STATE BOARD OF LAND COMMISSIONERS

August 20, 2024 Regular Agenda

Subject

Westwood and Lower Eagle Cedar Timber Sales with clearcut harvest units exceeding 100 acres

Question Presented

Shall the Land Board approve the Westwood and Lower Eagle Cedar Timber Sales with clearcut harvest units exceeding 100 acres?

Background

At its December 15, 2015 meeting, the State Board of Land Commissioners (Land Board) adopted a timber sale governance structure whereby the Idaho Department of Lands (Department) would only present individual proposed timber sales for Land Board approval that fall outside of established Land Board policies. Timber sales with clearcut harvest units exceeding 100 acres are one type of sale to be submitted for approval.

Discussion

The Mica Supervisory Area has submitted two timber sales in the FY25 timber sales plan that each have clearcut harvest units exceeding 100 acres in size.

The Westwood timber sale area is within Department and private ownership that has been previously managed (Attachments 1 and 2). The sale area is located 2 miles north of Rathdrum, Idaho (Attachment 3).

The unit totals 132 acres in size and is described in detail in Attachment 4. Mortality continues to occur across the stand and needs immediate treatment to capture the highest value. Dense shrub and brush overstory will likely impede natural regeneration stocking resulting in underutilizing the site's potential. The site will be planted with a mix of seral species, which will be more resilient to the current insect and disease problems. The Department has successfully planted similar stands to adequate stocking to maximize return to the beneficiaries. The clearcut harvest unit is silviculturally and economically justified. The sale has been prepared to meet the Forest Practices Act and the Mica Area Forest Asset Management Plan and was approved by the Timber Management Bureau (Attachment 5).

The Lower Eagle Cedar sale area is within other Department ownership that has been previously managed (Attachments 6 and 7). The sale area is located 5 miles southwest of Rose Lake, Idaho (Attachment 8).

Unit 3 of the proposed sale is a clearcut unit of 133 acres and is described in detail in Attachment 9. It is characterized as being dominated by climax species that are not expected to regenerate the site due to their age and physical traits. Mortality continues to occur across the stand and needs immediate treatment to capture the highest value. The site will be planted with a mix of seral species, which will be more resilient to the current insect and disease problems. The Department has successfully planted similar stands to adequate stocking to maximize return to the beneficiaries. The clearcut harvest unit is silviculturally and economically justified. The sale has been prepared to meet the Forest Practices Act and the Mica Area Forest Asset Management Plan and was approved by the Timber Management Bureau (Attachment 10).

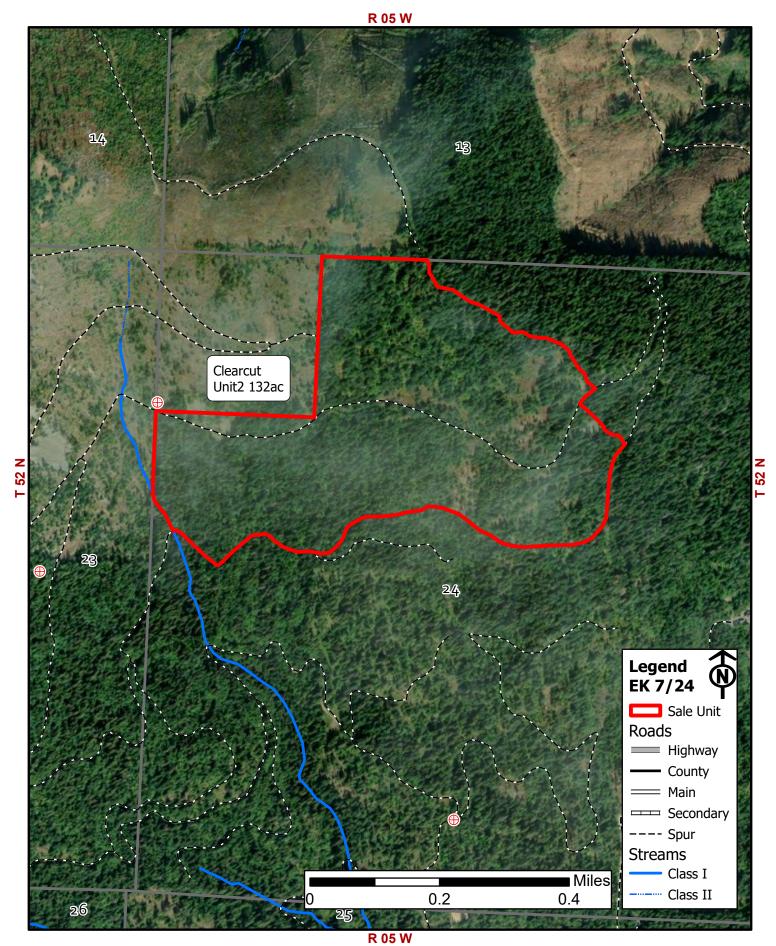
Recommendation

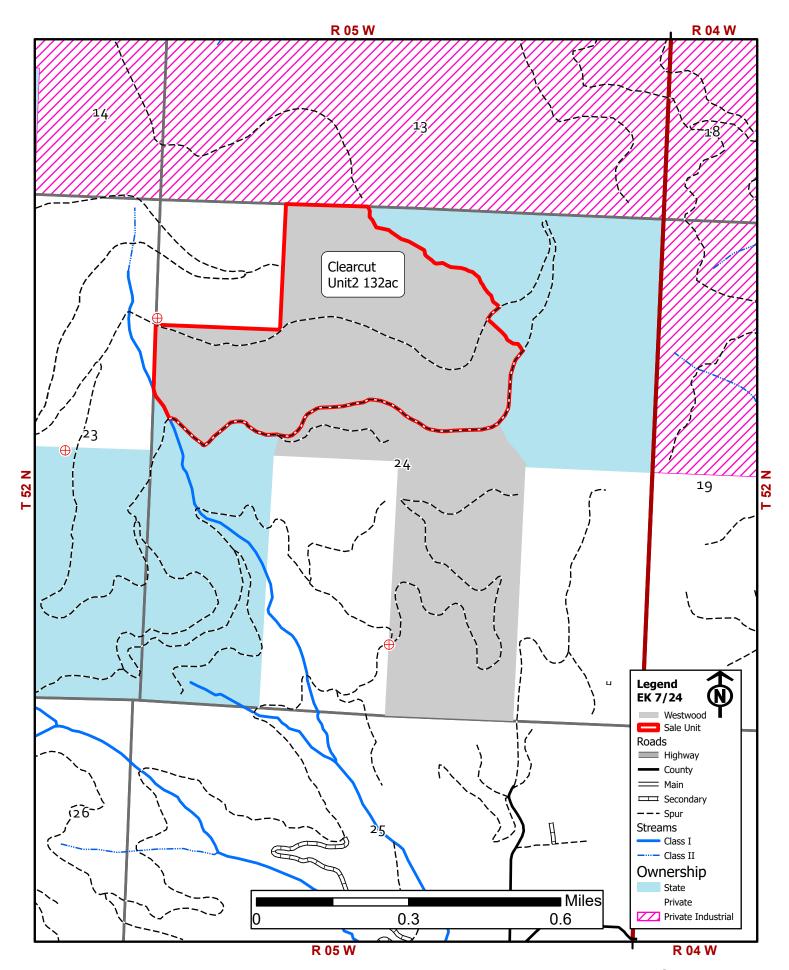
Approve the Westwood and Lower Eagle Cedar Timber Sales.

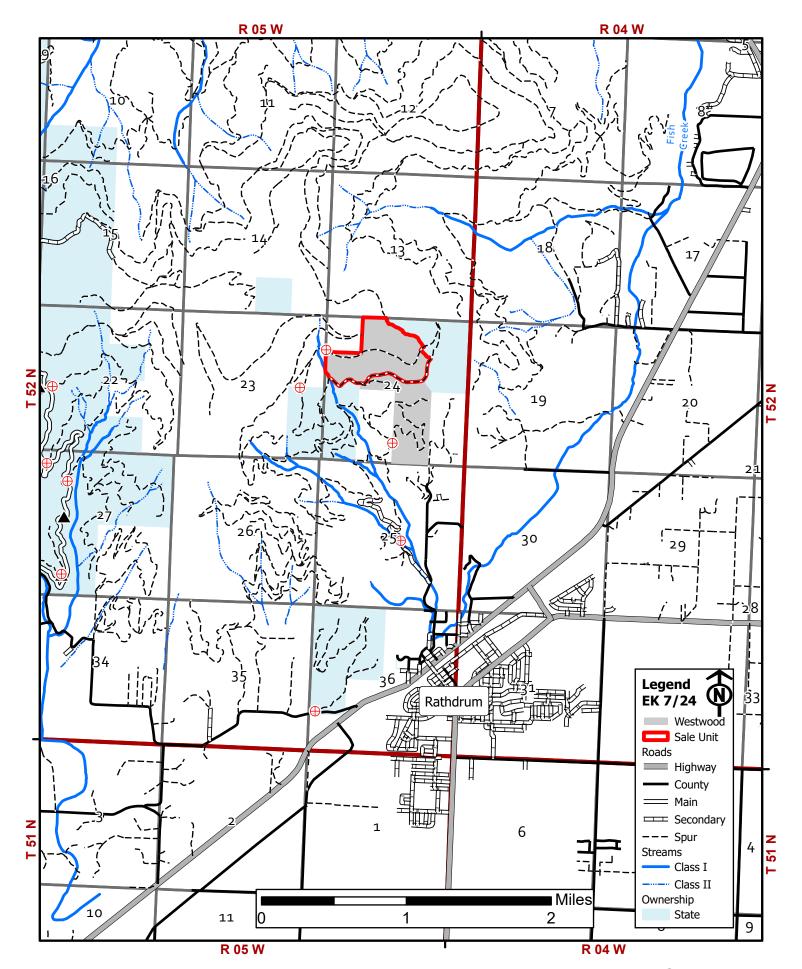
Board Action

Attachments

- 1. Westwood Unit Map
- 2. Westwood Ownership Map
- 3. Westwood Vicinity Map
- 4. Westwood Clearcut Justification
- 5. Westwood Timber Bureau Approval
- 6. Lower Eagle Ortho Map
- 7. Lower Eagle Ownership Map
- 8. Lower Eagle Vicinity Map
- 9. Lower Eagle Clearcut Justification
- 10. Lower Eagle Timber Bureau Approval







Westwood Clearcut Justification

1. Treatment Description

a) This stand is primarily composed of overmature western redcedar. Douglas-fir, western larch, grand fir and western hemlock comprise minor components of the stand. This stand will be clearcut and planted following harvest.

b) Clearcut Justification:

Clearcutting will help achieve Desired Future Conditions outlined in the Mica Supervisory Area's Forest Asset Management Plan. Clearcut harvest in Unit 2 (132 ac) is silviculturally and economically justified and complies with the Idaho Forest Practices Act. A clearcut prescription will harvest the existing stand and re-establish seral and intermediate species. Natural regeneration will not accomplish this for the following reasons:

- 1) This stand is dominated by climax species including western redcedar, grand fir and western hemlock. The age of dominant trees ranges from 90 to 120 years old. Due to the age and phenotypic characteristics of the seral species on site, these trees are not expected to produce the seed necessary to fully regenerate these stands.
- 2) This unit has a significant brush component within the stand and insufficient and undesirable existing natural regeneration.
- 3) Clearcutting will minimize the number of entries into the area, reduce harvest costs and maximize revenue to the Endowments, reduce disturbance and erosion, minimize the spread of disease, and expedite regeneration through planting.

c) Forest Improvement Activity:

This clearcut unit will require a waving wand herbicide application prior to planting. Once sprayed, the units will be planted with a mix of western larch, Douglas-fir, and western white pine at approximately 436 trees per acre.



TIMBER MANAGEMENT BUREAU

3284 W Industrial Loop Coeur d'Alene, ID 83815 208-769-1525/FAX 208-769-1524

MEMORANDUM

TO: Eric Valiquette, Resource Supervisor

FROM: Kyle Seigley, Lands Section Manager FM Projects & Inventory

DATE: June 13, 2024

SUBJECT: Westwood (CR225031) FY 2025 Timber Sale

On June 12th, 2024, the timber bureau visited the Mica Supervisory Area to review the proposed timber sale, Westwood. The timber bureau was requested to visually review unit 1 for the proposed timber sale. The proposal would create a 132 acre clearcut.

The Westwood Timber Sale is in section 24 Township 52N Range 5W. The public school endowment owns this section of the sale area.

Timber Bureau representatives Spencer Hanson and Kyle Seigley rode along with Nick Capobianco and Eric Valiquette from the Mica Supervisory Area to the timber sale unit from Coeur d' Alene. The group parked near the southwestern corner of section 24 and continued on ATV's on an old road grade to look at the proposed clearcut in the north half of the section. Based on relic stumps and the condition of the historic road grade harvesting hasn't taken place within unit 1 for several decades.

The dominant trees within unit 1 range from 90 to 120 years of age and are experiencing mortality due to insect and disease (images 1-2). Grand fir (*Abies grandis*) is the dominant species throughout the proposed harvest with pockets of western redcedar in the draws and a minor component of Douglas-fir and western hemlock, a few ridgelines with shallow soils and rock outcrops contain ponderosa pine. The unit has a significant hardwood component concentrated in areas that were harvested several decades ago.

The sale is located on a productive site with an estimated Douglas-fir site index of 74 base age 50. Although the unit is predominately south aspect it is a western redcedar / wild ginger habitat type. Soils are an ashy silt loam transitioning to a gravely sandy loam over a parent material of weathered granite. Depth to restrictive feature is 39-59 inches

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and available water supply in the first 60 inches is moderate at about 7.1 inches.

The stand needs a restart. It was a unanimous conclusion from the group that a clearcut harvest prescription was the best option for multiple reasons. The stand is lacking desirable leave trees both in species composition and quality. Even if adequate crop trees were present, there is an existing brush component in the understory that would be released and out compete any tree seedlings trying to establish (Image 3). Mature red alder (*Alnus rubra*) trees are present and dominate portions of the stand where past harvesting has taken place. Red alder's rapid early growth can interfere with establishment of conifer seedlings. Unfortunately, red alder is not a commercial species in Idaho.

The group discussed the silviculture plan of the site after harvest is complete. The existing hardwood vegetation competition must be treated for planted conifers to become established. All standing red alder will be treated with a hack and squirt prescription. A site prep herbicide spray targeting woody stems will mitigate the existing brush in the understory. The Area foresters plan to plant a "north Idaho mix" of western larch, Douglas-fir, and western white pine at approximately 436 trees per acre. The timber management bureau recommended planting a higher proportion of improved Douglas-fir due to the sight's productivity potential and lack of animal browse risk. It was also recommended to conduct a clopyralid (transline) release spray one year following a spring planting to target pioneering forbs such as Canada thistle and spotted knapweed.

In summary, the stand has inadequate levels of desired leave trees to naturally regenerate the site. The unit has a significant woody brush component within the stand that possesses a significant risk to conifer seedling establishment. A clearcut with vegetation management prescription is the best economical decision to turn the site over for its next rotation and meet future desired stocking levels that will optimize its site potential for timber production. The timber management bureau supports the Area's decision to facilitate a clearcut prescription on the 132 acres.

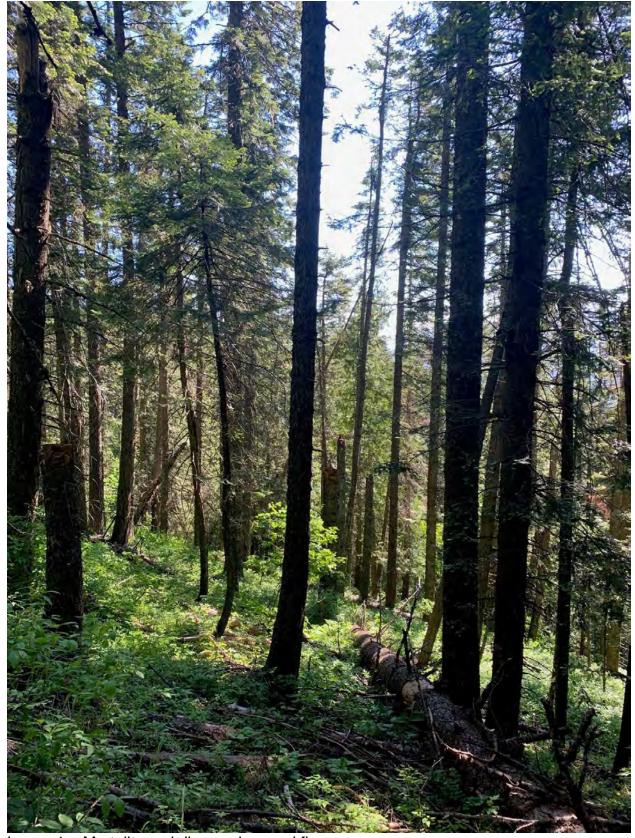


Image 1 - Mortality and disease in grand fir.



Image 2 – Douglas-fir with mistletoe witches' broom.

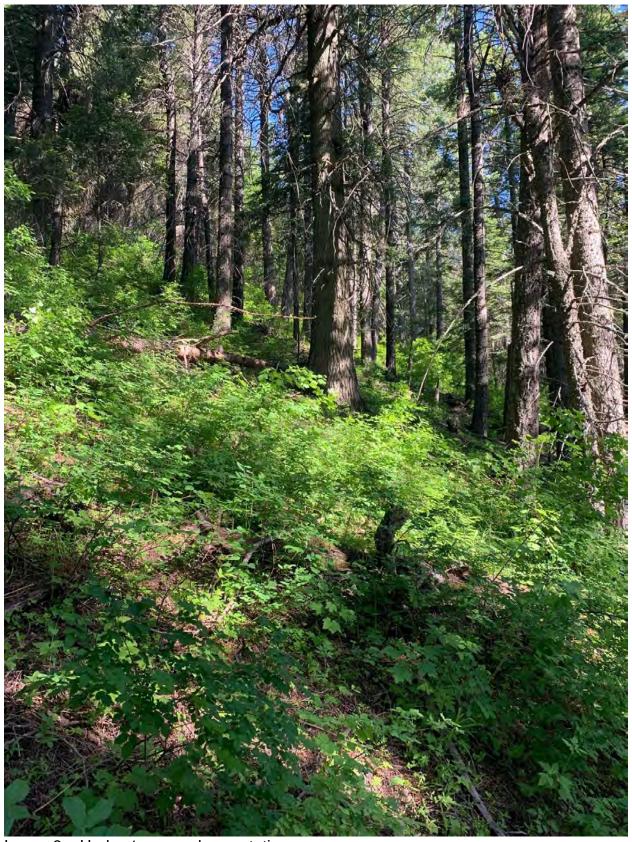


Image 3 – Understory woody vegetation.

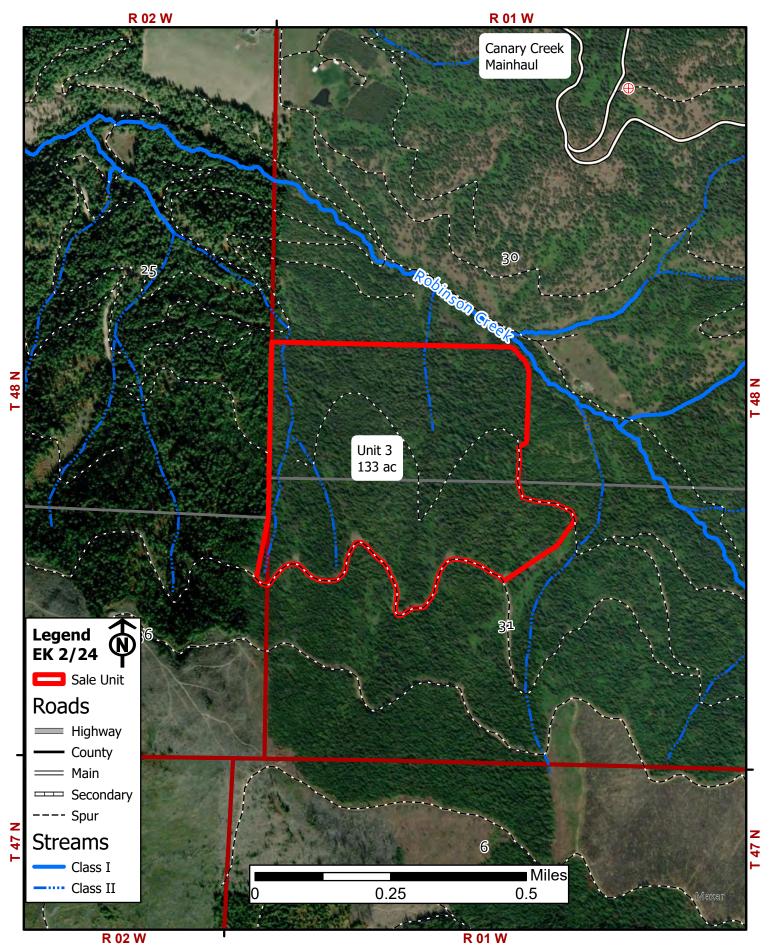
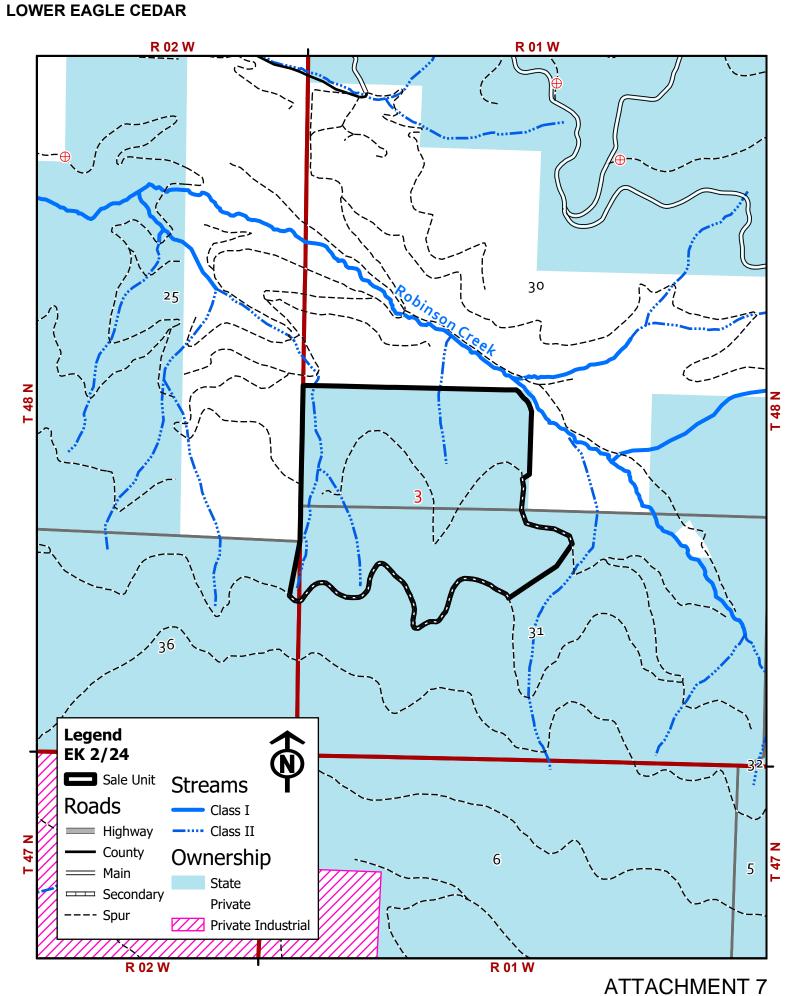
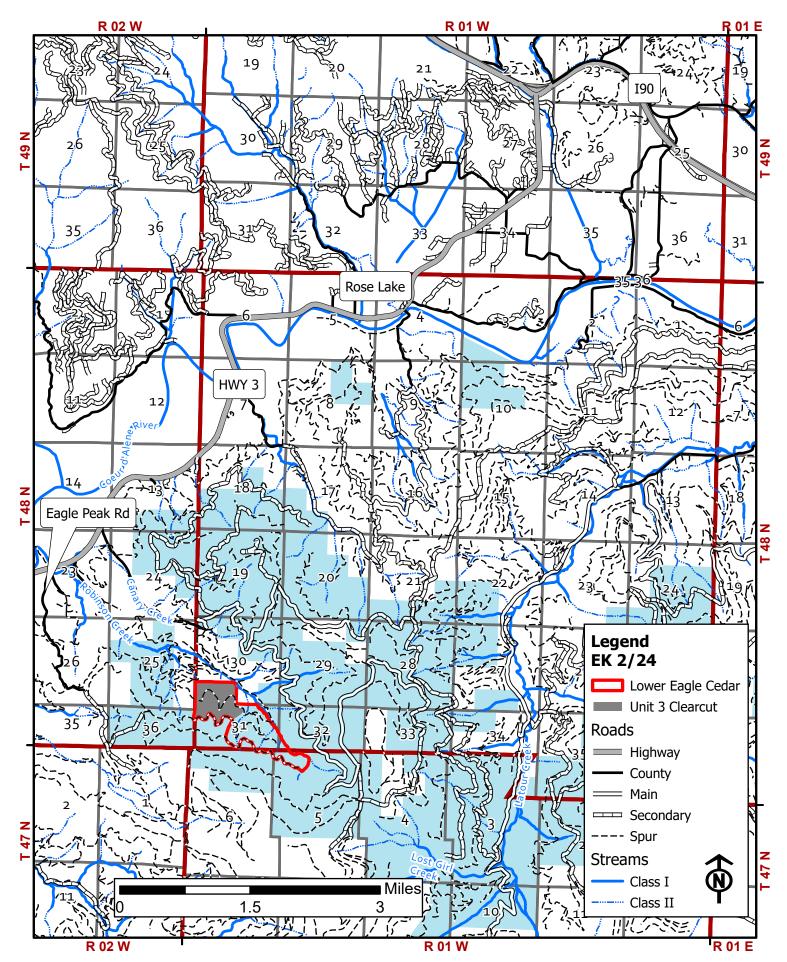


Exhibit A





Lower Eagle Cedar Clearcut Justification

1. Treatment Description:

a) This stand is primarily composed of overmature western redcedar. Douglas-fir, western larch, grand fir and western hemlock comprise minor components of the stand. This stand will be clearcut and planted following harvest.

b) Clearcut Justification:

This clearcut will help achieve Desired Future Conditions outlined in the Mica Supervisory Area's Forest Asset Management Plan. Clearcut Unit 3 (133 acres) is silviculturally and economically justified and complies with the Idaho Forest Practices Act. A clearcut prescription will be used to harvest the existing stand and re-establish seral and intermediate species on the site. Natural regeneration will not accomplish this for the following reasons:

- 1) This stand is dominated by climax species including western redcedar, grand fir and western hemlock. The age of dominant trees ranges from 90 to 120 years old. Due to the age and phenotypic characteristics of the seral species on site, these trees are not expected to produce the seed necessary to fully regenerate these stands.
- 2) Dwarf mistletoe (Arceuthobium spp), Schweinitzii (Phaeolus schweinitzii) root rot and Armillaria (Armillaria ostoyae) root rot are present which reduces the number of available seed trees.
- 3) Clearcutting will minimize the number of entries into the area, reduce harvest costs and maximize revenue to the Endowments, reduce disturbance and erosion, minimize the spread of disease, and expedite regeneration through planting.

c) Forest Improvement Activity:

This clearcut unit will require a waving wand herbicide application prior to planting. Once sprayed, the units will be planted with a mix of western larch, Douglas-fir, and western white pine at approximately 436 trees per acre.



TIMBER MANAGEMENT BUREAU

3284 W Industrial Loop Coeur d'Alene, ID 83815 208-769-1525/FAX 208-769-1524

MEMORANDUM

TO: Eric Valiquette, Lands Resource Supervisor

FROM: Jeremy Shawver, Lands Section Manager Timber Sales and Contract Admin

DATE: April 9, 2024

SUBJECT: Lower Eagle Cedar (CR225084) FY 2025 Timber Sale

On April 8th, 2024, the timber bureau visited the Mica Supervisory Area to review the proposed timber sale, Lower Eagle Cedar. The timber sale is comprised of three units. Unit 1 (clearcut – 85 acres), unit 2 (overstory removal – 100 acres), and unit 3 (clearcut - 133 acres). The timber bureau was requested to look at unit 3 of the proposed timber sale. Unit 3 of the timber sale is prescribed to facilitate a clearcut prescription. The unit is 133 acres in size which will need Land Board approval.

The timber sale is located in sections 30, 31, and 32 Township 48N Range 1W, section 36 Township 48N Range 2W, and Sections 5 and 6 of Township 47N Range 1W. The public school endowment owns these sections of the sale area.

Spencer Hanson and Jeremy Shawver, Timber Bureau Representatives met Eric Valiquette and Eric Klein, operational personnel at the Rose Lake exit along I-90. The group continued down Highway 3 to the East Eagle Peak Road which accesses the sale area. The group stopped near the middle of unit 3 and continued on foot to review the proposed clearcut over 100 acres, unit 3 (Image 1).

Unit 3 of the sale area is an overmature stand of timber that was granted to the Idaho Department of Lands (IDL) in 1981 from the Bureau of Land Management (BLM). Since it was acquired, there has been no management by IDL. There is also no sign of historic timber management before IDL took ownership in 1981. The stand shows old fire scars on relic timber from the 1910 fires. The stand ranges in age from 90 to 120 years in age with the average age of the stand being over 100 years old. This stand is in the latter stages of succession with the majority of the stand composition being shade tolerant species (Image 2).

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Unit 3 is a productive site. It is a northern aspect being primarily a western hemlock/queencup beadlily habitat type. It consists of approximately 70% shade tolerant species by volume including western redcedar (45%), grand fir (15%), and western hemlock (10%). The remaining 30% of the species composition consist of Douglas-fir, western larch, and pine. These species are located in isolated pockets of the unit that are generally on west facing aspects. These aspects transition from the hemlock to a drier grand fir/twinflower habitat type. The western aspects are a minor portion of the proposed sale area.

Most of the insect and disease issues are located on the drier, west facing aspects of the unit. Dwarf mistletoe (*Arceuthobium spp.*), Schweinitzii root disease (*Phaeolus schweinitzii*), and armillaria root rot (*Armillaria ostoyae*) were noted by the forester in charge (FIC) during sale set up (Images 3 & 4). The bureau noted dwarf mistletoe, various root diseases, and fir engraver beetle (*Scolytus ventralis*) during the field tour in varying degrees (Image 5). Due to the presence of insects and disease and uneven distribution of the desired seral species, the bureau does not see natural regeneration as a viable option to fully occupy the site.

The timber bureau asked about the silviculture plan following harvest. The FIC plans to perform a waving wand herbicide application following harvest. This will prepare the site for planting western larch, Douglas-fir, and white pine. The bureau asked why more Douglas-fir is not being planted. The FIC stated there are high levels of root disease in the drainage. During the tour of the unit, the bureau noted the north and northeast aspects were relatively disease free and consisted of primarily western redcedar and grand fir. The bureau recommended planting a higher percentage of Douglas-fir on these aspects and saving the western larch for the western aspects. This would best utilize the site's potential for the next rotation.

In summary, the stand has a high level of shade tolerant species that wouldn't be suitable for regenerating the site. The desired species for seed trees have varying levels of insect or disease and are not evenly distributed across the stand to rely on natural regeneration. The timber bureau supports the Area's decision to facilitate a clearcut prescription on the 133 acre timber sale unit.



Image 1 – Stand composition and aspect driven changes.



Image 2 – Stand composition, shade tolerant species.





 $Images \ 3 \ and \ 4-(left) \ mortality \ in \ Douglas-fir. \ \ (right) \ Dwarf \ mistletoe \ in \ western \ larch.$



Image 5 – Scolytus in grand fir.