## **REVISED**

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

REGIONAL FORESTER'S FOREST PLAN AMENDMENT #2

JUNE 5, 1995

as amended by the DECISION NOTICE AND FINDING OF NO SIGNIFICANT IMPACT for the

FOREST MANAGEMENT DIRECTION FOR LARGE DIAMETER TREES IN EASTERN OREGON AND SOUTHEASTERN WASHINGTON PROJECT

Effective JANUARY 15, 2021

# 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 hole 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:

**NOTE:** The Interim Riparian Standard of the Eastside Screens was replaced by the Interim Strategies for Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California (PACFISH; 1995) and the Inland Native Fish Strategy (INFISH; 1995). PACFISH Riparian Management Objectives (RMO) apply in anadromous fish habitat and INFISH RMO apply in inland (non-anadromous) fish habitat. Standards and guidelines in individual forest plans also apply where they are more restrictive than PACFISH/INFISH management direction.

## 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 in- sects/ 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. Multistratum 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 bio physical 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**. <u>Structural stages for use with HRV analysis</u>. 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 <sup>2</sup> of seedlings or saplings. Grass, forbs, or shrubs may also be present with early seral trees. <sup>3</sup>
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.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> A cohort is a class of trees arising after a common natural or artificial disturbance.

<sup>&</sup>lt;sup>3</sup> "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 <sup>4</sup>	Dominant Disturbance Factors	Disturbance Regime <sup>5</sup>	Average Disturbance Patch	Typical Landform Setting	Typical Elevation Range	Typical Aspects
Hot, Dry: PIPO, ABGR	Fire, insects, and disease	Low	<l acre<="" td=""><td>Ridge tops and steep side slopes</td><td>2500-4000 feet</td><td>S, SW</td></l>	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

<sup>&</sup>lt;sup>4</sup> Temperature and moisture regime, characteristic late seral species, first two letters of genus and species.

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.

<sup>&</sup>lt;sup>5</sup> Agee (1990). "The historical role of fire in Pacific Northwest forests", <u>Natural and Prescribed Fire in Pacific Northwest Forests</u>, Oregon State University Press.

**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 es- timated 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	d Initiat	tion		Exclus en Canc			Exclus ed Can			nderstoi initiatio	•		ti-stratı ıt large	-		ti-stratı large tı	-		gle-strat large t	
Envt	Н%	C%	D%	Н%	C%	D%	Н%	C%	D%	Н%	C%	D%	Н%	С%	D%	Н%	C%	D%	Н%	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 1 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.<sup>1</sup>
- 2) Outside of LOS, many types of timber harvest 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 plan components:

INTENT STATEMENT: Maintain and increase old and late structure forest. Favor fire tolerant species where appropriate.

<sup>&</sup>lt;sup>1</sup> Subpart d(1) is not to be interpreted as requiring application of the guideline language in d(2) as long activities maintain or improve LOS conditions and there is no reduction in total LOS.

- a) Managers should retain and generally emphasize recruitment of old trees and large trees, including clumps of old trees. Management activities should first prioritize old trees for retention and recruitment. If there are not enough old trees to develop LOS conditions, large trees should be retained, favoring fire tolerant species where appropriate. Old trees are defined as having external morphological characteristics² that suggest an age ≥ 150 years. Large trees are defined as grand fir or white fir ≥ 30 inches dbh or trees of any other species ≥ 21 inches dbh. Old trees will be identified through best available science. Management activities should consider appropriate species composition for biophysical environment, topographical position, stand density, historical diameter distributions, and spatial arrangements within stands and across the landscape in order to develop stands that are resistant and resilient to disturbance.
- **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 al- low 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 in- sure 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

Appendix B Revised Interim Direction

<sup>&</sup>lt;sup>2</sup> External morphological characteristics could be assessed using local or regional field guides such as *Identifying old trees and forests in eastern Washington* (Van Pelt 2008) or other best available science.

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: Retain existing snags and green trees to provide for recruitment of future snags and down wood, in order to support life history requirements for a diverse array of wildlife.

### (1) Snags

**Standard**: Maintain all snags  $\geq 20$  inches (or whatever is the representative DBH of the overstory layer if it is less than 20 inches) OR complete a snag analysis using the best available science on species ecological requirements as applied through current snag tools, models, or other documented procedures to maintain or increase diverse snag composition, size, structure, and distribution (i.e. groups or clusters) for a diverse composition of wildlife species and ecological site conditions.

*Guideline*: If snags meeting the objectives of the standard must be felled for operational safety, then the following should be considered:

 Protect snags from operations by grouping or clustering in skips or leave areas.

- Assess snags in the project area both prior and while layout is occurring, considering wildlife, layout and other expertise.
- Identify landings in advance away from groups or clusters of snags or leave areas whenever possible.
- Contain equipment and vehicles to identified landings and skid trails whenever possible.

## (2) Green Tree Retention for Future Snag Recruitment

**Standard:** Retain green trees to meet future snag and down wood recruitment for a diverse composition of wildlife species using best available science. Retain partially hollow or hollow trees that could become snags and down wood whenever possible.

#### Guidelines:

- Use natural decay processes and agents to recruit future snags from green trees.
- Strive for diverse composition and size class of tree species including true firs and hardwoods.
- Strive for tree species that are tolerant, resistant, or immune to root disease, especially if root disease is known to occur nearby or on site.
- Prioritize and retain deformed, damaged, or broken topped trees.
- Consider retaining groups of trees.
- Consider retaining tall old and larger trees on ridgelines with sloughing bark.
- Consider retaining more true firs on north facing slopes.
- Consider retaining trees with mechanical wounds if possible, for future development of decayed wood.
- Consider diverse techniques outside of girdling and inoculation for future snag creation.

## (3) Down Logs

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	<u>PIECES</u> <u>PER ACRE</u>	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 ma-ture/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).</p>
  - 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).

## f. Adaptive Management Strategy:

Where trees over 21-inches are harvested, the Adaptive Management Strategy applies as described below.

1) Local Monitoring (Encouraged): When projects are implemented that involve the harvest of large trees (≥ 21-inches) the Forest Service may coordinate project-level multiparty monitoring. The Forest Service encourages integration of monitoring questions into the existing multiparty party monitoring efforts, such as those associated with the Collaborative Forest Landscape Restoration Program (CFLRP) or other programs. The Forest Service is encouraged to engage tribal natural and cultural resource staff in this work to incorporate consideration of tribal treaty rights and culturally-significant plants. Local monitoring could focus on implementation monitoring or effectiveness monitoring and could ask questions related to development of late and old forest conditions, effectiveness of particular management activities, development of snags, or other issues of interest.

- **2) Broad-scale Effectiveness Monitoring (***Required***):** Effectiveness monitoring would assess conservation and recovery late and old structure forest across the analysis area. Effectiveness monitoring questions include:
  - a) Are large trees increasing in number while setting species composition on a trajectory appropriate to the ecological setting?
  - **b)** Is the density, quality, and distribution of snags improving across the landscape? (Optional)

An age-related monitoring question is highly recommended. This question should be informed by the scientific community and the Regional Adaptive Management Workgroup. Effectiveness monitoring questions and the thresholds below may be added to or altered based on feedback from the scientific community or lessons learned from the Regional Adaptive Management Workgroup.

#### 3) Thresholds:

- a) If large trees are not increasing in number with appropriate composition, the Regional Forester will impose the Age Standard Alternative across the whole analysis area or by national forest or potential vegetation zone.
- **b)** If effectiveness monitoring does not occur, the Regional Forester will impose the Age Standard Alternative across all six national forests.
- 4) Regional Review: The Regional Forester will conduct a review of monitoring data once a year. Once every five years, a decision will be made on whether to continue with the guideline or move to the age standard, as described in the alternatives section of the analysis. The Regional Forester may order a move to the standard for a potential vegetation zone, individual national forests, or across all six national forests as warranted by the monitoring data. The Regional review will include at least the Regional Forester, the Regional Planning and Natural Resources Directors, a Forest Supervisor representing the six eastside Forests, and the Director of the PNW Research Station. The Regional Forester may choose to invite outside review if desired. The Regional review team will consider the monitoring findings compiled through Regional effectiveness monitoring and learnings from the Regional Adaptive Management Work Group.
- 5) Regional Adaptive Management Workgroup: To ensure transparency, build trust, and provide accountability the Regional Adaptive Management Work Group would be created. The Work Group is designed to develop shared knowledge about LOS development on Forest Service lands in eastern Oregon and southeastern Washington. The Work Group would also be a place for Forest Service practitioners and partners to share on-the-ground experience and learning across Forests to promote learning and innovation. Project level monitoring could be used to provide insights into regional data trends.

The work group would not supplant any local collaborative, multiparty monitoring, or other project-level collaborative efforts. The work group would hold at least one meeting a year and convene one multi-party field tour per year (if possible, e.g. no global pandemic). Other activities could be convened as resources and interest allow.