Forest Practices Application/Notification
Alternate Plan Form

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

TYPE OR PRINT IN INK:

Landowner information

<table>
<thead>
<tr>
<th>Name of LANDOWNER</th>
<th>Phone: 360.722.6571</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stillaguamish Tribe of Indians</td>
<td>Email: <a href="mailto:srockwell@stillaguamish.com">srockwell@stillaguamish.com</a></td>
</tr>
</tbody>
</table>

Contact person information.

<table>
<thead>
<tr>
<th>Contact Person</th>
<th>Phone: 360.722.6571</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scott Rockwell</td>
<td>Email: <a href="mailto:srockwell@stillaguamish.com">srockwell@stillaguamish.com</a></td>
</tr>
</tbody>
</table>

1. Current conditions and management goals:
   a) List the predominate tree species, average tree height and age; note excessive blowdown, fire damage, root rot or other forest health issues; describe topography.
   b) Describe the resource management goals you wish to achieve through this alternate plan.

See attached narrative.
1) Current conditions and management goals:
   a) List the predominate tree species, average tree height and age; note excessive
      blowdown, fire damage, root rot or other forest health issues; describe
      topography
   b) Describe the resource management goals you wish to achieve through this
      alternate plan

   a) This proposal is located entirely within the North Fork Stillaguamish channel
      migration zone (CMZ), which is dominated by cottonwood and hardwoods, primarily
      big-leaf maple and red alder. Stands are interspersed with small, clustered willow, vine
      maple, and the occasional western red cedar, hemlock, Doug fir, and mature spruce.
      Cottonwood average 25" dbh, w/ max 34" dbh. Hardwoods range in size from <6" to 26"
      dbh; 15' to 40' tall. CMZ conifer are limited in number and are typically not larger than
      12" dbh, though a few spruce do exceed 32" dbh, and some are in excess of 60' tall.
      These were presumably left during primary and secondary commercial harvest during the
      last century.
      Stillaguamish Tribe has performed conifer under-planting throughout the forested portion
      of the parcel within the CMZ, consisting primarily of western red cedar and spruce.
      A percentage of senescent alder have broken tops, and some willow and alder show
      indications of boring insect infestations.
      There is a shrub/grass understory in the CMZ, and is dominated in some areas by
      invasive Japanese knotweed and Himalayan blackberry.
      Topography is typically gentle, not exceeding 5%, except at terrace boundary slopes or
      channel scarp edges, which approach or exceed 20%. Several relict channel scarp edges exist
      w/in the CMZ, as well as Fortson Creek, Little French Creek, and a Type F pond that is a
      tributary to Fortson Creek.

   b) The desired resource management goal is to install 4 large, stable engineered logjams
      (ELJ's) along the left bank and in the mainstem NF Stillaguamish river to replicate
      structures that were historically formed by wood that was recruited from intact riparian
      stands that existed in the basin prior to large scale timber harvest conducted by European
      settlers. Existing riparian stands are currently incapable of contributing the size and
      volume (quantity) of conifer to the river that would naturally form these structures, and
      flood control activities have interrupted the natural processes by which large wood
      accumulates and moves through the system. Large, stable logjams influence fluvial and
      geomorphic processes, as well as nutrient and biological cycles that create and support
      habitat for adult and juvenile salmonids (particularly Chinook salmon).
      This project is an approved Large Woody Debris Project in the Stillaguamish Watershed
      Chinook Salmon Recovery Plan\(^1\) (pg. 97), and is intended to help meet the Large Woody
      Debris targets laid out in the Recovery Plan (pg. 68).
      This project also proposes to replace an existing decayed log stringer bridge with a
      70'x12' railcar bridge at the outlet stream of a pond that is a tributary to Fortson Creek.

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163, 164. Snohomish County, WA: Stillaguamish Implementation Review Committee (SIRC).
FPA/N Alternate Plan Form
Fortson Cr/Little French Cr Engineered Logjam Habitat Restoration Project

All other activities associated with the project will be conducted on non-forest land, within the bankfull width of waters of the state, and have been permitted by WDFW’s HPA #127066-1, Army Corps of Engineer’s permit # NWS-2012-385, and Snohomish County Flood Hazard Permit #12103587FZ.

2) Proposed Management Activities: Describe what activities will be conducted (example: harvest, tree planting, road construction, etc.) Describe where, how, and when each activity will be conducted.

Right-of-way harvest is proposed in 2012, and will be conducted as part of temporary road construction to allow heavy equipment access to the North Fork Stillaguamish River, and to allow imported conifer to be staged for the construction of the ELJ’s.

R-o-W harvest will also occur to allow for the excavation of a 0.5 acre channel that will connect a NF Stillaguamish River side channel to a relict channel scarp, located immediately to the south, which makes its confluence with Fortson Creek further to the west.

The temporary roads have been located to minimize riparian disturbance, avoid the softest surfaces, and maximize project efficiency (e.g. facilitating the fewest trips possible to stage imported wood, causing less sub-grade compaction and requiring less lift on temporary road surface). All harvested trees will be integrated into the logjams, or utilized in the road abandonment as ground cover (e.g. cottonwood boles will be bucked and partially buried within the CMZ). Abandonment of temporary roads will be conducted following ELJ construction in 2013. Abandoned roads will be replanted with conifer.

1 temporary ford will be constructed across the previously mentioned channel scarp using log cribbing and a water bypass through a culvert. This area comprises Stream Segment ID’s “V” and “W” in the FPA. This temporary ford is permitted under the HPA, is intended only for use during the summer construction season, and will not overwinter.

An existing log stringer bridge will be replaced with a 12’x70’ railcar bridge, and is permitted under the HPA. This area comprises Stream Segment ID’s “X” and “Y”.

This plan proposes 3 temporary roads and 1 harvest unit, all of which are included in the Alternate Plan. The temporary roads are identified in the FPA as Road Identifier #’s 1, 2, and 3. The corresponding right-of-way harvest in this Alternate Plan is Unit #1.

Road ID #1 is part of Alternate Plan Unit #1 and is a 20’ x 2170’ temporary road that will be constructed northward and eastward, into and through the North Fork Stillaguamish CMZ. As defined in Forest Practices Board Manual, section 2, the Alternate Plan site is located in a “Complex Floodplain CMZ” scenario with multiple surfaces. Approximately 1500’ of Road ID #1 is considered Stream Adjacent Parallel on Site Class V ground (Non-commercial/Marginally commercial) that is located within the CMZ. This area comprises Stream Segment ID “U”.
FPA/N Alternate Plan Form
Fortson Cr/Little French Cr Engineered Logjam Habitat Restoration Project

Road ID #’s 2 and 3 are also part of Alternate Plan Unit #1. They are 90’ and 70’ long x 20’ wide spur roads off of Road ID #1 that access staging areas for the construction ELJ’s 4 and 5. They are oriented perpendicular to the flow of the NF Stillaguamish.

3) Describe how your proposed management activity would affect the alternate plan area. For activities in riparian area:
   a) Describe the current level of large woody debris, shade, bank stability, sediment filtering, and nutrient input.
   b) Explain the short and long term changes in the amount of large woody debris, shade, bank stability, sediment filtering and nutrient input from the current level. Be as specific as possible. See Board Manual Section 21.

a) Unit 1/Road ID #’s 1, 2 & 3 are located in the North Fork Stillaguamish CMZ. The larger cottonwood and hardwoods proposed for removal offer a moderate degree of large woody debris function to the mainstem river due to their size and species composition. Due to their location in the CMZ, the largest trees furthest from the river offer very limited riparian shading during the height of summer. The large and small take trees offer a large to moderate degree of bank stability, sediment filtering, and nutrient input to the river, particularly those located closest to the river. They also provide potential floodplain roughness.

b) Unit 1/Road ID #’s 1, 2 & 3 will experience a long-term loss from an area contributing large woody debris (LWD) and riparian shading. Rooting strength, sediment filtering, and nutrient inputs will also be moderately compromised in the medium-term. The loss of most of these functions will be mitigated for by the installation of 4x mainstem engineered logjams located along the riverside of these locations. The LWD function of the removed trees will be magnified because they will work in conjunction with imported conifer key-pieces not currently available in this section of river.

The long-term loss of riparian shading will be compensated for by instream cover provided by the logjams and the interception of cool groundwater by the scour pools that will form near the logjams. Stand composition will be improved in the long term due to replanting of conifer species along the length of abandoned temporary road.

The loss of rooting strength and sediment filtering will be mitigated for through proper road abandonment and treatment of the excavated channel. It will also be mitigated for through the installation of bucked cottonwood boles, partially buried in the CMZ surface. These cottonwood boles will rapidly sprout and grow, adding rooting strength, sediment filtering, and floodplain roughness.

The excavated channel will be constructed through material composed primarily of bank-run material overlain by a 6” to 8” soil and duff profile. Chronic sedimentation will be addressed by implementing erosion control BMP’s during road abandonment.

Rooting strength and sediment filtering will also be replaced by replanting seedling spruce and cedar on a 15’ staggered spacing along the centerline of the abandoned road, maintained to an 80% survival rate target.

Soil compaction on the running surface in the CMZ will be mitigated for by scarification of the running surface during abandonment.
4. If you are planning activities in the riparian area, fill in the table below.

<table>
<thead>
<tr>
<th>Stream Segment Identifier</th>
<th>Watertype (S,F,Np)</th>
<th>Affected Stream Segment Length (feet)</th>
<th>Average Bankfull Width (feet)</th>
<th>Average width of no cut buffer (feet)</th>
<th>Harvest one side or both sides</th>
</tr>
</thead>
<tbody>
<tr>
<td>U</td>
<td>S</td>
<td>1500'</td>
<td>&gt;100</td>
<td>90'</td>
<td>One</td>
</tr>
<tr>
<td>V</td>
<td>F</td>
<td>20'</td>
<td>35'</td>
<td>90'</td>
<td>Both</td>
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<tr>
<td>W</td>
<td>F</td>
<td>20'</td>
<td>35'</td>
<td>90'</td>
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<tr>
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<td>F</td>
<td>20'</td>
<td>20'</td>
<td>90'</td>
<td>Both</td>
</tr>
</tbody>
</table>

5. 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.

Western red cedar, Sitka spruce. 15’ staggered spacing down entire length of Road #’s 1, 2 and 3. Maintained for 5 years, or until free-to-grow @ 80% survival. Invasives will be either hand treated, or sprayed by the department’s licensed applicator. The department’s Riparian Restoration program manager or other Tribal staff will check the site at least 2x per growing and dispatch maintenance crew, as needed.

6. List the specific parts of the Forest Practices Board Rules that the proposal departs from:

See Washington Forest Practices Board Rules at:
http://www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesRules

<table>
<thead>
<tr>
<th>WAC Section</th>
<th>Sub-section</th>
<th>WAC Section/Sub-section Title</th>
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</thead>
<tbody>
<tr>
<td>222-24-020</td>
<td>(2)</td>
<td>Road Location &amp; Design- SAPR’s</td>
</tr>
<tr>
<td>222-30-020</td>
<td>(12)</td>
<td>Harvest Unit Planning &amp; Design- Channel Migration Zone</td>
</tr>
<tr>
<td>222-30-021</td>
<td>(1)</td>
<td>No timber harvest or construction in Core zones</td>
</tr>
<tr>
<td>222-30-020</td>
<td>(2)</td>
<td>Landing locations</td>
</tr>
</tbody>
</table>

7. Attach map(s) (preferably 1” = 400’ scale) 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.

8. Attach information, such as a timber cruise, water type modification forms, technical field notes, literature references, etc., that support the alternate plan.

9. Small Forest Landowner Office Monitoring

The Small Forest Landowner Office (SFLO) is required to monitor small forest landowner alternate plans for cumulative effects.

a) Does this alternate plan contain a monitoring strategy

☒ Yes ☐ No If yes, please attach.

b) May SFLO staff access the alternate plan site to conduct monitoring?

☒ Yes ☐ No

-STR 8/31/12

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