NEW FORM - APPROVED BY DNR 5/3/2024 SEASONAL FISH STREAM MONITORING PLAN

WESTSIDE - CONIFER RESTORATION ALL ALDER REMOVED TO BFW (WITH SOME EXCEPTIONS)

Alternate Plan Form
Forest Practices Application/Notification

This form provides an outline for preparing an Alternate Plan. Although this form is not required, it will help you to prepare your Alternate Plan. Refer to Forest Practices Board Manual Section 21 for help in developing your alternate plan or contact your local DNR region office for assistance.

Current Conditions and Management Goals

1) Describe each of the following elements within the proposed alternate plan area.

Predominant tree species
Stream A Segment: Red Alder that seeded in after the 1992 harvest.
Stream B segment: Red Alder from the 1992 harvest above the inner gorge area. The inner gorge area is dominate Douglas fir, Western Red Cedar, Western Hemlock and Big Leaf Maple.

Average tree height and age
Stream A Segment: 30 year old Red Alder aproximately 60' tall. Leave tree Maple and Cedar are about 60 years and 80' tall. Also an understory of Western Red Cedar 50 years and 30' tall.
Stream B segment: Inner gorge trees are over 100 years and range from 80'- 140'.

Excessive blowdown
Stream A Segment: Maybe a few Alder.
Stream B segment: None

Fire damage
N/A

Root rot or other forest health issues
Stream A Segment: Alder becoming impacted by the environment.
Stream B segment: None

Describe topography
Stream A Segment: North bank is a gradual 20% -30% slope closest to the stream and then flat after 30'. The near bank on the south side goes from 40% to 70% +. After a distance of 25'-35' the slope is reversed away from the stream.
Stream B segment: Inner gorge feature is 75% + and mostly exposed rock. The inner gorge has an average width of 79', the upper area is mostly flat to 20% slope.

2) Describe the resource management goals you wish to achieve through this alternate plan

The naturally seeded 30 year old Alder in this 6 acre proposed harvest has many dead trees and ones with dying tops. This is from wind and sun exposure and lack of a early PCT. We propose to remove the Alder for firewood and some small diameter saw logs and reforest with conifer. Most of this unit is a good site for Douglas fir and Western Red Cedar.
Stream A riparian segment is 220' long. All Alder trees within the 30' equipment limination zone would be remove EXCEPT those Alder growing on the inner gorge features, in the center of the stream and those trees that lean toward the stream. If Alder can safely be felled away from the stream they would be harvested. Stream A goes dry every summer.
Stream B segment is 400' long and would have all of the inner gorge trees left, similar to the 1992 harvest. The outside of the riparian zone that is not inner gorge will be harvested and replanted. Alder leaning into the gorge area would be left.

Proposed Management Activities

3) **Describe what activities will be conducted** (e.g. harvest, tree planting, road construction, etc.)
Stream A Segment: Harvesting, site prep and then replanting with conifers.
Stream B segment: Outside of the inner gorge, harvesting, site prep and then replanting with conifers.

4) **Describe where each activity will be conducted:**
Stream A Segment: Even-aged harvest outside the 30' equipment limitation zone. Within the ELZ Alder that lean way from the stream will be harvested. Alder growing on the inner gorge feature, in the center of the stream and those Alder that lean toward the stream will be left. On the north side of the stream 10 existing Cedar and Hemlock and 5 Birch, Maple, and Cascara will be left. On the south side of the stream 9 existing Cedar and Hemlock and 12 Birch, Maple, and Cascara will be left. These trees vary from 3" to 28" DBH.
Stream B segment: Even-ages harvest outside of the inner gorge

5) **Describe how each activity will be conducted:**
Stream A Segment: Alder will be fell away from the stream with a chain saw. Yarding will likely all be done with a rubber tired skidder. The skidder would stay outside the ELZ and choke tree tops or if needed drum line pulled to reach felled trees.
Stream B segment: Alder will be fell away from the inner gorge with a chain saw. Yarding with rubber tired skidder.

6) **Describe when each activity will be conducted:**
Stream A Segment: During the dry time of the year.
Stream B segment: During the dry time of the year.

7) **Described how your proposed management activity would affect the alternate plan area**. See Board Manual Section 21.

For activities in a riparian area, describe the current level and explain the short- and long-term changes of each of the following: be as specific as possible.

Large woody debris
Stream A Segment: This 6' wide stream has a fair amount of medium size LWD which is mostly hardwood. It has a higher amount of Alder limbs. The Alder being left in the 30' ELZ will likely die or blow down in the next 5 years and be added to the stream. Fourteen hardwoods and conifers over 12" DBH will be left along the stream of potential LOD.
Stream B segment: The buffer being left varies from 55' to 200' and averages 79'. This is a steep inner gorge which protects all of the stream functions. The Alder beyond the inner gorge have minimal influence on maintaing stream functions

Shade
Stream A Segment: This stream goes dry each summer. The steep bank on the SE side of the stream provides topograghic shading. The thick layer on understory species will expand with the extra sunlight and offer a high level of shading. Firfteen tree of various sizes will remain along the north bank and 21 on the south side of the stream. These numbers do not include an equal number of Alder being left. Stream shading should not significantly change.

Stream B segment: The buffer being left varies from 55' to 200' and averages 79'. This is a steep inner gorge which protects all of the stream functions. The Alder beyond the inner gorge have minimal influence on maintaing stream functions

Bank stability

Stream A Segment: The leave trees and schrub layer will provide most of the stability. During the ID team review we saw a 13" dbh Alder that had uprooted along the stream edge a few years ago. A similar size tree leaning away from the stream will be harvested. To help midigate loss of bank stability after the roots decay in the next 8 years we can cut the a higher stump in hopes it will resprout and continue to grow. Midigation will be acheived by planting long lived conifers in openings near the stream.
Stream B segment: The buffer being left varies from 55' to 200' and averages 79'. This is a steep inner gorge which protects all of the stream functions. The Alder beyond the inner gorge have minimal influence

Sediment filtering

Stream A Segment: The thick duff layer and shrubs near the stream will remain to filter sediment. Instream filtering will continue with the contribution of many small branches and dead leaves.
Stream B segment: The buffer being left varies from 55' to 200' and averages 79'. This is a steep inner gorge which protects all of the stream functions. The Alder beyond the inner gorge have minimal influence on maintaing stream functions

Nutrient input

Stream A Segment: The remaining leave trees and heavy schrub layer will continue to provide nutrient imputs. As the planted conifer grow additional nutrients will be available. This stream already has high nutrient input from up stream buffers.
Stream B segment: The buffer being left varies from 55' to 200' and averages 79'. This is a steep inner gorge which protects all of the stream functions. The Alder beyond the inner gorge have minimal influence on maintaing stream functions

Additional information

The plan for doing this Alder conversion to conifer is to do the work ourseves to assure quality and following the AP presented in this permit. Much of the Alder removal will be for firewood. It is likely this 6 acre unit will be harvested over several years. To protect the soil and streams most of the harvesting will be during the dry months. Stream A goes dry each summer.

The narrow strip of ownership on the east side of stream B will not be harvested. This narrow, deep canyon with rocky slopes protects this stream and has remained very stable since the1992 harvest.

Monitoring

The 2013 purchase of this parcel is a long term family investment with our daughter. We want the implementation of this Red Alder conversion to conifer Alternate Plan Forest Practice Permit to be successful. We plan to monitor this harvest prescription over time to make sure the stream functions enhancement goals are achieved. Successful reforestation to conifer species is the goal of this harvest. A similar Alternate plan upstream of this harvest was successfully reforestation to conifer. Site prep, hand planting and subsequent vegetation control will be implemented and monitored to quickly establish a conifer stand near these streams. [redacted] Properties LLP is certified by the American Tree Farm program and will include this monitoring goal in the Management Plan.

8) If you are planning activities in the riparian area, complete the table below. ☐ N/A

Stream Segment Identifier	**Water Type** *(S ,F, Np)*	**Affected Stream Segment Length** *(feet)*	**Average Bankfull Width** *(feet)*	**Average Width of No-cut Buffer** *(feet)*	**Harvest One Side or Both Sides**
A	F	220	6	30' /RA removal	Both
B	F	400	14	79	One

9) Does this plan propose to remove hardwood trees within a riparian area in order to plant conifers?

☐ No ☒ Yes If yes, describe the species to be planted. Include a schedule of brush control activities to ensure the planted trees will be vigorous and free to grow after three growing seasons.

The upland area will be replanted to mostly Douglas fir and Western Red Cedar. Dedending on the soil wetness and shade, Western Red Cedar, Western Hemlock and Sitka Spruce will be planted in the riparian areas. A varible width buffer of existing Maple, Birch, Cascara, Cedar and Hemlock with remain in the riparian area. Where openings are available, brush species will be slashed and possible spot treatment with herbicides when the stream is dry. We expect to continue maintenance for at least 5 years.

10) List the specific parts of the Forest Practices Board Rules that the proposal departs from:

See Washington Forest Practices Board Rules at: https://apps.leg.wa.gov/wac/default.aspx?cite=222

WAC Section	Sub-section	WAC Section/Sub-section Title
222-30-021	(1) (b)	Western WA riparian management zones -Type F & S waters
222-30-040	(2), (3), (4)	Shade requirements, temperature predictions, leave tree requirements
222-12-040	(2)	Alternate plans - Policy for small forest landowners (this supports)

11) Attach a map(s) (1 inch = 400 feet) **with updated stream locations, wetlands, unstable slopes and roads.** Clearly designate proposed alternate plan area. The alternate plan area must also be shown on the forest practices activity map.

12) Attach information, such as timber cruise, water type modifications forms, technical filed notes, literature references, etc., that support the alternate plan.

13) Does this alternate plan contain a monitoring strategy?

☐ No ☒ Yes If yes, include monitoring plan with your FPA/N submittal.