multi-stratum, with large trees | Several to many cohorts and strata of trees are present. Large trees are common. | The overstory canopy is broken or discontinuous. Two or more canopy layers are present. Two or more cohorts of trees are present. Medium and large sized trees dominate the overstory. Trees of all sizes may be present. Horizontal and vertical stand structure and tree sizes are diverse. |
| Single stratum, with large trees | A single stratum of large trees is present. Large trees are common. Young trees are absent or few in the understory. Park-like conditions may exist. | The single dominant canopy stratum consists of medium sized or large trees. One or more cohorts of trees may be present. An understory may be absent or consist of sparse or clumpy seedlings or saplings. Grasses, forbs, or shrubs may be present in the understory. |

[1] Adapted from an unpublished report by K. O'Hara, Assistant Professor of Silviculture, University of Montana, under contract to the Interior Columbia Basin Ecosystem Project for the Eastside EIS. Modifications developed by Miles Hemstrom, USFS Regional Office, Portland, Oregon, with input from Paul Hessburg, USFS/PNW Research Station, Wenatchee Lab, Wenatchee, Washington.

[2] A cohort is a class of trees arising after a common natural or artificial disturbance.

[3] "Trees" refers to live trees, not snags or other dead trees.

**Table 2**. Example biophysical environments matrix. Analysis areas may have more or fewer kinds of biophysical environments and characteristics of each environment may differ from those shown. This table is only provided as an example. The biophysical environments listed are not comprehensive. Each landscape area may have these or different environments.

| Biophysical Environment[4] | Dominant Disturbance Factors | Disturbance Regime[5] | Average Disturbance Patch | Typical Landform Setting | Typical Elevation Range | Typical Aspects |
|---|---|---|---|---|---|---|
| Hot, Dry: PIPO, ABGR | Fire, insects, and disease | Low | <l acre | Ridge tops and steep side slopes | 2500-4000 feet | S, SW |
| Warm, Dry: PSME, ABGR | Fire, insects, and disease | Moderate | <5 acres | Side slopes | 3000-5000 feet | S, SW |
| Cool, Mesic: PSME, ABGR, ABLA2, PIEN | Fire, insects, and disease | High | 80-120 acres | Various | 3000-5000 feet | Various |
| Cool, Wet: ABGR, ABLA2, TSME | Insects and disease, fire | High | >250 acres | Bottom lands | 3000-5000 feet | NE, N, NW, Flat |

[4] Temperature and moisture regime, characteristic late seral species, first two letters of genus and species.

[5] Agee (1990). "The historical role of fire in Pacific Northwest forests", Natural and Prescribed Fire in Pacific Northwest Forests, Oregon State University Press.

Low severity regime: 1-25 year return interval, 0% to 20% mortality of large trees.

Moderate severity regime: 26-100 year return interval, 26% to 70% mortality of large trees.

High severity regime: >100 year return interval, >70% mortality of large trees.

**Table 3**. Example biophysical environment by structural stage matrix. This is only an example. The number and kind of biophysical environments and the historic and current distribution of structural conditions vary by landscape. H% is the estimated range of the percent extent of each condition from HRV assessment. C% is the estimated percent extent of each condition at present in the watershed under examination. D% is a range indicating the difference between H% and C%; D% = C%-H%. Negative values indicate a reduction from historical conditions. *This table is only provided as an example. The biophysical environments listed are not comprehensive. Each landscape area may have these or different environments.*

| | Stand Initiation | | | Stem Exclusion: Open Canopy | | | Stem Exclusion: Closed Canopy | | | Understory Reinitiation | | | Multi-stratum, without large trees | | | Multi-stratum, with large trees | | | Single-stratum, with large trees | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Envt | H% | C% | D% | H% | C% | D% | H% | C% | D% | H% | C% | D% | H% | C% | D% | H% | C% | D% | H% | C% | D% |
| Hot, Dry | 5 to 15 | 15 | 0 to 10 | 5 to 20 | 20 | 0 to 15 | NA | NA | NA | NA | NA | NA | 5 to 10 | 30 | 20 to 25 | 2 to 15 | 20 | 5 to 18 | 20 to 70 | 15 | -5 to -55 |
| Warm, Dry | 1 to 15 | 5 | 4 to -10 | 5 to 20 | 20 | 0 to 15 | 1 to 10 | 10 | 0 to 9 | 1 to 10 | 10 | 0 to 9 | 5 to 25 | 25 | 0 to 20 | 5 to 20 | 35 | 15 to 30 | 15 to 55 | 5 | -10 to -50 |
| Cool, Mesic | 1 to 5 | 2 | 1 to -3 | NA | NA | NA | 5 to 25 | 5 | 0 to -20 | 5 to 25 | 5 | 0 to -20 | 50 to 70 | 65 | 15 to -5 | 5-25 | 24 | 19 to -1 | NA | NA | NA |
| Cool, Wet | 1 to 10 | 1 | 0 to -10 | NA | NA | NA | 1 to 10 | 3 | 2 to -7 | 5 to 25 | 10 | 5 to -15 | 20 to 50 | 40 | 20 to -10 | 30 to 60 | 46 | 16 to -14 | NA | NA | NA |

6. Interim wildlife standard:

   a. The interim wildlife standard has two possible scenarios to follow based on the Historical Range of Variability (HRV) for each biophysical environment within a given watershed. For the purposes of this standard, late and old structural stages (LOS) can be either "Multi-strata with Large Trees," or "Single Strata with Large Trees," as described in Table l of the Ecosystem Standard. These LOS stages can occur separately or in some cases, both may occur within a given biophysical environment.

   b. LOS stages are calculated separately in the interim ecosystem standard. Use Scenario A whenever any one type of LOS is below HRV. If both types occur within a single biophysical environment and one is above HRV and one below, use Scenario A. Only use Scenario B when both LOS stages within a particular biophysical environment are at or above HRV.

   c. The following sale types were exempted from consideration of HRV through the interim ecosystem standard, but must still meet the intent of the wildlife standards by following the direction provided in Scenario A, 1) through 4), as applicable to the type of sale being proposed, and regardless of whether the stand is LOS or not:

      1. precommercial thinning sales,
      2. sales of material sold as fiber,
      3. sales of dead material less than sawlog size (7-inch dbh) with incidental green volume,
      4. salvage sales with incidental green volume located outside currently mapped old growth,
      5. commercial thinning and/or understory removal sales located outside currently mapped old growth.

The interim wildlife standard only altered portions of current Forest Plans. All additional Forest Plan wildlife standards and guidelines not altered in this direction still apply.

   d. Scenario A

   If either one or both of the late and old structural (LOS) stages falls BELOW HRV in a particular biophysical environment within a watershed, then there should be NO NET LOSS OF LOS from that biophysical environment. DO NOT allow timber sale harvest activities to occur within LOS stages that are BELOW HRV.

      1) Some timber sale activities can occur within LOS stages that are within or above HRV in a manner to maintain or enhance LOS within that biophysical environment. It is allowable to manipulate one type of LOS to move stands into the LOS stage that is deficit if this meets historical conditions.

      2) Outside of LOS, many types of timber sale activities are allowed. The intent is still to maintain and/or enhance LOS components in stands subject to timber harvest as much as possible, by adhering to the following standards:

         a) Maintain all remnant late and old seral and/or structural live trees ≥ 21" dbh that currently exist within stands proposed for harvest activities.

b) Manipulate vegetative structure that does not meet late and old structural (LOS) conditions (as described in Table 1 of the Ecosystem Standard), in a manner that moves it towards these conditions as appropriate to meet HRV.

c) Maintain open, park-like stand conditions where this condition occurred historically. Manipulate vegetation in a manner to encourage the development and maintenance of large diameter, open canopy structure. (While understory removal is allowed, some amount of seedlings, saplings, and poles need to be maintained for the development of future stands).

3) Maintain connectivity and reduce fragmentation of LOS stands by adhering to the following standards:

INTENT STATEMENT: While data is still being collected, it is the best understanding of wildlife science, today, that wildlife species associated with late and old structural conditions, especially those sensitive to "edge," rely on the connectivity of these habitats to allow free movement and interaction of adults and dispersal of young. Connectivity corridors do not necessarily meet the same description of "suitable" habitat for breeding, but allow free movement between suitable breeding habitats. Until a full conservation assessment is completed that describes in more detail the movement patterns and needs of various species and communities of species in eastside ecosystems, it is important to insure that blocks of habitat maintain a high degree of connectivity between them, and that blocks of habitat do not become fragmented in the short-term.

a) Maintain or enhance the current level of connectivity between LOS stands and between all Forest Plan designated "old growth/MR" habitats by maintaining stands between them that serve the purpose of connection as described below:

(1) Network pattern – LOS stands and MR/Old Growth habitats need to be connected with each other inside the watershed as well as to like stands in adjacent watersheds in a contiguous network pattern by at least 2 different directions.

(2) Connectivity Corridor Stand Description – Stands in which medium diameter or larger trees are common, and canopy closures are within the top one-third of site potential. Stand widths should be at least 400 ft. wide at their narrowest point. The only exception to stand width is when it is impossible to meet 400 ft with current vegetative structure, AND these "narrower stands" are the only connections available (use them as last resorts). In the case of lodgepole pine, consider medium to large trees as appropriate diameters for this stand type.

If stands meeting this description are not available in order to provide at least 2 different connections for a particular LOS stand or MR/Old Growth habitat, leave the next best stands for connections. Again, each LOS and MR/Old Growth habitat must be connected at least 2 different ways.

(3) Length of Connection Corridors – The length of corridors between LOS stands and MR habitats depends on the distance between such stands. Length of corridors should be as short as possible.

(4) Harvesting within connectivity corridors is permitted if all the criteria in (2) above can be met, and if some amount of understory (if any occurs) is left in patches or scattered to assist in supporting stand density and cover. Some understory removal, stocking control, or salvage may be possible activities, depending on the site.

b) To reduce fragmentation of LOS stands, or at least not increase it from current levels, stands that do not currently meet LOS that are located within, or surrounded by, blocks of LOS stands should not be considered for even-aged regeneration, or group selection at this time. Non-regeneration or single tree selection (UEAM) activities in these areas should only proceed if the prescription moves the stand towards LOS conditions as soon as possible.

4) Adhere to the following specific wildlife prescriptions. These standards are set at MINIMUM levels of consideration. Follow Forest Plan standards and guidelines when they EXCEED the following prescriptive levels:

a) Snags, Green Tree Replacements and Down Logs:

INTENT STATEMENT – Most (if not all) wildlife species rely on moderate to high levels of snags and down logs for nesting, roosting, denning and feeding. Large down logs are a common and important component of most old and late structural forests. Past management practices have greatly reduced the number of large snags and down logs in managed stands.

(1) All sale activities (including intermediate and regeneration harvest in both even-age and uneven-age systems, and salvage) will maintain snags and green replacement trees of ≥ 21 inches dbh (or whatever is the representative dbh of the overstory layer if it is less than 21 inches), at 100% potential population levels of primary cavity excavators. This should be determined using the best available science on species requirements as applied through current snag models or other documented procedures. NOTE: for Scenario A, the live remnant trees (≥ 21" dbh) left can be considered for part of the green replacement tree requirement.

(2) Pre-activity (currently existing) down logs may be removed only when they exceed the quantities listed below. When pre-activity levels of down logs are below the quantities listed, do not remove downed logging debris that fits within the listed categories. It is not the intention of this direction to leave standing trees for future logs in addition to the required snag numbers, nor to fall merchantable material to meet the down log requirements. The snag numbers are designed to meet future down log needs in combination with natural mortality. Exceptions to meeting the down log requirement can be made where fire protection needs for life and property cannot be accomplished with this quantity of debris left on site.

The down log criteria are not intended to preclude the use of prescribed burning as an activity fuels modification treatment. Fire prescription parameters will ensure that consumption will not exceed 3 inches total (1½ inch per side)

of diameter reduction in the featured large logs (sizes below). Tools such as the CONSUME and FOFEM computer models, fire behavior nomograms, and local fire effects documentation can aid in diameter reduction estimates.

Leave logs in current lengths; do not cut them into pieces. Longer logs may count for multiple "pieces" without cutting them. Cutting them may destroy some habitat uses and also cause them to decay more rapidly. It is also not expected that the "pieces" left will be scattered equally across all acres.

| SPECIES | PIECES PER ACRE | DIAMETER SMALL END | PIECE LENGTH AND TOTAL LINEAL LENGTH | |
|---|---|---|---|---|
| Ponderosa Pine | 3-6 | 12" | >6 ft. | 20-40 ft. |
| Mixed Conifer | 15-20 | 12" | >6 ft. | 100-140 ft. |
| Lodgepole Pine | 15-20 | 8" | >8 ft. | 120-160 ft. |

b) GOSHAWKS:

INTENT STATEMENT: Goshawks are known to use interior forest habitats of mature/old growth structure. Habitat uses, nesting stand characteristics, and key habitat structural components in eastern Oregon/Washington are currently being studied. Until further information is known and management plans approved to insure species viability, the following standards are to be met as a minimum. Forest Plan standards and guidelines that EXCEED the levels described below should be used instead of, or in addition to, the following:

(1) Protect every known active and historically used goshawk nest-site from disturbance. "Historical" refers to known nesting activity occurring at the site in the last 5 years. Seasonal restrictions on activities near nest sites will be required for activity types that may disturb or harass pair while bonding and nesting.

(2) 30 acres of the most suitable nesting habitat surrounding all active and historical nest tree(s) will be deferred from harvest.

(3) A 400-acre "Post Fledging Area" (PFA) will be established around every known active nest site. While harvest activities can occur within this area, retain the LOS stands and enhance younger stands towards LOS condition, as possible.

e. Scenario B

Within a particular biophysical environment within a watershed, if the single, existing late and old structural (LOS) stage is WITHIN OR ABOVE HRV, OR if both types of LOS stages occur and BOTH are WITHIN OR ABOVE HRV, then timber harvest can occur within these stages as long as LOS conditions do not fall below HRV. Enhance LOS structural conditions and attributes as possible, consistent with other multiple use objectives.

The intent of the following direction is to maintain options by impacting large and/or contiguous stands of LOS as little as possible, while meeting other multiple use objectives.

1) Harvest activities, (any and all types being considered), can occur in the following stand types in order of priority:
   a) Activities should occur within stands other than LOS as a first priority.
   b) Second priority for harvest activities is within smaller, isolated LOS stands <100 acres in size, and/or at the edges (first 300 ft) of large blocks of LOS stands (≥ 100 acres).
   c) Some harvesting can occur, but only as a last priority, within the interior of large LOS stands (≥ 100 acres); REGENERATION AND GROUP SELECTION ACTIVITIES ARE NOT ALLOWED. REFER TO NON-FRAGMENTATION STANDARDS, 3), BELOW.
2) Maintain connectivity as directed in Scenario A, 3)
3) Non-fragmentation standards – Within the interior of large LOS stands ≥ 100 acres, (beyond 300 ft from edge), harvest activities are limited to non-fragmenting prescriptions such as thinning, single-tree selection (UEAM), salvage, understory removal, and other non-regeneration activities. Group selection (UEAM) is only allowed when openings created either mimic the natural forest pattern, and do not exceed ½ acre in size.
4) Adhere to wildlife prescriptions provided in SCENARIO A, 4) a) for snags, green tree replacements, and down logs; and 5) for goshawks with the following exception for goshawk post fledging areas in 5) c):

A 400-acre "Post Fledging Area" (PFA) will be established around every active nest site. While harvesting activities can occur within this area, up to 60% of the area should be retained in an LOS condition, (i.e., if 35% of the area is now in LOS stands then it all needs to be retained; if 75% of the area is now in LOS stands then some can be harvested, as long as this late and old stand structure does not drop below 60% of the area).

## APPENDIX 3: SILVICULTURE WHITE PAPERS

White papers are internal reports, and they are produced with a consistent formatting and numbering scheme – all papers dealing with Silviculture, for example, are placed in a silviculture series (Silv) and numbered sequentially. Generally, white papers receive only limited review and, in some instances pertaining to highly technical or narrowly focused topics, the papers may receive no technical peer review at all. For papers that receive no review, the viewpoints and perspectives expressed in the paper are those of the author only, and do not necessarily represent agency positions of the Umatilla National Forest or the USDA Forest Service.

Large or important papers, such as two papers discussing active management considerations for dry and moist forests (white papers Silv-4 and Silv-7, respectively), receive extensive review comparable to what would occur for a research station general technical report (but they don't receive blind peer review, a process often used for journal articles).

White papers are designed to address a variety of objectives:

(1) They guide how a methodology, model, or procedure is used by practitioners on the Umatilla National Forest (to ensure consistency from one unit, or project, to another).
(2) Papers are often prepared to address ongoing and recurring needs; some papers have existed for more than 20 years and still receive high use, indicating that the need (or issue) has long standing – an example is white paper #1 describing the Forest's big-tree program, which has operated continuously for 25 years.
(3) Papers are sometimes prepared to address emerging or controversial issues, such as management of moist forests, elk thermal cover, or aspen forest in the Blue Mountains. These papers help establish a foundation of relevant literature, concepts, and principles that continuously evolve as an issue matures, and hence they may experience many iterations through time. [But also note that some papers have not changed since their initial development, in which case they reflect historical concepts or procedures.]
(4) Papers synthesize science viewed as particularly relevant to geographical and management contexts for the Umatilla National Forest. This is considered to be the Forest's self-selected 'best available science' (BAS), realizing that non-agency commenters would generally have a different conception of what constitutes BAS – like beauty, BAS is in the eye of the beholder.
(5) The objective of some papers is to locate and summarize the science germane to a particular topic or issue, including obscure sources such as master's theses or Ph.D. dissertations. In other instances, a paper may be designed to wade through an overwhelming amount of published science (dry-forest management), and then synthesize sources viewed as being most relevant to a local context.
(6) White papers function as a citable literature source for methodologies, models, and procedures used during environmental analysis – by citing a white paper, specialist reports can include less verbiage describing analytical databases, techniques, and so forth, some of which change little (if at all) from one planning effort to another.
(7) White papers are often used to describe how a map, database, or other product was developed. In this situation, the white paper functions as a 'user's guide' for the new product.

Examples include papers dealing with historical products: (a) historical fire extents for the Tucannon watershed (WP Silv-21); (b) an 1880s map developed from General Land Office survey notes (WP Silv-41); and (c) a description of historical mapping sources (24 separate items) available from the Forest's history website (WP Silv-23).

The following papers are available from the Forest's website: Silviculture White Papers

| Paper # | Title |
|---|---|
| 1 | Big tree program |
| 2 | Description of composite vegetation database |
| 3 | Range of variation recommendations for dry, moist, and cold forests |
| 4 | Active management of Blue Mountains dry forests: Silvicultural considerations |
| 5 | Site productivity estimates for upland forest plant associations of Blue and Ochoco Mountains |
| 6 | Blue Mountains fire regimes |
| 7 | Active management of Blue Mountains moist forests: Silvicultural considerations |
| 8 | Keys for identifying forest series and plant associations of Blue and Ochoco Mountains |
| 9 | Is elk thermal cover ecologically sustainable? |
| 10 | A stage is a stage is a stage…or is it? Successional stages, structural stages, seral stages |
| 11 | Blue Mountains vegetation chronology |
| 12 | Calculated values of basal area and board-foot timber volume for existing (known) values of canopy cover |
| 13 | Created opening, minimum stocking level, and reforestation standards from Umatilla National Forest land and resource management plan |
| 14 | Description of EVG-PI database |
| 15 | Determining green-tree replacements for snags: A process paper |
| 16 | Douglas-fir tussock moth: A briefing paper |
| 17 | Fact sheet: Forest Service trust funds |
| 18 | Fire regime condition class queries |
| 19 | Forest health notes for an Interior Columbia Basin Ecosystem Management Project field trip on July 30, 1998 (handout) |
| 20 | Height-diameter equations for tree species of Blue and Wallowa Mountains |
| 21 | Historical fires in headwaters portion of Tucannon River watershed |
| 22 | Range of variation recommendations for insect and disease susceptibility |
| 23 | Historical vegetation mapping |
| 24 | How to measure a big tree |
| 25 | Important Blue Mountains insects and diseases |
| 26 | Is this stand overstocked? An environmental education activity |
| 27 | Mechanized timber harvest: some ecosystem management considerations |
| 28 | Common plants of south-central Blue Mountains (Malheur National Forest) |
| 29 | Potential natural vegetation of Umatilla National Forest |

| Paper # | Title |
|---|---|
| 30 | Potential vegetation mapping chronology |
| 31 | Probability of tree mortality as related to fire-caused crown scorch |
| 32 | Review of “Integrated scientific assessment for ecosystem management in the interior Columbia basin, and portions of the Klamath and Great basins” – Forest vegetation |
| 33 | Silviculture facts |
| 34 | Silvicultural activities: Description and terminology |
| 35 | Site potential tree height estimates for Pomeroy and Walla Walla Ranger Districts |
| 36 | Stand density protocol for mid-scale assessments |
| 37 | Stand density thresholds related to crown-fire susceptibility |
| 38 | Umatilla National Forest Land and Resource Management Plan: Forestry direction |
| 39 | Updates of maximum stand density index and site index for Blue Mountains variant of Forest Vegetation Simulator |
| 40 | Competing vegetation analysis for southern portion of Tower Fire area |
| 41 | Using General Land Office survey notes to characterize historical vegetation conditions for Umatilla National Forest |
| 42 | Life history traits for common Blue Mountains conifer trees |
| 43 | Timber volume reductions associated with green-tree snag replacements |
| 44 | Density management field exercise |
| 45 | Climate change and carbon sequestration: Vegetation management considerations |
| 46 | Knutson-Vandenberg (K-V) program |
| 47 | Active management of quaking aspen plant communities in northern Blue Mountains: Regeneration ecology and silvicultural considerations |
| 48 | Tower Fire…then and now. Using camera points to monitor postfire recovery |
| 49 | How to prepare a silvicultural prescription for uneven-aged management |
| 50 | Stand density conditions for Umatilla National Forest: A range of variation analysis |
| 51 | Restoration opportunities for upland forest environments of Umatilla National Forest |
| 52 | New perspectives in riparian management: Why might we want to consider active management for certain portions of riparian habitat conservation areas? |
| 53 | Eastside Screens chronology |
| 54 | Using mathematics in forestry: An environmental education activity |
| 55 | Silviculture certification: Tips, tools, and trip-ups |
| 56 | Vegetation polygon mapping and classification standards: Malheur, Umatilla, and Wallowa-Whitman National Forests |
| 57 | State of vegetation databases for Malheur, Umatilla, and Wallowa-Whitman National Forests |
| 58 | Seral status for tree species of Blue and Ochoco Mountains |

## REVISION HISTORY

**April 2013:** Formatting changes were made throughout this document to bring it in line with the Umatilla National Forest's new white paper template. Text was added providing Paul Hessburg's perspective about the origin and history of Eastside Screens (Paul is a research landscape ecologist stationed at Wenatchee Forestry Sciences Laboratory).