



TENURE IDENTIFICATION

ORIGINAL

LICENCE #	CP	BLOCK	UBI	OPENING NUMBER	FDU	LOCATION	LATITUDE / LONGITUDE
A94685	-	HW208	BB2WX		West Harrison	Weaver Lake	49 22 04 / 121 52 42

AREA UNDER THE PLAN

GROSS AREA (TAUP)	PAS	NP	WTRA / WTP	RESERVES	OTHER	NAR
43.8	3.6	0.0	6.2	0.7	0.0	33.3

ADDITIONAL COMMENTS

SOIL DISTURBANCE

SU	Max. Allowable Soil Disturbance (%)	Max. Amount TAS May Exceed MASD Prior To Rehab (%)	Max. Allowable Soil Disturbance For Roadside Work Areas (%)	Maximum Permanent Access Structures (%)
1	5.0	25.0	25.0	8.3
SU	CRITICAL SITE CONDITIONS THAT AFFECT THE TIMING OF OPERATIONS, AND HOW THEY AFFECT THE TIMING			

RESULTS AND STRATEGIES

Biodiversity Objectives	
Result or Strategy Description	<div>Biodiversity Objectives 1 (Landscape Lvl) and 2 (Stand Lvl)</div> <div>CHC-3009 RESULT: (1) In respect of the "Order to Establish A Landscape Unit and Objectives", the plan holder(s) will manage landscape level biological diversity and stand level structural diversity by; (a) designing cut blocks and roads in a manner that is consistent with Objectives One (1) and Two (2) of the Order (refer to Appendix D for each Objective by LU), (b) carrying out forest practices only if the forest practices are consistent with the design for the cut block or road referred to in paragraph (a), and, (c) in the case of BCTS only, entering into a timber sale licence, or granting a road permit only if the license or permit is consistent with the design for the cut block or road referred to in (a).</div>
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	<div>HW208 is consistent with CHC-3009. This development is consistent with objectives 1 and 2 of the 'Order to Establish a Landscape Unit and Objectives' (the Order) for the West Harrison Landscape Unit. This development is not located within a designated old growth management area (OGMA).</div> <div>OGMAs, in occurrence, are buffered sufficiently from HW208 to ensure no forest practice overlap. HW208 is comprised of smaller edge effect openings confined and limited by terrain and stream features. OGMA SRY_410_117 is 102 Lin. meters from HW208, OGMA SRY_410_111 is 140 linear meters from HW208, OGMA SRY_410_122 is 363 linear meters from HW208.</div> <div>A total of 14.2% (6.2 ha) of the Total Area Under Prescription (TAUP) has been set aside as Wildlife Tree Retention Area (WTRA), 14% Required for dm in the West Harrison LU. No timber harvesting, including salvage or singletree selection is to occur within the WTRA for at least one rotation, except in the event of a catastrophic windthrow event, or significant forest health emergency as specified in section 4, Objective 2 of the Order.</div>
Result or Strategy Description	<div>Maximum Block Size and Adjacency</div> <div>CHC-3007 RESULT: (1) The plan holder(s) will adopt sections 64 (maximum cutblock size) and 65 (harvesting adjacent to another cutblock) of the FPPR as a result or strategy in respect of cut blocks within which the plan holder(s) carries out or the TSM authorizes timber harvesting. (2) The TSM will notify each holder of a timber sale licence or road permit to which the plan relates that Sections 64 (maximum cutblock size) and 65 (harvesting adjacent to another cutblock) of the FPPR apply to the holder's primary forest activities carried out during the term of the plan.</div>
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	<div>Sections 64 and 65 of the FPPR apply:</div> <div>HW208 and aggregate areas comprising both new blocks and non-conforming portions does not exceed 40ha as described in Section 64(1) of the FPPR.</div> <div>HW208 and adjoining openings meets the criteria outlined in Section 65(2)(b) of the FPPR.</div>

Result or Strategy Description	Stand Lvl Biodiversity: Wildlife Tree Retention and Harvesting Restriction CHC-3008 RESULT: In respect to stand Level Management (wildlife tree retention): (1) The plan holder(s) will adopt section 66 (wildlife tree retention) and 67 (restriction on harvesting) of the FPPR. (2) The TSM will notify each holder of a timber sale licence or road permit to which the plan relates that Sections 66 and 67 of the FPPR apply to the holder's primary forest activities carried out during the term of the plan.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	Section 67 of the FPPR applies: Per FPPR 66 & 67, a total of 14.2% (6.2 ha) of the Total Area Under Prescription (TAUP) has been set aside as Wildlife Tree Retention Area (WTRA), 14% Required for dm in the West Harrison LU. No timber harvesting, including salvage or singletree selection is to occur within the WTRA for at least one rotation, except in the event of a catastrophic windthrow event, or significant forest health emergency as specified in section 4, Objective 2 of the Order. Felled danger trees will not be utilized.
Result or Strategy Description	Biodiversity Management at Landscape Level CHC-3010 RESULT: (1) In respect of the "Ministerial Order, dated February 4, 2013, to Establish A Landscape Unit and Objectives", the plan holder(s) will manage landscape level biological diversity by: (a) designing cut blocks and roads in a manner that is consistent with Objectives of the Ministerial Order, (refer to Appendix D for each Objective by LU), (b) carrying out forest practices only if the forest practices are consistent with the design for the cut block or road referred to in paragraph (a), and, (c) in the case of BCTS, entering into a timber sale licence or granting a road permit, only if the license or permit is consistent with the design for the cut block or road referred to in (a).
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	CHC-3010 is not applicable to HW208.

Cultural Objectives	
Result or Strategy Description	<p>Cultural Heritage Resource</p> <p>CHC-3011 STRATEGY:</p> <p>Regarding the objective for cultural heritage resources, set out in Section 10 of the FPPR, the plan holder(s) will apply the following strategy;</p> <p>(1) ensure that a primary forest activity will not cause a cultural heritage resource to become unavailable for its continuing use by First Nations up to the historical extent of its traditional use by that First Nation, unless it is confirmed by government in consultation with that First Nation that it is not necessary to conserve or protect the cultural heritage resource that is:</p> <p>(a) referred to in Section 10 of FPPR</p> <p>(b) likely to be adversely impacted by that primary forest activity;</p> <p>(c) not conserved or protected through;</p> <p>(i) legislation, plans or policies; or</p> <p>(ii) other means or arrangements, developed or accepted through information sharing with First Nations; and</p> <p>(d) important, valuable and scarce in the context of a traditional use by First Nations, based on their input.</p> <p>(2) share information with First Nations regarding proposed primary forest activities that are within the asserted traditional territory of that First Nation;</p> <p>(a) in accordance with established agreements made by government with a First Nation for information sharing in respect of time lines and content of information provided; or</p> <p>(b) where no agreements made by government with First Nation are in place, as determined by a qualified professional based on those factors in FPPR Schedule 1, Section 4.</p> <p>(3) at the request of a First Nation, jointly develop a written communications protocol to share information. If established, follow that agreement, in which case 2(a) and 2(b) will not apply in respect of that First Nation.</p> <p>(4) at the request of a First Nation, endeavor to establish a jointly developed protocol with that First Nation for the purpose of identifying a current and/or future supply of western red cedar (<i>Thuja plicata</i>) and cypress (<i>Chamaecyparis nootkatensis</i>) trees suitable for traditional use up to the extent of historical use.</p> <p>(5) consider First Nation accommodation requests and develop mutually agreed upon measures to mitigate the impact of timber harvest and road construction activities.</p> <p>(6) in the case of a TSL the holder of the license, when encountering previously unidentified cultural heritage resource feature the licensee will;</p> <p>(a) cease operations within the cutblock or road in order to protect the potential unidentified cultural heritage resources,</p> <p>(b) notify the TSM,</p> <p>(c) If necessary, retain a qualified professional to propose a mitigation strategy,</p> <p>(d) present the modified plan to TSM,</p> <p>(e) resume operations within the cutblock or road to the extent that the operations are consistent with the plan, if required.</p> <p>(7) when encountering previously unidentified cultural heritage resource features the plan holder(s) will:</p> <p>(a) ensure operations within the cutblock or road cease,</p> <p>(b) notify the applicable First Nation(s),</p> <p>(c) notify MFLNRORD's staff,</p> <p>(d) in collaboration with the First Nation(s) determine;</p> <p>(i) the type of cultural heritage resource feature,</p> <p>(ii) the conservation or, if necessary the protection of the cultural heritage resource feature, and</p> <p>(iii) constraints, if any, applicable to the primary forest activity carried out on the feature.</p> <p>(e) if required, modify the relevant plan(s) pertaining to primary forest activity, and</p> <p>(f) resume operations within the cutblock or road to the extent that the operations are consistent with the modified plan(s).</p>
Applies:	YES

How Result or Strategy Applies to the Site (or Rationale if it does not apply)	<p>HW208 is consistent with the BCTS Chilliwack FSP #643 R/S CHC-3011 for Cultural Heritage Resources. To ensure consistency, BCTS must share information and consult with affected First Nation(s) regarding proposed primary forest activities that are within the asserted traditional territory of the applicable First Nation(s). BCTS also refers operational plans to affected First Nation(s) on a regular basis so that the BCTS Chinook Timber Sales Manager (TSM) can evaluate the nature and extent of a possible cultural heritage resource within or adjacent to a given development.</p> <p>In respect to HW208, First Nation(s) referral and information sharing has been completed for this block and any related road systems under Operating Plan #20 and People of the River Office (PRRO) #602918 by Enrique Sanchez, BCTS Planning Forester. Comments and/or concerns brought forward by First Nation communities have been addressed by BCTS and the TSM considers the information sharing process to be complete. Consistent with legislative requirements, prior to the issuance of the Timber Sale License (TSL), the TSM will consider if previous consultation and/or information sharing remains sufficient, or, if any new information needs to be considered prior to TSL issuance. There are no written communication protocols for information sharing with affected First Nations in effect at this time (CHC-3011(3)).</p> <p>HW208 aligns with the advice set out in the S'olh temexw Use Plan Policy (STUP). HW208 is located within "Resource Harvesting" and "Spiritual Practice" areas as identified during referral with the PPRO. Forestry activities proposed under this plan should not prevent Sto:lo members access when performing resource harvesting and/ or spiritual practice activities. Additionally, road reconstruction/construction, when complete, on in-block and related road systems should enhance access for such activities in the area. Signage to warn, inform and redirect potential users of industrial activity should be installed when and where appropriate.</p> <p>A Preliminary Field Review (PFR) was completed for block HW208 by Sts'ailes Heritage Consulting (final report dated: February 6, 2018). One archaeological site (temp. name DiRI-t36) was identified. Additionally, a rock overhang with potential for use as a rock shelter was identified immediately adjacent to the block. The recommended areas have been excised as per the PFR report recommendations in order to protect these features. It is recommended no road clearing or widening occur in the vicinity of the rock shelter cache. Refer to the PFR document for further information. No further archaeological work is necessary.</p> <p>Under this TSL, the TSL holder must ensure that, if any previously unidentified cultural heritage features are encountered, all operations within the cutblock or road cease. The TSL holder must then notify the TSM. If necessary, the TSL holder must retain a qualified professional to develop a mitigation strategy and present the plan to the TSM prior to resuming operations in the cutblock or road under the modified plan(s), if applicable.</p> <p>There were no requests by affected First Nations to establish a jointly developed protocol for the purpose of identifying a current and/or future supply of western red cedar (<i>Thuja plicata</i>) and cypress (<i>Chamaecyparis nootkatensis</i>) trees suitable for traditional use or to develop mutually agreed upon measures to mitigate the impact of timber harvest and road construction activities associated with HW208 (CHC-3011 (4)). There were no First Nation accommodation requests, where mutually agreed upon measures were developed to mitigate the impact of timber harvest and road construction activities (CHC-3011 (5)).</p> <p>Comments brought forward during the information sharing/consultation process outside of the scope of this Site Plan were addressed by Enrique Sanchez (Planning Forester, BCTS Chilliwack). Information sharing was concluded in April 7, 2018.</p>
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Measures for Preventing the Introduction or Spread of Invasive Plants	
Result or Strategy Description	<p>Invasive Plants Measures</p> <p>CHC-3015 MEASURE:</p> <p>For the purposes of Section 47 of the FRPA, to prevent the introduction or spread of invasive plants if such introduction or spread is likely to be the result of forest practices carried out under this FSP by the plan holder(s) or a Timber Sales Licence Agreement Holder, the following steps / measures will be taken:</p> <p>(1) Prior to undertaking any field activity that will result in soil disturbance, the plan holder(s) will;</p> <p>(a) review the FLNRORD Invasive Alien Plant Program (IAPP) database, to determine the presence of invasive plants in the vicinity of the proposed forest development activities, and</p> <p>(b) conduct a field review to determine;</p> <p>(i) if new invasive plants exist or</p> <p>(ii) if existing invasive plants have spread beyond the location identified in the IAPP database.</p> <p>(2) When new invasive plants are identified or have spread beyond the reported location, this information will be reported to the IAPP database.</p> <p>(3) Prepare an implement a plan outlining measures to prevent the spread of existing or introduction of new invasive plants will be prepared. This plan will consider the "Chinook Invasive Plant best management practices (BMP)." It will include but not limited to;</p> <p>(a) the timing of grass seed application,</p> <p>(b) washing of equipment capable of disturbing soils in the harvesting or road building phase to ensure that invasive plant reproductive material is removed,</p> <p>(c) no storage of equipment in areas of infestation,</p> <p>(d) no use of material from infested soils, and</p> <p>(e) maintenance of records of the location and timing of grass seeding.</p> <p>(4) Preferred grass seed will be used and must have the following attributes;</p> <p>(a) high sod-forming content except in areas that are planted with tree seedlings,</p> <p>(b) certified by the Canadian Seed Growers Association that the seed meets Common #1 Forage Grade or better standards for varietal purity established by the Association for seed of that kind of species (Seeds Act, Seeds Regulation), and</p> <p>(c) is of native origin.</p> <p>(5) Grass seeding will take place within one (1) year of disturbance and monitored for one growing season. At this time it will be determined:</p> <p>- if more grass seeding or a different practice needs to applied</p> <p>- update the plan prepared in (3)</p> <p>- monitor if the updated plan identifies the need</p> <p>Grass seeding is based on the following;</p> <p>(a) apply grass seed when germination has the best probability of success, and</p> <p>(b) where germination levels cover less than 75% of the treatment area after one year of sowing, one additional application of grass seeding will be done.</p> <p>(6) Newly disturbed soils will not be grass seeded where;</p> <p>(a) soils that will be occupied by seedlings as part of the Net Area to be Reforested (NAR), and</p> <p>(b) soils where there are no known invasive plants within 500m of disturbed soils.</p> <p>(7) Grass seed must be applied where;</p> <p>(a) disturbed soils are created as a result of forest harvesting or road construction activities,</p> <p>(b) disturbed soil has been created within 20m of the high water mark of any stream, wetland or lake regardless of (6) above.</p>
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	An iMap viewer review was conducted January 24, 2017. There is one invasive plant site identified in close proximity to the POC of the FN1200 Road; a CT or Common Tansy. Measures initiated and carried out under the CHC-3015 including the application of grass seed to both the site, if identified, and surrounding disturbed soils caused by works under this plan.
Range Resources	
Result or Strategy Description	<p>Natural Range Barriers Measures</p> <p>CHC-3016 MEASURES:</p> <p>(1) For the purposes of Section 48 of the FRPA, and FPPR s.18, the plan holder(s) prior to designing primary forestry activities will: apply the following strategy:</p> <p>(a) Identify areas that are subject to or adjacent to agreements under the Range Act in respect of grazing of livestock.</p> <p>(b) Refer the proposed timber harvest and or road construction activities to the affected Range Act tenure holder;</p> <p>(c) Where an affected agreement holder under the Range Act indicates that the proposed activities will remove or render ineffective a natural range barrier, the plan holder(s) will;</p> <p>(i) consider the input from the Range Act agreement holder, and</p> <p>(ii) develop and carryout reasonable mutually agreed upon measures to mitigate the impact of timber harvest and road construction activities, within an agreed upon time.</p> <p>(d) The TSM, at the time of the TSL advertisement, will notify each holder of a timber sale license or road permit of the necessary strategies in (c) to be implemented during forestry activities operations.</p>
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	There are no range areas within or adjacent to HW208.
Recreation Resources	
Result or Strategy Description	<p>Interpretive Forest: Mission TFL-26</p> <p>Under the authority of Section 56(1) of the FRPA, the Regional Manager for the Coast Recreation Region established objectives on October 6, 2011 for the Mission Interpretive Forest Site (MIF)</p> <p>CHC-3013 STRATEGY:</p> <p>In respect to the established objectives for the Mission Interpretive Forest Site (MIF), BCTS will work collaboratively with the District of Mission when developing primary forest activities within the boundaries of the MIF. This approach will ensure that primary forestry activities are designed and implemented, during harvesting activities, consistent with the objectives of the Interpretive Forest Site objectives.</p>
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	HW208 is not located within or adjacent to Mission TFL 26

Result or Strategy Description	<p>Objectives: Established Recreation Trails</p> <p>The Regional Manager for the Coast Recreation Region, under Section 56 of the FRPA, on October 10th, 2012, established objectives for the following Recreation Trails:</p> <p>Baby Munday Mount McGuire Vedder Mountain Elk-Thurston Mount Rexford Williams Peak Ford Mountain Pierce Lake Williamson Lake Ling Lake Slesse Memorial Mount Cheam Slesse Mountain</p> <p>CHC-3012 STRATEGY:</p> <p>In respect of the established objectives for these trails, the plan holder(s) will apply the following strategy.</p> <p>(1) Maintain the unique recreation experience of trail riding and/or hiking through a forested and sub-alpine setting by:</p> <p>(a) ensuring primary forest activities are designed and implemented to follow the targets/actions described in the 'Guidance Document for Established Trails with Legal Objectives in the Chilliwack River Valley' (see Appendix D).</p> <p>(b) obtaining recommendations from the Ministry of Forests, Lands and Natural Resource Operations and Rural Development (FLNRORD), Recreation Sites and Trails' District Recreation Officer, should primary forest activities vary from the targets/actions as described in the 'Guidance Document for Established Trails with Legal Objectives in the Chilliwack River Valley' and:</p> <p>i) implementing the recommendations in (b), or</p> <p>ii) implementing, when (i) is not achievable due to conflicts with other objectives set by government, i.e. timber objectives, a rationale or strategy to be developed in collaboration with Recreation Sites and Trails' District Recreation Officer.</p> <p>(2) Avoid building access structures over an established recreation trail unless no other practicable alternative exists. If crossing is planned, targets indicated in the guidance document will be adhered to.</p> <p>(3) When designing forestry activities requiring crossing a designated trail, the FLNRORD Recreation Sites and Trails' District Recreation Officer will be consulted for guidance on access prevention measures to maintain any new access structures in a manner that makes the best effort to prevent all motorized vehicles from accessing the trail. The developed measures will be implemented and monitored during harvesting operations. Some examples are to;</p> <p>(a) establish a gate on the access road to prevent motorized vehicle access.</p> <p>(b) excavate/deactivate the road prism to the extent that a motorized vehicle is unable to pass.</p> <p>(c) place large, unmovable boulders on the access road to prevent motorized vehicle access, and</p> <p>(d) establish deep ditch line(s) to further prevent motorized vehicle access.</p>
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	CHC-3012 does not apply. HW208 does not overlap with and is not near any of the recreation trails/features identified in the Chilliwack FSP with defined objectives.
Soil Objectives	
Result or Strategy Description	<p>Soil Disturbance and Permanent Access structure Limits</p> <p>CHC-3000 RESULT:</p> <p>(1) The plan holder(s) will adopt Section 35 (soil disturbance limits) and 36 (permanent access structure limits) of the FPPR in respect to primary forest activities carried out by the plan holder(s) during the term of this plan.</p> <p>(2) The TSM will notify each holder of a timber sale licence (TSL) or road permit (RP) to which the plan relates that Section 35 and 36 of the FPPR apply to the holder's primary forest activities carried out during the term of the plan.</p>
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	<p>Sections 35 and 36 of the FPPR are adopted as a result or strategy. Under FPPR s 35, soils within SU 1 are classified as sensitive.</p> <p>HW208 soils are classified as Sensitive. FPPR Sec 35(3)(a) applies; soil disturbance maximum of 5% of the area covered by the SU excluding roadside work areas. FPPR Sec 35(3)(c) maximum of 25% soil disturbance of the area covered by roadside work applies.</p> <p>Site degradation for access structures (PAS) in cutblock HW208 in Weaver Lake is predicted to exceed the maximum allowable level of 7.0%. A rationale is required per Section 36 of the Forest Planning and Practices Regulation (FPPR) pertaining to permanent access exceeding normal levels.</p> <p>HW208 is the first block in the first entry into second growth stands in the upper Weaver drainage and is surrounded by economic candidate stands of timber. The area is interspersed with old roads that continue on and outside of the current HW208 configuration developing future timber consistent with FPPR Sec 36(1)(b).</p> <p>New road sections and old roads develop timber within an inherent pattern of broken topography limiting yarding distance. Broken terrain combined with a discontinuous timber quality cause roads in HW208 to exceed 7% of the cutblock consistent with FPPR Sec 36(1)(a)(i).</p> <p>The resultant proportion of allowable permanent access will be 8.3% (calculation worksheet on file) in cutblock HW208 is consistent with FPPR Sec 36(1)(a)(i), and 36(1)(b).</p>
Timber Objectives	
Result or Strategy Description	<p>Timber Objectives</p> <p>CHC-3017 STRATEGY:</p> <p>(1) The plan holder(s) will adopt section 12 (8) of the FPPR, in which the holder of the plan is exempt from the requirement to prepare results or strategies for an objective set by government for timber.</p>
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	There is no R/S for Timber Objectives in the BCTS Chilliwack FSP, nor is one required, as noted above.

Visual Objectives	
Result or Strategy Description	<p>Visual Quality Objectives</p> <p>With respect to Section 7 and 17 of the Government Actions Regulation (GAR), the Plan holder(s) will apply the following strategy.</p> <p>CHC-3014 STRATEGY:</p> <p>(1) The plan holder(s) will not carry out, or in the case of BCTS, authorize, timber harvesting or road construction in a scenic area unless the completed cutblock or road will be consistent with the visual quality objective applicable to the area.</p> <p>(2) The plan holder(s) will ensure that a Visual Impact Assessment (VIA) is completed by a Qualified Professional prior to conducting primary forestry activities to confirm that the activities are consistent with applicable Visual Quality Objectives (VQO), taking into account the current existing condition and the effects of surrounding development. When conducting the VIA, Qualified Professionals will be guided by current literature as a benchmark, such as the Visual Impact Assessment Guidebook, January 2001.</p> <p>(3) The plan holder(s) for the purposes of designing primary forestry activities will consider:</p> <p>(a) Dead or damaged stands as to have the same visual quality as though they were unaltered,</p> <p>(b) Powerlines and/or utility corridors do not impact visual quality, and</p> <p>(c) Private land and other land tenure denudation do not impact visual quality.</p> <p>(4) For the purposes of (1), within the Mission Tree Farm Licence (MTFL) FDU the TSM will be consistent with Visual Quality Objectives (VQO) in accordance with Appendix F "Visual Quality Objectives within TFL 26".</p>
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	HW208 is located within Visual Resource Management Unit #928. A VIA was completed January 2, 2018 finding HW208 and aggregate openings do not exceed fVQC of Partial Retention. HW208 is consistent with the VQO prescribed for the area and meets the definition of Partial Retention as defined in FPPR, confirmed by digital terrain modelling conducted by Silvacre Inc. Modeling indicates 2.8% alteration of the visual landscape from the greatest viewsite location predicted. Modification of the overall viewscape is less than maximum provided by Partial Retention. Viewscape modification by HW208 is projected to be in small separated openings that meet the description of a mosaic. Openings are too small to express visual parameters such as line and form.
Water Management Objectives	
Result or Strategy Description	<p>Fish Management Within Riparian Areas</p> <p>CHC-3006 RESULT</p> <p>(1) Consistency with the objective for fish within riparian areas is achieved through the results and strategies provided in Section 3.4 Water (CHC3003, CHC3004, and CHC3005) of this FSP.</p>
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	As noted above, consistency with the objective for fish within riparian areas is achieved through the results and strategies provided in Section 3.4 Water of the BCTS Chilliwack FSP (CHC-3003, CHC-3004, and CHC-3005). There are no fish streams associated with this development. All streams have been identified, surveyed and field forms filled out. All streams in HW208, excluding Creek 10 and 10A, contain no reaches less than 25% gradient and all streams are barriered downslope of HW208. In reference to Creeks 10 and 10A, no suitable habitat was found at the time of survey as both creeks were completely dry.

Result or Strategy Description	<p>Water Management: Riparian Areas</p> <p>CHC-3003 RESULT:</p> <p>(1) The plan holder(s), with respect to primary forest activities that are carried out or authorized by the TSM in relation to riparian classes or restrictions within them during the term of this plan, will adopt the following FPPR sections;</p> <p>(a) Section 47 Stream riparian classes,</p> <p>(b) Section 48 Wetland riparian classes,</p> <p>(c) Section 49 Lake riparian classes,</p> <p>(d) Section 50 Restrictions in a riparian management area (RMA),</p> <p>(e) Section 51 Restrictions in a riparian reserve zone (RRZ),</p> <p>(f) Section 52(2) Restrictions in riparian management zone (RMZ), and</p> <p>(g) Section 53 Temperature sensitive streams.</p> <p>(2) The TSM will notify each holder of a TSL or RP to which the plan relates that Sections 47 to 51, 52(2) and 53 of the FPPR apply to the holder's primary forest activities carried out during the term of the plan.</p>																																																						
Applies:	YES																																																						
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	<p>This development is consistent with BCTS FSP Results and Strategies for water and fish Sec 3.5. Forest practices are consistent with sections 47 to 51, 52(2), and 53 of the Forest Planning and Practices Regulation (FPPR) as per 2.2.4.</p> <p>All streams within and adjacent to this development were classified as per section 47 and 49 of the FPPR by field staff. All streams have been identified, surveyed and field forms filled out. All streams in HW208, excluding Creek 10 and 10A, contain no reaches less than 25% gradient and all streams are barriered downslope of HW208. In reference to Creeks 10 and 10A, no suitable habitat was found at the time of survey as both creeks were completely dry.</p> <p>The roads within HW208 are primarily old established roads that provide access to broken terrain features. They follow a terrain-constrained route through broken and rocky terrain (standard of the day). Roads were not deactivated. Over time, the fill-slopes have revegetated to various coniferous and deciduous cover. The following existing road sections are within the RMA of several S5 and S6 streams (see table below):</p> <table><tr><td>Road</td><td>Start</td><td>End</td><td>Type</td><td>Creek</td><td>Class</td></tr><tr><td>FN1200</td><td>4+031</td><td>4+116</td><td>Existing</td><td>5</td><td>S5</td></tr><tr><td>FN1280</td><td>0+460</td><td>0+515</td><td>Existing</td><td>8</td><td>S6</td></tr><tr><td>FN1280</td><td>0+695</td><td>0+715</td><td>New</td><td>9</td><td>S5</td></tr><tr><td>FN1280</td><td>0+775</td><td>0+992</td><td>Ex/New</td><td>9,11</td><td>S5, S6</td></tr><tr><td>FN1281</td><td>0+050</td><td>0+137</td><td>Existing</td><td>9</td><td>S5</td></tr><tr><td>FN1282</td><td>0+170</td><td>0+236</td><td>Existing</td><td>11</td><td>S6</td></tr><tr><td>FN1283</td><td>0+165</td><td>0+215</td><td>Existing</td><td>10</td><td>S6</td></tr><tr><td>FN1284</td><td>0+117</td><td>0+147</td><td>Existing</td><td>12</td><td>S6</td></tr></table> <p>The old section of FN1280 that is located within the RMA of an S5 stream is not absolutely required for access to upper portions of HW208 as an alternative route is practicable (Sta. 0+640 to 0+799) as shown on the map. This alternative route is still within the RMA of the S5 stream however, at the request of BCTS, the route was established in an effort to mitigate influence on the riparian area. Furthermore, the bypass of the original S5 section is compatible with the initiative to maintain water quality and quantity for the Oregon Spotted Frog (SARA).</p> <p>There are no streams within riparian reserve zones within the development that meet the specifications of FPPR Section 51.</p> <p>Trees do not contribute significantly to stream-bank stability of streams within HW208 (Section 52(2)).</p> <p>There are no wetlands, lakes, or temperature sensitive streams within or immediately adjacent to this development that falls under Section 53 of FPPR.</p>	Road	Start	End	Type	Creek	Class	FN1200	4+031	4+116	Existing	5	S5	FN1280	0+460	0+515	Existing	8	S6	FN1280	0+695	0+715	New	9	S5	FN1280	0+775	0+992	Ex/New	9,11	S5, S6	FN1281	0+050	0+137	Existing	9	S5	FN1282	0+170	0+236	Existing	11	S6	FN1283	0+165	0+215	Existing	10	S6	FN1284	0+117	0+147	Existing	12	S6
Road	Start	End	Type	Creek	Class																																																		
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FN1283	0+165	0+215	Existing	10	S6																																																		
FN1284	0+117	0+147	Existing	12	S6																																																		
Result or Strategy Description	<p>Water Management: RMZ Tree Retention</p> <p>CHC-3005 STRATEGY:</p> <p>(1) In respect to sections 8 and 12 (3) of the FPPR, to address retention of trees in a riparian management zone, prior to primary forestry activities occurring, the plan holder(s) will;</p> <p>(a) ensure that retention levels within Riparian Management Zones (RMZs) are determined by a qualified professional through a riparian assessment that considers all factors listed in Schedule 1, section 2 of the FPPR,</p> <p>(b) design cutblocks and roads in a manner that is consistent with the retention levels as determined by the qualified professional as described in (a); and</p> <p>(c) ensure that the qualified professional recommendations are implemented during primary forestry activities.</p>																																																						
Applies:	YES																																																						
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	<p>Broken terrain and ground based harvesting with very little small stem or streamside vegetation negates prescriptions to retain streamside RMZ vegetation. Stream crossing for harvesting equipment is to utilize identified crossing sites.</p>																																																						

Result or Strategy Description	Water Management: Community Watershed CHC-3004 STRATEGY: (1) Prior to conducting primary forest activities within a community watershed to which section 8.2 of the FPPR applies, the plan holder(s) will; (a) engage, in conjunction with other potentially affected forest agreement holders, a qualified professional to conduct a Hydrologic Assessment for the community watershed in which the activities are proposed. The assessment will be prepared to address the objectives described in Section 8.2(2) of the FPPR by assessing the equivalent clearcut area (ECA), road densities, terrain stability and general stream morphology and function. (b) conduct subsequent Hydrological Assessments at least once every 5 years, unless no primary forest activities have occurred or proposed to occur in the community watershed(s) during that period. (c) ensure that the Hydrological Assessment considers potential impacts on water quality, water quantity, risks to public health, timing of water flows, current watershed health, cumulative effects of sediment sources, riparian conditions, and peak flow increases within the watershed; (d) ensure that planned primary forest activities are designed and implemented to be consistent with the results and recommendations in the Hydrologic Assessment. (e) engage a qualified professional to conduct a Terrain Hazard Assessment for potential primary forest activities in which the proposed area(s) exhibits terrain class IV or V, or is >60% slope. (f) ensure that the THA considers factors including; soil drainage, water flow, surficial materials, sub-surficial materials, landslide history, and public safety; (g) ensure that planned primary forest activities are designed and implemented to be consistent with the results and recommendations in the Terrain Hazard Assessment. Recommendations may include deleting portion of the planned block or road as well as changing road locations.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	HW208 is not located in a Community Watershed.
Wildlife Objectives	
Result or Strategy Description	Species at Risk: FPPR Section 7 Notice CHC-3001: In respect of the notice entitled 'Indicators of the amount, distribution and attributes of wildlife habitat required for the survival of species at risk in the Chilliwack Forest District' dated August 3, 2007. At the date of submission, no species at risk are identified under FPPR section 7, requiring preparation of results or strategies.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	In respect of the notice entitled Indicators of the amount, distribution and attributes of wildlife habitat required for the survival of species at risk in the Chilliwack Forest District dated August 3, 2007. At the date of submission, no species at risk are identified under FPPR section 7, requiring preparation of results or strategies.
Result or Strategy Description	Survival of Regionally Important Wildlife CHC-3002: The Ministry responsible for the Wildlife Act has not identified regionally important wildlife within the Forest Development Units covered by this FSP.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	BCTS Chilliwack FSP R/S CHC-3001 does not apply to any FDUs at this time. HW208 is not located within an area where any species at risk have been identified under an FPPR Section 7 Notice.

STOCKING REQUIREMENTS

SU	NAR	STANDARDS ID #	OTHER PERFORMANCE STANDARDS
1	33.3	1055470	Hw only preferred in Stave and Pitt river drainages. Hw, as preferred, max density 100 stems/ha Fd: risk w/ Swiss needle cast.yReduce Min. Hor. Dist. to 1.5m in areas with less than 400 plantable spots per hectare.
COMMENTS	SU1 - CWHdm 01/03 Site is dry and well drained. Brush is expected to become a problem, Planting of some shade tolerant Cw is recommended adjacent to standing timber edges and convex slopes adjacent to watercourses or where seepage is evident. Plant 1+0 or older 412A or larger Fd (75%) and Cw (25%) @ 1200sph SU1 - 33.34 ha NAR Fd = 900sph (30,006 seedlings) Cw = 300sph (10,002 seedlings) Total Seedlings: 40,008 Planting Density: 1.5m inter-tree spacing allowable on site 03 rock outcrops or where soil depth is less than 5cm. Season: Planting to be conducted during early spring post-snowmelt conditions; avoid planting during during low soil moisture conditions that occur during greater than 1 week without rainfall. Post May 31 planting is discouraged unless soil moisture is evident. No Site Preparation is anticipated. Pile roadside accumulations and burn during low hazard conditions. Do not pile within 10 Lin M from watercourses. Use of accellerants not allowed for burning. Slash loading is anticipated to be low to moderate as block is second growth.		

ADMINISTRATION

Amendment number	Date Typed (Yr Mo Dy)	Map Required?
ORIGINAL	2018 03 28	YES

RPF PRINTED NAME	RPF'S SIGNATURE and SEAL
John Cookman	
DATE SIGNED	
2018/03/28	
I certify that the work described herein fulfils standards expected of a member of the Association of British Columbia Forest Professionals, and that I did personally supervise the work.	

Map attached forms an integral part of the site plan.

SUPPORT DOCUMENT

ORIGINAL

LICENCE #	CP	BLOCK	UBI	OPENING NUMBER	FDU	LOCATION	LATITUDE / LONGITUDE
A94685	-	HW208	BB2WX		West Harrison	Weaver Lake	49 22 04 / 121 52 42

ASSESSMENTS

VISUAL IMPACT ASSESSMENT INFORMATION
HW208 is located within a Visual Resource Management Unit #928. A VIA was completed January 2, 2018 finding HW208 and aggregate openings do not exceed rVQC of Partial Retention.
PEST INCIDENCE SURVEY INFORMATION
Pest Specific Comments
There was no significant presence of pests observed throughout the stand however, some heart rot and conks were observed in the lower section of block during field work activities.
Forest Health Comments
Dunham and Associates completed a wind throw assessment for all of the harvest area boundary segments, January 22, 2018. All boundary sections are considered to have a Moderate risk of windthrow. This determination is based on the prevailing wind direction, boundary orientation, cutblock design strategy and stand/tree attributes. No special prescriptions are required to protect forest resources.
Some minor heart rot and conk was found in lower sections of the block
ARCHAEOLOGICAL IMPACT ASSESSMENT INFORMATION
HW208 is consistent with recommendations provided in the PFR. No archaeological or heritage resources were identified within this cut block, or the associated proposed access road. However, two noted archaeological sites are located within close proximity to the block with one site located approximately 10m outside the block boundary between FC109 and 110 within the WTRA and the other site located outside the block boundary approximately 50m southeast of FC115. The probability that undetected heritage materials are present in the development area is low. No further archaeological assessment is required. Should any other unanticipated cultural remains or features be encountered during timber harvesting and related activities, all work in the immediate area will cease and BCTS will be contacted.
TERRAIN STABILITY FIELD AND GULLY ASSESSMENTS INFORMATION
Terrain Stability Comments
A Terrain Stability Hazard Assessment (TSHA) was completed March 1, 2018. HW208 is consistent with the recommendations provided in the TSHA. Consistent slopes in block HW208 do not exceed 50%, there is a low likelihood of post-harvest landslide occurrence.
Gully Comments
There are no gullied streams assocaited with this development.
VEGETATION
Preferred: Complete a survey 2-4 growing seasons after planting. Monitor for Big leaf maple, birch and vine maple encroachment during surveys and schedule potential treatments in accordance with an approved Pest Management Plan as necessary.
Alternative: No alternative brush treatment recommendations.
Rationale: The general brush hazard for this cutblock is anticipated to be moderate. It can be anticipated that one brushing treatment will be required to enable this stand to become free growing.

RIPARIAN ASSESSMENTS					
Management Strategies					
Fall away and yard away techniques are to be implemented on all streams within HW208, where possible. Retain as much brush, understory and deciduous along the stream edge and within the stream channel as possible. If a tree cannot be felled away from the stream, fall it directly across the stream bridging the stream banks. Do not buck or limb within the stream banks. No machine traffic is permitted within 5m of the creek channel. If excessive debris enters the creek channel, it will need to be removed concurrent with harvesting. Use designated crossings for ground- based harvesting. Deactivate temporary crossings upon completion of harvesting.					
Riparian I.D. and Class	RMA	SU	WIDTH (m)	BA or SPH Retained	Comments (Indicate if in a Community Watershed)
2, 3, 4, 6, 7, 8, 8A, 10, 10A, 11, 12, 13 S6	RMZ	Ext	20.0		Fall away and yard away techniques are to be implemented on all streams and retain as much brush, understory and deciduous along the stream edge and within the stream channel as possible. If a tree cannot be felled away from the stream, fall it directly across the stream bridging the stream banks. Do not buck or limb within the stream banks. No machine traffic is permitted within 5m of the creek channel. Use designated crossings for ground- based harvesting. Deactivate temporary crossings upon completion of harvesting. Directionally handfall timber full length to bridge across Stream 8 and Stream 8A and yard full length to maintain channel integrity.
1, 5, 9 S5	RMZ	SU1	30.0		Fall away and yard away techniques are to be implemented on all streams and retain as much brush, understory and deciduous along the stream edge and within the stream channel as possible. If a tree cannot be felled away from the stream, fall it directly across the stream bridging the stream banks. Do not buck or limb within the stream banks. No machine traffic is permitted within 5m of the creek channel. If excessive debris enters the creek channel, it will need to be removed concurrent with harvesting. Use designated crossings for ground- based harvesting. Deactivate temporary crossings upon completion of harvesting.

SOIL ASSESSMENT							
HAZARD RATINGS				SOIL CHARACTERISTICS			
SU	Soil Comp	Soil Erosion	Soil Disp	Depth To Unfavourable Subsoil		Type of Unfavourable Subsoil	Sediment Delivery Risk (Community Watersheds)
				Min(cm)	Max(cm)		
1	H	H	M	10.0	60.0	PMT	
COMMENTS							
HW208 soils are classified as Sensitive. FPPR Sec 35(3)(a) applies; soil disturbance maximum of 5% of the area covered by the SU excluding roadside work areas. FPPR Sec 35(3)(c) maximum of 25% soil disturbance of the area covered by roadside work applies.							

RESERVE / RETENTION INFORMATION

WTRA / WTP (INSIDE OR ATTRIBUTED TO THE BLOCK)						
I.D.#	Area	Description				
WTRA	6.2	The WTRA adopted adjacent to HW208 is similar to the stand characteristics of the harvest area. The species composition of the WTRA consists of Fdc(56%), Hw(29%) and Dr(15%) at 800 sph and on average 22.6m tall. The average age is 56 years old, crown closure is estimated to be 65% and site index is 23.				
OTHER RESERVE AREAS (INSIDE OR ATTRIBUTED TO THE BLOCK)						
I.D.#	Area	Description				
RET	0.7	<p>There are two internal retention patches in HW208 totalling an area of 0.7ha.</p> <p>The species composition of the retention patch "A" in HW208 consists of Cw (50%), Dr (40%) and Hw (10%) at 100 sph and on average 12m tall. The average age is 56 years old, crown closure is estimated to be 20% and site index is 12.</p> <p>The species composition of the retention patch "B" in HW208 consists of Fdc (56%), Hw (26%) and Dr (15%) at 800 sph and on average 22.6m tall. The average age is 56 years old, crown closure is estimated to be 65% and site index is 23.</p>				
GROUP WTRA / WTP AND SITE DEG. CALCULATION (to be retained on the first block of the Permit only)						
Block	Gross Cutblock Area	WTRA / WTP	%	BEC	Perm Access	%
HW208	43.8	6.2	14.2	CWH/dm/	3.6	8.2
Total # of Blocks: 1	43.8	6.2	14.2		3.6	8.2

SUPPORTING INFORMATION

HLP/FSP CONSIDERATIONS
Wildlife/Endangered Species Comments
<p>Oregon Spotted Frog: The recovery Strategy for Oregon Spotted Frog (2015) identifies Unnamed streams in HW208 as critical habitat. HW208 is above 260 M ASL and is consistent with Criteria 1 and 2 of the Recovery Strategy. In respect of the Recovery Strategy for the Oregon Spotted Frog SARA Sec 44.</p> <p>A) HW208 is consistent with Criteria 1 and 2 of the Recovery Strategy for the Oregon Spotted Frog: (1) HW208 is not located in occupied habitat (Criteria 1) (2) HW208 is not located in suitable or connecting habitat (Criteria 2)</p> <p>B) HW208 is consistent with Criteria 3a of the Recovery Strategy for the Oregon Spotted Frog (1) HW208 is located above 260M ASL (Criteria 3a) C) HW208 is consistent with Criteria 3 of the Recovery Strategy for the Oregon Spotted Frog. All other areas that are required to maintain the attributes of the Oregon Spotted Frog (i.e., the quality and quantity of water). (1)Criteria 3c - a strip of area 30M wide on each side of identified streams and watercourse</p> <p>Other Strategies to ensure the maintenance of attributes of the Oregon Spotted Frog's habitat (ie, the quality and quantity of water) Criteria 3c - a strip of area 30M wide on each side of identified streams and watercourses. Management for very high and high threats; Recovery Strategy for Oregon Spotted Frog, Sec 4.2.1. Management for Pollution; fuel. A. Follow BCTS ISO 14001-2004 a. Fuel Handling Procedures #06 b. Fuel Handling Environmental Field Procedure #06 c. Spill Kit d. Emergency Response Plan i. Spill Preparedness and Response ii. Spill Reporting Criteria</p> <p>B. Silviculture - Site Preparation; piling and burning a. Do not pile within 10 Lin M of any stream or watercourse b. Pile on low side of roads away from ditchlines c. Do not use fuel accelerants for ignition of slash piles in HW208 i. Propane burners are acceptable for ignition and fire control.</p> <p>Management for Insecticides; glyphosphates; A. No aerial spraying of herbicides in HW208 B. Use only stem treatment applications for brush control in HW208</p> <p>Management for sediment: A. New location of roads outside of RMZ and active stream spectrum; FN1280 Station 0+640 to 0+799 consistent with FPPR Sec 50(1). B. Install cross drain culverts strategically to exit ditch water to forest floor dissipation: a. FN1200 Station A37:1 b. FN1200 Station A35 c. FN1200 Station A46:1 d. FN1280 Station 0+147 e. FN1280 Station 0+319 f. FN1280 Station 0+671 g. FN1283 Station 0+005 C. Utilize identified stream crossings for harvest activities D. Maintain 5M machine free zones on all identified watercourses. E. Rainfall shutdown guidelines limit to a maximum of 25mm soil moisture for ground based harvesting operations in HW208. F.Utilize grass seeding for exposed soils and cut/fill slopes in HW208; seed immediately after harvesting consistent with Chinook BA's invasive Plant BMP.</p> <p>Pacific Water Shrew: The recovery Strategy for Pacific Water Shrew identifies critical habitat in the Wolf Lake drainage tributary to Morris Lake. Block HW208 contains upland S5 and S6 ephemeral streams at 500M to 820M ASL and not likely directly tributary to identified PWS habitat. Waterways not included in defined critical habitat are managed for Oregon Spotted Frog utilizing FPPR stream protection regulations.</p> <p>Spotted Owl: This block is not located within established Spotted Owl SRMZ or Matrix Activity Center. No Spotted Owl nests were identified during field layout activities.</p> <p>Coastal Tailed Frog: There are no areas spatially indentified and set aside in the Chilliwack Forest District in regards to the Coastal Tailed Frog. Coastal Tailed Frog is not known to be present in HW208.</p> <p>Black tailed or Mule Deer: HW208 is not located within established or draft Deer Winter Range for Black Tailed or Mule Deer. Mountain Goat: HW208 is not located within and is not adjacent to established Goat Winter Range.</p>
Range Comments
<p>There are no range areas within or adjacent to HW208.</p>
Fisheries Comments
<p>All lakes and streams within and adjacent to this development were classified as per sections 47and 49 of the FPPR by Dunham and Associates.</p>
Watersheds/Hydro Assessments Comments
<p>HW208 is not located within a Community Watershed. This level of harvesting represents a low level of hydrologic hazard.</p>
Sensitive Areas Comments
<p>HW208 does not overlap FSP Sensitive areas.</p>
Recreation Comments
<p>BCTS Staff is responsible for liasing and developing plans to ameliorate impacts to established or designated trails, particularly the Hemlock Valley ATV trail that utilizes the old FN1200 roadway to connect to Simms Creek. The ATV rated bridge is to be removed and placed closeby on a pad that will enable recovery and/or reinstallation post-harvest. Recreation communications with the ATV Club and/or custodians of the ATV trails and structures is not known to this Forester. Similar to Cultural and First Nations consultation, BCTS Planning Staff may be the resource for Recreation planning interactions.</p>
Cultural Heritage Comments
<p>HW208 aligns with the advice set out in the S'olh temexw Use Plan Policy (STUP). HW208 is located within "Resource Harvesting" and "Spiritual Practice" areas as identified during referral with the PPRO. Forestry activities proposed under this plan should not prevent Sto:lo members access when performing resource harvesting and/ or spiritual practice activities. Additionally, road reconstruction/construction, when complete, on in-block and related road systems should enhance access for such activities in the area. Signage to warn, inform and redirect potential users of industrial activity should be installed when and where appropriate.</p>
Biodiversity Emphasis/L.U. Comments
<p>HW208 is consistent with R/S CHC-3007, CHC-3008, CHC-3009 and CHC-3010 for biodiversity in the BCTS Chilliwack FSP #643.</p>
Other Resources Comments

ADDITIONAL COMMENTS:

ADMINISTRATION

Amendment number	Date Typed (Yr Mo Dy)	Map Required?
ORIGINAL	2018 03 28	YES

HARVEST PLAN

ORIGINAL

LICENCE #	CP	BLOCK	UBI	OPENING NUMBER	FDU	LOCATION	LATITUDE / LONGITUDE
A94685	-	HW208	BB2WX		West Harrison	Weaver Lake	49 22 04 / 121 52 42

SILVICULTURE SYSTEMS

SU	SYSTEM	VARIANT	PHASE	RESERVE	Min BA (m2/ha)	Min Residual Density (sph)
1	CCRES		REMOV	G		
Current Stand Structure/Site Conditions			The species composition of the pre-harvest stand consists of Fdc(56%), Hw(31%) and Cw(13%) at 954 sph and on average 22.6m tall. The average age is 56 years old, crown closure is estimated to be 70% and site index is 23. The site is dominated by salal and vaccinium parviflorum; Vine maple is present. Classification: CWH dm 01(70)/03(30).			
Silviculture Systems SU Comments						
Min. Characteristics of Leave Trees (Form, Health, Vigour)			There are no leave trees planned for this opening.			

Additional Comments

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SOIL ASSESSMENT											
SU	HAZARD RATINGS			SOIL DISTURBANCE				SOIL CHARACTERISTICS			
	Soil Comp.	Soil Erosion	Soil Disp.	Max Allow Soil Dist %	Max Allow Max Amount TAS may exceed MASD prior	Max Allow Perm Access Structures %	MASD for Roadside work areas %	Depth to Unfavorable Subsoil		Type of Unfavorable Subsoil	Sediment Delivery Risk (Comm. Watershed)
								Min (cm)	Max (cm)		
1	H	H	M	5.0	25.0	8.3	25.0	10.0	60.0	Parent Material	
SU	Critical site conditions that affect the timing of operations and how they affect the timing										
1											

SU MANAGEMENT COMMENTS	
SU	SU Description
1	HW208 occurs in the dry sub maritime Coastal Western Hemlock variant in the Weaver Lake drainage in the West Harrison area. Forest cover of SU 1 consists of a 60 year old second growth Fdc (56%), Hw(26%) and Cw(13%). The block is located on upland terrain 500 to 820M ASL in the Weaver Lake Drainage. Aspect is Southerly, drainage in coarse colluvium is excellent. Surface streams are evident with many headwatering in or close to the upper block boundary. Soils are Blocky Sandy Loam thin in spots due to numerous rock outcrops. LFH layers are relatively shallow due to past harvesting and fire history. Soils are brown with moderate nutrients (C/D), rooting depths vary to 30+ cm. Frequent areas of rubble overlay will inhibit spacing. The site is dominated by salal and vaccinium parviflorum; Vine maple is present. Classification:CWH dm 01(70)/03(30). Upper portions of HW208 FL 59 to FL84 is identified on Mapview as CWH vm1. The characteristics of the site correspond to dm. South east aspect combined with summer drying in a climate change dynamic of warming serve to support this site as dm for the purpose of adopting a stocking standard.

SOIL MANAGEMENT COMMENTS	
Soil Conservation	
HW208 soils are classified as Sensitive. FPPR Sec 35(3)(a) applies; soil disturbance maximum of 5% of the area covered by the SU excluding roadside work areas. FPPR Sec 35(3)(c) maximum of 25% soil disturbance of the area covered by roadside work applies.	
Temporary Access	
TAS is allowed up to 5% site disturbance. All TAS is to be deactivated concurrent with harvest activities. TAS crossings of any watercourse is to be constructed from clean non-soil material to protect streambed features and is to be removed post harvest concurrent with harvest activities.	
Slope Instability	
A Terrain Stability Hazard Assessment (TSHA) was completed March 1, 2018. HW208 is consistent with the recommendations provided in the TSHA. Consistent slopes in block HW208 do not exceed 50%, there is a low likelihood of post-harvest landslide occurrence.	

RIPARIAN ASSESSMENTS					
Management Strategies					
Fall away and yard away techniques are to be implemented on all streams within HW208, where possible. Retain as much brush, understory and deciduous along the stream edge and within the stream channel as possible. If a tree cannot be felled away from the stream, fall it directly across the stream bridging the stream banks. Do not buck or limb within the stream banks. No machine traffic is permitted within 5m of the creek channel. If excessive debris enters the creek channel, it will need to be removed concurrent with harvesting. Use designated crossings for ground- based harvesting. Deactivate temporary crossings upon completion of harvesting.					
Riparian I.D. and Class	RMA	SU	WIDTH (m)	BA or SPH Retained	Comments (Indicate if in a Community Watershed)
2, 3, 4, 6, 7, 8, 8A, 10, 10A, 11, 12, 13 S6	RMZ	Ext	20.0		Fall away and yard away techniques are to be implemented on all streams and retain as much brush, understory and deciduous along the stream edge and within the stream channel as possible. If a tree cannot be felled away from the stream, fall it directly across the stream bridging the stream banks. Do not buck or limb within the stream banks. No machine traffic is permitted within 5m of the creek channel. Use designated crossings for ground- based harvesting. Deactivate temporary crossings upon completion of harvesting. Directionally handfall timber full length to bridge across Stream 8 and Stream 8A and yard full length to maintain channel integrity.
1, 5, 9 S5	RMZ	SU1	30.0		Fall away and yard away techniques are to be implemented on all streams and retain as much brush, understory and deciduous along the stream edge and within the stream channel as possible. If a tree cannot be felled away from the stream, fall it directly across the stream bridging the stream banks. Do not buck or limb within the stream banks. No machine traffic is permitted within 5m of the creek channel. If excessive debris enters the creek channel, it will need to be removed concurrent with harvesting. Use designated crossings for ground- based harvesting. Deactivate temporary crossings upon completion of harvesting.

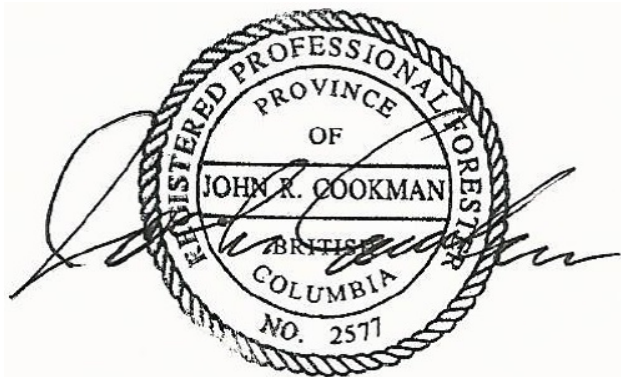
COARSE WOODY DEBRIS MANAGEMENT STRATEGY INFORMATION		
Retain a minimum of 4 logs per hectare, each being a minimum of 5M in length and 30cm at one end per FPPR Sec 68(1)(a). Debris may be retained as waste logs in piles.		
Performance Std. (%) :	Block Target (%):	Coarse Woody Debris (m3/ha):

DEFINITIONS

ADMINISTRATION

Amendment number	Date Typed (Yr Mo Dy)	Map Required?
ORIGINAL	2018 03 28	YES

Print off the PAS/TAS table located as an attachment on the Block Details Screen and attach to this prescription.

RPF PRINTED NAME	RPF'S SIGNATURE and SEAL
John Cookman	
DATE SIGNED	
2018/03/28	
I certify that the work described herein fulfils standards expected of a member of the Association of British Columbia Forest Professionals, and that I did personally supervise the work.	

SILVICULTURE PLAN

ORIGINAL

LICENCE #	CP	BLOCK	UBI	OPENING NUMBER	FDU	LOCATION	LATITUDE / LONGITUDE
A94685	-	HW208	BB2WX		West Harrison	Weaver Lake	49 22 04 / 121 52 42

ECOLOGICAL INFORMATION

SU	Ecology Unit	Area	Zone	Subzone	Variant / Phase	Site Series (series - %)	Elevation Avg (m)	Slope Avg (%)	Aspect	Slope Position	Rooting Depth (cm)	Soil Texture
1	A	33.3	CWH	dm		01-70 03-30	660		S	Middle Slope	30	

STOCKING REQUIREMENTS				
ASSESSMENT DATES				
Standard Unit	Standards ID	Regen Delay (yrs)	Freegrow Early (yrs)	Freegrow Late (yrs)
1	1055470	3		20
Min/Max Elevation Regime: 500 / 820				

SU : 1 REGENERATION LAYER									
PREFERRED SPECIES			ACCEPTABLE SPECIES			POST SPACING DENSITY(sph)		MAX CONIFEROUS (sph)	
Species		Min Ht. (m)	Footnotes	Species		Min Ht. (m)	Footnotes	Min	Max
Fdc Douglas Fir - Coastal		3.0		Pw Western White Pine		2.5		WELL SPACED TREES (sph)	
Cw Western Red Cedar		1.0		Hw Western Hemlock		2.0		Target Pref/Acc	Minimum Pref/Acc
								900	500
								Height Relative to Competition (%)	
								150	

OTHER REQUIRED STOCKING INFORMATION
SU1 - CWHdm 01/03
Site is dry and well drained. Brush is expected to become a problem, Planting of some shade tolerant Cw is recommended adjacent to standing timber edges and convex slopes adjacent to watercourses or where seepage is evident.
Plant 1+0 or older 412A or larger Fd (75%) and Cw (25%) @ 1200sph
SU1 - 33.34 ha NAR Fd = 900sph (30,006 seedlings) Cw = 300sph (10,002 seedlings)
Total Seedlings: 40,008
Planting Density: 1.5m inter-tree spacing allowable on site 03 rock outcrops or where soil depth is less than 5cm.
Season: Planting to be conducted during early spring post-snowmelt conditions; avoid planting during during low soil moisture conditions that occur during greater than 1 week without rainfall. Post May 31 planting is discouraged unless soil moisture is evident.
No Site Preparation is anticipated. Pile roadside accumulations and burn during low hazard conditions. Do not pile within 10 Lin M from watercourses. Use of accellerants not allowed for burning. Slash loading is anticipated to be low to moderate as block is second growth.

ACTIVITIES

PLANTING						
Planting(Container) 2021/05/01 SEASON:						
AREA	PLANTING UNIT	UNIT AREA	SPECIES	COMMENTS	STEMS / HA	TOTAL STEMS
33.3	1	33.3	Douglas Fir - Coastal		900	30006
			Western Red Cedar		300	10002
			LIMITING FACTORS / COMMENTS			

SILVICULTURE ACTIVITY COMMENTS	
ACTIVITY	COMMENT

MANAGEMENT STRATEGY

COARSE WOODY DEBRIS MANAGEMENT STRATEGY INFORMATION		
Retain a minimum of 4 logs per hectare, each being a minimum of 5M in length and 30cm at one end per FPPR Sec 68(1)(a). Debris may be retained as waste logs in piles.		
Performance Std. (%):	Block Target (%):	Coarse Woody Debris (m3/ha):

ADMINISTRATION

Amendment number	Date Typed (Yr Mo Dy)	Map Required?
ORIGINAL	2018 03 28	YES

RPF PRINTED NAME	RPF'S SIGNATURE and SEAL
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