### STATE BOARD OF LAND COMMISSIONERS

April 16, 2024 Regular Agenda

## Subject

Chunker and Paddy Pond Ton Timber Sales with clearcut harvest units exceeding 100 acres

## **Question Presented**

Shall the Land Board approve the Chunker and Paddy Pond Ton 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 St. Joe Supervisory Area (Chunker) and the Payette Lakes Supervisory Area (Paddy Pond Ton) have each submitted a timber sale in the FY25 timber sales plan that have a clearcut harvest unit exceeding 100 acres in size.

The Chunker timber sale area is within other Department and private ownership that has been previously managed (Attachments 1 and 2). The sale area is located 6 miles south of St. Maries, Idaho (Attachment 3). There are three units adjacent to each other totaling 188 contiguous acres and 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. Stands in the vicinity, managed by the Department, have been successfully planted to adequate stocking to maximize return to the beneficiaries. The sale has been prepared to meet the Forest Practices Act and the St. Joe Area Forest Asset Management Plan and was approved by the Timber Management Bureau (Attachment 5).

The Paddy Pond Ton timber sale area is within other Department and private ownership that has been previously managed (Attachments 6 and 7). The sale area is located 5 miles northeast of Donnelly, Idaho (Attachment 8). The sale area consists of two clearcuts with unit 2 being 115 acres in size and described in detail in Attachment 9. It is composed of overmature Engelmann spruce and grand fir that have had numerous spruce budworm

attacks. Clearcutting is needed to achieve higher stocking and reduce the timeframe for the next rotation. The sale area does not have permanent access. The lack of permanent access is a risk to schedule multiple entries of harvest needed for natural regeneration. The sale will be planted to maximize the site's economic potential. The sale has been prepared to meet the Forest Practices Act and the Payette Lakes Area Forest Asset Management Plan and was approved by the Timber Management Bureau (Attachment 10).

Both sales clearcut harvest units are silviculturally and economically justified.

## Recommendation

Approve the Chunker and Paddy Pond Timber Sales.

## **Board Action**

## Attachments

- 1. Chunker Ortho Map
- 2. Chunker Ownership Map
- 3. Chunker Vicinity Map
- 4. Chunker Clearcut Justification
- 5. Chunker Timber Bureau Approval
- 6. Paddy Pond Ton Ortho Map
- 7. Paddy Pond Ton Ownership Map
- 8. Paddy Pond Ton Vicinity Map
- 9. Paddy Pond Ton Clearcut Justification
- 10. Paddy Pond Ton Timber Bureau Approval



CR300732 CHUNKER Exhibit C Page 1 of 1

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#### **Chunker Clearcut Justification**

- 1. Treatment Description:
  - a) The stands are primarily composed of mature Grand fir with a minor component of Douglas-fir and lodgepole pine. The stands will be clearcut and planted following harvest.
  - b) Clearcut Justification:

Clearcuts will help achieve Desired Future Conditions outlined in the St. Joe Supervisory Area's Forest Asset Management Plan. Clearcutting U1 (44 acres), U2 (89 acres) and U3 (55 acres) is silviculturally and economically justified and complies with the Idaho Forest Practices Act. The three units are adjacent to each other and total 188 contiguous acres. A clearcut prescription will be used to harvest existing stands and re-establish site specific species on the site. This prescription will be used for the following reasons:

- A dense shrub layer already exists in the understory and is likely impede the establishment of natural regeneration. Following a natural pathway is likely to add 20 or more years to the stands' rotation and would result in underutilized sites with a low relative stocking index and establishment of non desired species for the site.
- 2) The age of the dominant trees ranges from 70 to 180 years old, with an average age of 110 years old. Both stands exhibit high levels of defect. This site is located within our identified fragipan soil zone, which is a high water table accompanied by poor drainage and mainly dense clay soils.
- 3) Endemic levels of scolitis are present within the Grand fir.
- 4) Clearcutting will minimize the number of entries into the area, reduce disturbance and erosion and expedite regeneration by planting site specific trees.
- c) Forest Improvement Activity:

Both units will require a waving wand herbicide application prior to planting. Once sprayed, the units will be planted with 400 trees per acre. The species mix will be Lodgepole pine, Ponderosa pine, Western larch and Douglas fir. The plantations adjacent to the proposed clearcut units are currently successful and this regiment has been successful on the area many times.



TIMBER MANAGEMENT BUREAU

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

## MEMORANDUM

TO: Tony Brede, Lands Area Manager

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

DATE: October 30, 2023

SUBJECT: Chunker (CR300732) FY 2025 Timber Sale

On October 26<sup>th</sup>, 2023, the timber bureau visited the St Joe Supervisory Area to review the proposed timber sale, Chunker. The timber bureau was requested to come look at three of the units for the proposed timber sale. These three contiguous units are all planned to facilitate a clearcut prescription. This proposal would create a contiguous block of 188 clearcut acres.

The three units of Chunker Timber Sale are in section 36 Township 45N Range 1W. The public school endowment owns this section of the sale area.

The group parked near the eastern end of section 36. The group continued on foot to look at the proposed clearcuts. There were relic pine stumps from management in the early 1900s. Other than the relic stumps, the sale area was first entered in 2020 to build the main access road. The area secured easement to access the section in 2018. This portion of section 36 has not been managed with modern logging systems.

The stand is over 100 years old. The decadent stand is experiencing high levels of mortality due to insects and disease (Images 1 - 2). Grand fir (*Abies grandis*) is the dominant species throughout the proposed harvest. Fir engraver beetle (*Scolytus ventralis*) is defecting the trees and causing mortality in the grand fir throughout the sale area (Image 3). It was also noted that root disease is a contributing factor to the mortality in the stand. There are pockets of desirable tree species including western larch (*Larix occidentalis*) and Douglas-fir (*Pseudotuga menzessii*). However, these are small areas and have well-established vegetative competition already existing in the understory (Image 4). With the levels of mortality, the stand needs to be treated before more value is lost. The group agreed a clearcut prescription was the proper treatment for the site.



The group discussed the silviculture plan for the site after harvesting is complete. The stand needs conversion to a species less susceptible to drought stress and root disease. The Area recommends planting a "pine spice mix" of ponderosa pine, lodgepole pine, and western white pine on the flat areas (units 1 and 2). These areas have a restrictive layer in the soils, fragipan, around 14" to 20" in the soil profile. This causes a highwater table in the spring followed by a prolonged summer drought. The restrictive layer reduces rooting depth not allowing trees to access water deep in the soil profile during summer months. The more favorable aspects of the sale area will be planted with a mix of Douglas-fir and western larch. As mentioned above, the stand has an established understory of ocean spray brush, perennial grasses, and forbs. A herbicide site prep application will be necessary to reduce the vegetative competition to establish artificial regeneration. Preserving the "O" horizon will be important in this site to help regulate soil temperature and preserve soil moisture during the dry summer months.

In summary, the stand has inadequate levels of desired leave trees to naturally regenerate the site. Being an isolated parcel, a clearcut prescription is the best economical decision to turn the site over for its next rotation. Site prep and retaining slash on the site will help reduce the vegetative competition and create a mulching effect to help retain soil moisture during the summer months. The timber bureau supports the Area's decision to facilitate a clearcut prescription on the 188 acres.

## **IDAHO DEPARTMENT OF LANDS**



# ANDS

Image 1 – Mortality and disease in grand fir.



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Image 2 - Stand composition and mortality from insect and disease (root rot).



Image(s) 3 – Stem damage. Left photo shows frost damage. Right photo shows damage from insects (Scolytus ventralis).



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Image 4 – Vegetative competition.



POND TON

Exhibit C Page 1 of 1

**ATTACHMENT 6** 

## ATTACHMENT 7





**ATTACHMENT 8** 

#### Paddy Pond Ton Unit 2 Clearcut Justification

- 1. Treatment Description:
  - a) The sale area consists of two non-contiguous clearcut units. Unit 2 (115 acres) is primarily composed of mature Engelmann spruce and grand fir with a moderate component of Douglas-fir and a minor component of western larch and lodgepole pine. The unit will require an herbicide treatment prior to being planted.
  - b) Clearcut Justification:

The proposed clearcut prescription will help achieve Desired Future Conditions outlined in the Payette Lakes Supervisory Area's Forest Asset Management Plan. Clearcutting Unit 2 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 species on the site. This prescription will be used for the following reasons:

- 1) The stand is primarily composed of overmature Engelmann spruce and grand fir that have been subject to numerous attacks from the spruce budworm. There is also a significant amount of dwarf mistletoe in the Douglas-fir and western larch.
- 2) Following a natural pathway, such as a seed tree prescription, is likely to add 20 or more years to the stand's rotation and would result in an underutilized site with a low relative stocking index.
- 3) The age of the dominant trees ranges from 80 to 130 years, with an average age of 110 years.
- 4) Clearcutting will minimize the number of entries into the area, reduce disturbance and erosion, minimize the spread of disease, and expedite regeneration by planting larch and Englemann spruce.
- 5) The clearcut unit is located on state ownership that does not possess permanent access. The state was able to acquire temporary access for this sale. The lack of permanent access makes multiple entry silvicultural prescriptions challenging. The uncertainty of future access creates economic risk if harvest scheduling was to be conducted over multiple timber sales.
- c) Forest Improvement Activity:

Unit 2 will require an herbicide application prior to planting. Once sprayed, the unit will be planted with 303 trees per acre of western larch and Engelmann spruce.



TIMBER MANAGEMENT BUREAU

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

### MEMORANDUM

TO: Lucas Pate, Lands Resource Supervisor

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

DATE: December 19, 2023

SUBJECT: Paddy Pond Ton Clearcut - FY 2025 Timber Sale

On November 2<sup>nd</sup>, 2023, the Timber Management Bureau met virtually with the Payette Lakes Supervisory Area to review the proposed timber sale, Paddy Pond Ton. The Timber Bureau was requested to discuss the timber sale due to one unit being a 115-acre clearcut (CC). The sale is comprised of Unit 1 (82 acre CC), Unit 2 (115 acre CC), and Unit 3 (22 acre right-of-way).

The timber sale located in Sections 28, 33, and 34 of Township 17N Range 4E is owned by the Public School Endowment.

The group started the meeting discussing unit 2's stand characteristics. The stand is composed of overmature Englemann spruce and grand fir with a moderate component of Douglas-fir and a minor component of western larch and lodgepole pine. The Englemann spruce and grand fir have had numerous attacks from spruce budworm. Dwarf mistletoe can be found in the Douglas-fir and western larch.

The sale area is also accessed through private ownership. IDL was able to obtain temporary access for this sale. However, without permanent access it justifies the decision to move in with one sale and get the next rotation of timber established. The area's local knowledge of this area assumes approximately a 20-year lag if natural regeneration methods were implemented.

As the discussions were wrapping up, the TMB asked about the southwest portion of IDL property as it was not in the sale boundary for unit 2. The Resource Supervisor, Luke, mentioned it was steep and rocky as to why the FIC didn't include the 15 acres in the sale area. The TMB asked him to go take a look at the area himself. After going to look at the area, Luke made the call that it was not a great spot to carve in trails due to the steep, rocky topography.

Lastly, the group discussed the remainder of the silviculture plan after harvesting is completed. The area is dialing in their herbicide spray program and anticipates needing a successful spray treatment followed by planting with western larch and Englemann spruce at 303 trees per acre.

In summary, the proposal is silviculturally and economically justified due to its current stand characteristics, site access, and lack of anticipated natural regeneration in the next 20 years. The timber bureau fully supports the proposed clearcut over 100 acres for the Paddy Pond Timber Sale.

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