

Forest Stewardship Plan

2023-2028 A&A Trading (Haida Gwaii) Ltd.

Tree Farm Licence 58 and Forest Licence A16870 Haida Gwaii Natural Resource District FSP #685

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Purple text is added throughout the draft FSP to highlight sections where we expect additional edits will occur.

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1.0 INTRODUCTION

The Holder of this FSP, A&A Trading (Haida Gwaii) Ltd. (AAHG) is a private forestry company, a wholly owned subsidiary of A&A Trading Ltd. with operations on Haida Gwaii. AAHG holds two forest tenures, Tree Farm Licence (TFL) 58 and Forest Licence (FL) A16870. The company's office is located in Sandspit with a head office in Vancouver, British Columbia and satellite office in Campbell River, British Columbia. Principal activities include timber harvesting, road construction and silviculture. AAHG has no sawmilling or other secondary manufacturing facilities.

AAHG is committed to ecosystem-based management of the licenses through the implementation of the objectives outlined in the Haida Gwaii Land Use Objective Order (HGLUOO) and through the Forest & Range Practices Act (FRPA), other applicable Acts and associated regulations. In addition, AAHG has certified TFL 58 and FL A16870 to the Sustainable Forestry Initiative 2022 Forest Management Standard.

1.1 Forest Stewardship Plan Information

This Forest Stewardship Plan (FSP) covers Forest Development Unit (FDU) 1 and 2 located within the Haida Nation's Territory on Moresby Island, Haida Gwaii, British Columbia.

The FSP is a landscape level plan, which focuses on establishing results and strategies for conserving and protecting important Haida Nation cultural values, support for ecosystem integrity and providing environmental and human well-being benefits from forest management activities. The FSP states measurable or verifiable, enforceable results and strategies that are consistent with objectives set under the *HGLUOO* and the *FRPA* and associated regulations established by the Council of the Haida Nation and Province of British Columbia.

The published notice and 60-day public review and comment period required under section 20 of the FPPR is the primary referral process for notifying and seeking initial public input for the FSP but is not intended to be the only mechanism for Council of the Haida Nation and stakeholder input. AAHG is committed to ensuring open and transparent communications with the Council of the Haida Nation, individuals, public groups and communities on Haida Gwaii related to the company's forest management activities. Opportunities will be made available for the Council of the Haida Nation, stakeholders and interested parties to review and provide input into the company's forest management activities. AAHG's information sharing commitments with the Council of the Haida Nation are described in FSP strategy 4.2.9.. Opportunities for review and input from stakeholders and members of the public will include but not be limited to annual public and stakeholder engagement sessions in communities, review of operational plans for planned roads and cutblocks via community newsletters, information updates on the company's website and upon request meetings with Village Council's.

To ensure that the objectives under this FSP are achieved, AAHG will work collaboratively and in cooperation with other licensees as per the *updated (date to be added) Haida Gwaii FSP Implementation Agreement*, the Council of the Haida Nation and government in shared landscape units and watersheds covered by FDU 1 and FDU 2. Where formal agreements by the parties have not been initiated and signed, AAHG will apply proportional targets applicable to FDU 1 and FDU 2 and complete an analysis to ensure that the representative amount consistent with the objective is maintained.

As a means to address climate change AAHG will plant ecologically suited tree species consistent with the Provincial Chief Forester's Standards for Seed Use that are appropriate for existing and future sites conditions. This includes the sourcing and use of seed for growing seedlings that is adapted to ranging climatic conditions. Subtle genetic advantages of newly planted trees that have been grown from seed adapted to warmer conditions will ensure future forests are resilient to changing climate conditions. Seed that has been genetically modified will not be used. In addition, as an alternative to pile burning, block hazard assessments will consider making waste fibre available to the community of Sandspit for home heating as a means to displace the use of fossil fuels. The displacement of fossil fuels for home heating in favor of wood fibre that ordinarily would be burned in slash piles will result in a net carbon savings.

Through AAHG's Sustainable Forestry Initiative certification the company is also in the process of determining Scope 1 and Scope 2 emissions in an effort to reduce our corporate footprint and address climate change. Scope 1 covers direct emissions from owned or controlled sources and Scope 2 covers indirect emissions from the generation of purchased electricity, heating and cooling consumed by our company.

The current annual allowable cut (AAC) for TFL 58 is 99,000 m³ with a cedar partition of 10,000 m³ and the AAC for FL A16870 is 13,632 m³ with a cedar partition of 5,192 m³. The cedar partition allocation will change with changing AAC determinations.

AAHG will not harvest an amount of cedar, neither red and yellow cedar, in excess of the amount established through partition under section 8 of the Forest Act as set out by the Chief Forester for British Columbia in the Rationale for Allowable Annual Cut Determinations for Tree Farm Licence 58, Tree Farm Licence 60, and Timber Supply Area 25, effective October 27, 2020.

AAHG will adhere to a five-year sliding average partition calculation where in any given five-year period the amount of cedar harvested does not exceed 25,960 m³ for FL A16870 and 50,000 m³ for TFL 58 based on the current AAC determination. If the AAC is revised or the partition is rescinded or changes the allocated amount will be recalculated.

AAHG will reforest harvested areas with an amount of cedar, both red and yellow, consistent with FSP strategy 4.3.5.

1.2 Clarifications

In this FSP, where terms are used which are defined in the HGLUOO, FRPA or the FPPR, the definition of the term is as per the Order, Act or Regulation (e.g., "tree-length" and "intergovernmental process" are as defined in the HGLUOO). Where there is confusion or conflict between the HGLUOO, FPRA or the FPPR, the order of precedence is as follows: the HGLUOO, then the FRPA, and then the FPPR.

In this FSP, the below undefined terms will have the meaning as follows:

"practicable" is as intended in FRPA General Bulletin Number 3, dated June 9, 2005;

"integrity" is defined as, the state or condition of the feature or habitat has not been materially affected by the activity;

"sufficient" is defined as an amount or area that is adequate as determined through field assessment considering site specific conditions including risk associated with blowdown required to protect the integrity of the feature;

"marine interface zone" is the upper area of land, connected by a perennial or seasonal stream that is a Type 1 fish habitat, between the high tide line and an area inland that is influenced by the sea, sometimes referred to as the "back shore zone" that is dominated by terrestrial species like forests and land animals.

"tree-length" is used throughout the FSP with regard to the widths of reserve and management zones. Tree-length is as defined in the HGLUOO, and the associated HGLUOO Schedule 5. AAHG will use the field verified predominant biogeoclimatic unit site-series adjacent to the feature to determine tree length referencing HGLUOO Schedule 5 column A or column B. "Adjacent area" must include an area at least equal to the distance of the final tree length buffer assigned.

Unidentified features, such as a Haida cultural, forest or heritage feature, wildlife feature, karst feature or other resource feature not previously identified through detailed survey will be managed upon discovery to the degree possible to requirements of the HGLUOO and/or applicable Act or Regulation. Harvesting and road construction crews are provided training in the identification of features and follow AAHG standard operating procedures in the event a previously unidentified resource feature is discovered during operations.

2.0 APPLICATION, TERM AND COMMENCEMENT OF TERM OF THIS FSP

This FSP may be amended from time to time as required. Possible reasons for amendments include changes in land-use designations or regulations, changes to operating areas, adaptive management lessons learned, changing economic or market conditions and/or changes in forest management due to climate change. Amendments will be consistent with FPPR sections 29 and 30.

2.1 Application of this FSP (FRPA Section 3(4))

This FSP applies to AAHG and granted licence TFL 58 and Forest Licence A16870 and each cutting permit and road permit issued to the Holder after the approval date of this FSP and under those licenses.

2.2 Date of Submission

The date of submission of this Forest Stewardship Plan is XXX XX, XXXX (the "Date of Submission").

2.3 Term of this FSP (FRPA Section 6(1)(a))

The term of this FSP is 5 years from the approval date.

2.4 Commencement of Term (FRPA Section 6(1)(b))

The term of this FSP commences on the approval date of this FSP as specified by the delegated decision maker (DDM).

3.0 FOREST DEVELOPMENT UNITS

3.1 Forest Development Units in Effect on Date of Submission (FPPR Section 14(1)(b)

The FSP Maps in Appendix 2 at 1:40,000 scale provide an overview of the FSP area including FDU 1 and FDU 2 that are in effect under the approved FSP (FPPR section 14(1)(a) and 14(1)(b)).

3.2 Forest Development Unit (FDU) Designations

FDUs identify areas of planned development activities during the term of the FSP. There are two FDUs (FDU 1 and FDU 2) included under this FSP.

Management Unit	Landscape Units or portion of within Forest Development Unit 1	Description of FDU
Forest Development Unit 1 (FDU 1)	Skidegate Lake	FDU 1 includes all of the operating area under TFL 58.
Forest Development Unit 2 (FDU 2)	Honna and Gudal	FDU 2 is located within the Haida Gwaii Timber Supply Area (TSA 25)

3.3 Maps

The FSP Maps are included in Appendix 2.

3.4 Roads and Cutblocks with Assessments Complete

There are no cutblocks or roads within this FSP that are considered approved under section 196(1) or (2) of the FRPA, or that are referred to in section 110 of the FPPR.

3.5 Designations in Effect before Submission of this FSP

The FSP map shows the designations and other areas listed in FPPR section 14(3) that were in effect on the date the FSP was submitted for approval. Parks and conservancies are excluded from the FSP. Other areas excluded from the FDU area are clearly indicated on the map as not being included.

Designations in effect at the time of submission are:

Type of Designation in FDU 1 or FDU 2	Date Designated and comments
FPPR Section 14(3)(b)	None designated
Wildlife Habitat Areas	
FPPR Section 14(3)(c)	None designated
Fisheries Sensitive Areas	
FPPR Section 14(3)(d)	None designated
Lakeshore Management Areas	
FPPR Section 14(3)(e)	Scenic Areas and associated VQOs established for TSA and TFLs consolidated
Scenic Areas	and mapped, December 22, 2005.
FPPR Section 14(3)(f)	None designated
Identified L1 Lakes	
FPPR Section 14(3)(g)	None designated
Community Watersheds	
FPPR Section 14(3)(h)	Not applicable
Old Growth Management Areas	
FPPR Section 14(3)(i)	As shown on the FSP Map
Area in which commercial timber harvesting is prohibited by another enactment	
FPPR Section 14(3)(j)	The FSP map shows the cutting permits and road permits held or applied for by A&A Trading (Haida Gwaii) Ltd. before and on the date of FSP approval.
Recreation Sites & Trails	None designated

4.0 UNDERTAKINGS, RESULTS AND STRATEGIES

4.1 Non-Spatial Old Growth Order

A Non-Spatial Old Growth Order effective June 30, 2004 establishes landscape units, biodiversity emphasis and objectives in the province. FDU 1 and FDU 2 under this FSP are within the area to which the HGLUOO, dated December 17, 2010 and amended April 2, 2014 and September 21, 2017 apply, therefore a result/strategy in respect of the Order Establishing Provincial Non- Spatial Old growth Objectives is no longer required in this FSP.

4.2 Objectives Prescribed Under FRPA Section 149

Objective set by government for Soils			
Regulation	FPPR Section 5		
Objective	The objective set by government for soils is, without unduly reducing the supply of timber from British Columbia's forests, to conserve the productivity and the hydrologic function of soils.		
Practice Requirement Default for FDU 1 and FDU 2	The Holder of this FSP will comply with the legislated requirements setting limits for soil disturbance (section 35 of FPPR) and for permanent access structures (section 36 of FPPR).		

4.2.1 Objectives set by government for soils (FPPR Section 5)

4.2.2 Objectives set by government for timber (FPPR Section 6)

Objective set by go	overnment for Timber		
Regulation	FPPR Section 6		
Objective	 Maintain or enhance an economically valuable supply of commercial timber from British Columbia's forests, 		
	(2) Ensure that delivered wood costs, generally, after taking into account the effect on them of the relevant provisions of this regulation and of the Act, are competitive in relation to equivalent costs in relation to regulated primary forest activities in other jurisdictions, and		
	(3) Ensure that the provisions of this regulation and of the Act that pertain to primary forest activities do not unduly constrain the ability of a holder of an agreement under the Forest Act to exercise the holder's rights under the agreement.		
The Holder is exempt as per FPPR Section 12(8)			

Objective set by government for		Wildlife
Regulation	FPPR Section 7	
Objective and related legislation	(1) The objective set by government for wildlife is, without unduly reducing the supply of timber from British Columbia's forests, to conserve sufficient wildlife habitat in terms of amount of area, distribution of areas and attributes of those areas, for	
	(a) the survival of species at risk,	
	(b) the survival	of regionally important wildlife, and
	(c) the winter s	urvival of specified ungulate species.
	(2) A person required to prepare a forest stewardship plan must specify a result or strategy in respect of the objective stated under subsection (1) only if the minister responsible for the Wildlife Act gives notice to the person of the applicable	
	(a) species referred to in subsection (1), and	
	(b) indicators of the amount, distribution and attributes of wildlife habitat described in subsection (1).	
	in whole or in part, by or an ungulate winter in habitat feature, the minexempt a person from	objective set out in subsection (1) is addressed, an objective in relation to a wildlife habitat area range, a general wildlife measure, or a wildlife nister responsible for the Wildlife Act must the obligation to specify a result or strategy in e set out in subsection (1) to the extent that the idressed.
		ber 31, 2004, a notice described in subsection east 4 months before the forest stewardship plan val
The Notice given under the authority of section 7(2) of the FPPR issued on December 30, 2004 was cancelled on January 5, 2011. The cancellation Notice removes the obligation of the Holder to specify a result or strategy in relation to the objective set out in section 7(2) of		

4.2.3 Objectives set by government for wildlife (FPPR Section 7)

4.2.4 Objectives set by government for water fish, wildlife and biodiversity in riparian areas (FPPR Section 8)

Objective set by government for		Water, Fish Wildlife and Biodiversity in Riparian Areas
Regulation	FPPR Section 8	

the FPPR.

Objective	The objective set by government for water, fish, wildlife and biodiversity within riparian areas is, without unduly reducing the supply of timber from British Columbia's forests, to conserve, at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas.
Practice Requirement Default for FDU 1 and FDU 2	When constructing a road or harvesting timber under this FSP, the Holder undertakes to comply with section 47, 48, 49, 50, 51, 52(2), and 53 of the FPPR. Where the HGLUOO applies (e.g. Type 1 Fish Habitat and Type 2
	Fish Habitat), the HGLUOO will take precedence over section 47, 48, 49, 50, 51, 52(2), and 53 of the FPPR.

	Retention of Trees in a Riparian Management Zone FPPR s.12(3)
Strategy for FDU 1 and FDU 2	(1) In respect to sections 8 and 12(3) of the FPPR, to address the retention of trees in a riparian management zone (RMZ), the Holder of this FSP will:
	 (a) Ensure that prior to harvesting; retention levels within the RMZ's are determined by a Qualified Professional through a riparian assessment that considers: i) All of the factors listed in Schedule 1, section 2 of the FPPR as that section was on the date of submission of this FSP and; ii) potential site specific safety issues. (b) Design cutblocks and roads in a manner that is consistent with the retention levels as determined by a Qualified Professional as described in (a). (c) Plan and conduct primary forest activities consistent with the results and recommendations of the assessment (a) and design (b).

4.2.5 Objectives set by government for fish habitat in fisheries sensitive watersheds (FPPR Section 8.1)

Objective set by government for		Fisheries Sensitive Watershed
Regulation	FPPR Section 8.1	
No fisheries sensitive watersheds continued under section 180(f) or section 180(g) exist within the area under the FSP.		

4.2.6 Objectives set by government for water in community watershed (FPPR Section 8.2)

 Objective set by government for	Community Watershed	
	10	

Regulation	FPPR Section 8.2
0	nated community watersheds under this FSP. The Holder of this of this or construct road within a designated community watershed.

4.2.7 Objectives set by government for wildlife and biodiversity (FPPR Sections 9 & 9.1)

Objective set by go	vernment for	Wildlife and Biodiversity
Regulation FPPR Section 9 and 9		.1
Objective	Objectives set by gove level – Objective 9	ernment for wildlife and biodiversity - landscape
	landscape level is, wit British Columbia's fore areas on which timber	overnment for wildlife and biodiversity at the hout unduly reducing the supply of timber from ests and to the extent practicable, to design harvesting is to be carried out that resemble, porally, the patterns of natural disturbance that cape.
	Objectives set by gove – Objective 9.1	ernment for wildlife and biodiversity - stand level
	stand level is, without	overnment for wildlife and biodiversity at the unduly reducing the supply of timber from ests, to retain wildlife trees.
Practice Requirement Default for FDU 1 and FDU 2		will undertake to comply with the default outlined in section 64, 65, 66 and 67 of the
Other commitments	including guidance on (WTRAs) is provided i – Guidelines for Mana possible WTRAs will n such as the protection Traditional Forest Fea AAHGs intent to overla	direction around stand level biodiversity establishing Wildlife Tree Retention Areas n the FSP Supporting Document, Appendix 2 ging Stand Level Biodiversity. Where naximize overlap with other resource values of Western yew tree patches, Haida tures and aquatic habitat reserves. It is not ap stand level biodiversity with areas tection of landscape level biodiversity (e.g.

4.2.8 Objectives set by government for visual resources (GAR 7(2))

Objective set by government for	Visual Resources	
Subjective set by government for		

Regulation and Objectives	Scenic Areas and corresponding Visual Quality Objectives were established (mapping consolidated for TSA and TFLs) on December 22, 2005.
Result for FDU 1 and FDU 2	 The Holder will, when constructing a road or harvesting timber in a scenic area established through GAR s.7(2) on December 22, 2005, do so in a manner consistent with:
	 (a) the established Visual Quality Objective (VQO) for visual quality polygon(s) in a scenic area using good visual design and be assessed at the landform scale; and (b) follow the guiding principles outlined in the Haida Gwaii Natural Resource District Manager Policy: Management of Visual Quality Objectives, dated April 17, 2013; and (c) adjacent to mainline roads incorporate where possible practices such as screening (e.g. leaving non-merchantable trees and vegetation along the roadside), not piling debris close to the roads, prompt planting and ensuring that harvested areas when completed are tidy in appearance.
	(2) For the purpose of section (1) of this strategy, the visual quality polygons are those identified as scenic areas on the FDU map that forms a part of this FSP.

4.2.9 Objectives set by government for cultural resources (FPPR Section 10)

Objective set by go	vernment for	Cultural Resources
Regulation and Objectives	The objective set by government for cultural heritage resources conserve, or, if necessary, protect cultural heritage resources th	
	(a) the focus of a tradi continuing importance	tional use by an aboriginal people that is of to that people, and
	(b) not regulated unde	r the Heritage Conservation Act.
Strategy for FDU 1 and FDU 2	(1) During the term of this FSP, the Holder will communicate regularly with the Council of the Haida Nation's Heritage and Natural Resource Department (HNRD) and as a minimum, the Holder will request:	
		meetings to share:
		aps (called an Annual Public Engagement Map) of the Holder's areas of interest for the following
	ii) a shapefile	containing shapes for all of the Holder's areas of he following year;
		of the completed and active projects within FDU 2 from the previous year;
		of planned and proposed activities within FDU 1 for the following year;
	v) work to ider and concerr	tify, understand and discuss respective interests is; and
	vi) ask the HNF	RD whether or not they wish to see detailed described in section (2) of this strategy.

	(b) Information Sharing meetings prior to permit submission to share:
	 an information sharing package that supports each Road Permit, Cutting Permit, Special Use Permit, and Licence of Occupation that will be submitted to the Solutions Table for
	approval containing:
	 a description of the proposal,
	• a map,
	 a shapefile,
	 applicable assessments including but not limited to:
	 Cultural Feature Identification Survey Archaeological Assessment
	 Stream Classification Assessment
	 Visual Impact Assessment
	 Wildlife Assessment
	 Active Fluvial Unit Assessment
	 Terrain Stability Assessment
	 Gully Assessment
	 Windthrow Assessment
	 Marine Assessment,
	Intergovernmental Process Package including
	Erosion Control Plan and Adaptive Managemen Plan if applicable;
	ii) an overview of the contents of the information sharing
	package;
	iii) work to identify, understand and discuss respective interest
	and concerns; and
	iv) ask the HNRD whether or not they wish to see detailed
	follow-up as described in section (2) of this strategy.
(2)) If requested by the HNRD under section 1(a)(vi) or section 1(b)(iv) of this strategy, before submitting applications to the Solutions Table, the Holder will make all reasonable efforts to provide any
	requested detailed follow-up information to the HNRD. Detailed follow up information may include:
	(a) a field visit with HNRD staff;
	(b) meeting(s) with designated representatives of the HNRD to
	review and discuss further details on planned and proposed
	activities including strategies adopted to address identified
	concerns; and
	(c) if required, modifying or adjusting planned and proposed forest
	development activities to address the identified new information interests and concerns.
(3)) All Solutions Table submissions will include a summary of the
	engagement process, including the date, participation and method
	of any applicable communication and a description of identified issues and how they were resolved.
(4)) In the event that the meetings have not occurred, the Holder will
	prepare a summary of the efforts made to meet and/or review the

information and provide the summary described in section (3) of this strategy along with the application to the Solutions Table and the designated representatives of the HNRD.
(5) If during the term of the FSP the HNRD wishes to enter into a Protocol Agreement with the Holder, the Holder will undertake to work with the HNRD to develop such an agreement. Once signed by both parties the Protocol Agreement will replace this strategy.

4.3 Haida Gwaii Land Use Objectives Order

The following strategies address the HGLUOO, dated December 17, 2010 and amendments dated April 2, 2014 and September 21, 2017. References to sections and subsections in the results and strategies refer to the HGLUOO unless otherwise specified. For example, "The Holder will comply with the reporting requirements outlined in section 5(8)" does not include a specification and therefore it is referring to the HGLUOO. Where as, "The Holder will comply with the reporting requirements outlined in section 5(8) of this strategy" does include a specification; it specifies that the reference is to section 5(8) of the applicable strategy.

HGLUOO Part 2 - Cultural Objectives

Objective 3	(1) Maintain cedar stewardship areas to provide a supply of cedar for present and future cultural use.
	(2) Despite subsection (1), up to 10% of the total area of cedar stewardship areas may be harvested for commercial purposes, of which up to 250 hectares may be harvested in a 10 year period, provided that:
	(a) an intergovernmental process is completed;
	(b) cultural values within the specific cedar stewardship area proposed for harvesting are identified in accordance with section 4 (Objectives for cultural feature identification); and
	(c) the distribution of harvest is proportional to the occurrence of cedar stewardship areas within a given landscape unit.
Strategy for FDU 1 and FDU 2	1. The Holder will not harvest in Cedar Stewardship Areas (CSA) as identified in the HGLUOO, Schedule 3.

4.3.1 Objective for cedar stewardship areas (HGLUOO Objective 3)

4.3.2 Cultural feature identification (HGLUOO Objective 4)

Objective 4	(1) Identify cultural features referred to in sections 5, 6 and 9 by conducting a field assessment prior to undertaking road construction or timber harvesting. The field assessment is to be completed by a person who has been certified by the Council of the Haida Nation.
Strategy for FDU 1 and FDU 2	(1) Prior to commencing timber harvesting or road construction activities in a development area, the Holder will ensure that a Cultural Features Identification Survey has been completed by a surveyor certified by the Council of the Haida Nation and if required through survey results or by Qualified Professional an archaeological impact assessment for the proposed development area will be completed. The results of both surveys will be provided to the HNRD a minimum of 30 days prior to submitting an application to the Solutions Table for approval and be included as part of the application package.

4.3.3 Haida traditional heritage features (HGLUOO Objective 5)

Objective 5	(1) Protect all Class 1 Haida traditional heritage features.
	(2) Adjacent to Class 1 Haida traditional heritage features, maintain a reserve zone with a minimum width equal to 500 meters, measured from the edge of the Class 1 Haida traditional heritage feature, in order to protect that feature.
	(3) Despite subsection (2), the area of the reserve zone may be reduced, provided that:
	(a) an intergovernmental process is completed; and
	(b) the reduction is required for road access, other infrastructure, or to address a safety concern, and no practicable alternative exists.
	(4) Protect all Class 2 Haida traditional heritage features.
	(5) Adjacent to Class 2 Haida traditional heritage features, maintain a reserve zone with an average width equal to 100 meters, measured from the edge of the Class 2 Haida traditional heritage feature, in order to protect that feature.
	(6) Despite subsections (4) and (5), a Class 2 Haida traditional heritage feature or adjacent reserve zone may be altered, removed or reduced, provided that:
	(a) an intergovernmental process is completed; and
	(b) the alteration, removal or reduction is required for road access, other infrastructure, or to address a safety concern, and no practicable alternative exists.

	 (7) The width of the reserve zone for any one Haida traditional heritage feature may be decreased by up to 0.5 tree length from the outer edge of the reserve zone to address site specific values, provided there is no net loss of reserve zone area within the development area. (8) Haida traditional heritage features and reserve zones identified or retained in accordance with subsections (1) to (7) must be documented and submitted as digital spatial data at the end of each calendar year to the Council of the Haida Nation and the Province of British Columbia. (9) Where some or all of the forest within the reserve zones required for Class 1 and Class 2 Haida traditional heritage features has been previously altered or harvested, provide for the recruitment of mature forest and old forest in that reserve zone through natural processes and voluntary management intervention.
Strategy for FDU 1 and FDU 2	(1) The Holder will protect all Class 1 Haida traditional heritage features. A reserve zone consistent with the reserve zone width specified in section 5(2), subject to section 5(3), will be used to protect the integrity of all Class 1 Haida traditional heritage features.
	(2) The Holder will protect the integrity of all Class 2 Haida traditional heritage features with a reserve zone consistent with the reserve zone width specified in section 5(5), subject to sections 5(6) and 5(7).
	(3) For the purpose of being consistent with the Government Action Regulation, "Order to Identify a Karst Resource Feature", effective September 15, 2006, the Holder will complete a karst survey for areas mapped as having "karst potential" in the Reconnaissance Karst Potential Mapping spatial layer (BC Ministry of Research Branch, 2002) for Haida Gwaii or as shown on "Queen Charlotte Islands Karst Distribution" map, dated September 12, 2006, prior to submission of harvesting or road construction applications. Karst features identified through a karst survey completed by a Qualified Professional or identified during operations will be protected with a reserve zone consistent with the reserve zone width specified in section 5(5), subject to sections 5(6) and 5(7).
	(4) The Holder will comply with annual reporting requirements outlined in section 5(8).
	(5) The Holder will comply with the objective outlined in section 5(9) for the recruitment of mature and old forest in a reserve zone that has been previously altered or

	harvested.
4.3.4 Haid	a traditional forest features (HGLUOO Objective 6)
Objective 6	 Protect the integrity of all Class 1 Haida traditional forest features.
	(2) Adjacent to a Class 1 Haida traditional forest feature, maintain a reserve zone with an average width equal to 1.0 tree length, measured from the Haida traditional forest feature, in order protect the integrity of that feature.
	(3) Adjacent to reserve zones specified in subsection (2), maintain a management zone with an average width equal to 1.0 tree length, in order to protect the integrity of the reserve zone.
	(4) For the purposes of subsection (3), the width of the management zone in any one location may be decreased by up to 0.5 tree length from the outer edge of the management zone to address site specific values, provided there is no net loss of management zone area specified in subsection (3) within the development area.
	(5) Despite subsections (2), (3) and (4), and for the purpose of managing Class 1 Haida Traditional Forest Features, the area o the reserve zone and management zone may be modified, provided that:
	(a) an intergovernmental process is completed;
	(b) it is necessary for road access, other infrastructure, to address a safety concern, or to protect the Class 1 Haida traditional forest feature from windfall; and
	(c) an adaptive management plan is developed and implemented.
	(5.1) Despite subsection (1), a Class 1 Haida traditional forest feature may be altered or removed, provided that:

(a) an intergovernmental process is completed, and the alteration or removal is required for road access or other infrastructure and there is no practicable alternative.

- (6) Protect the integrity of a minimum of 50% of all Class 2 Haida traditional forest features that occur within a development area.
- (7) For the purposes of subsection (6), provide sufficient stand level retention to maintain the integrity of the Class 2 Haida traditional forest features.

(8) Despite subsection (7):

(a) maintain a minimum of 50% of Indian hellebore features in stand level retention, or;

	(b) maintain a minimum of 50% of Indian hellebore features, and:
	i. maintain directional falling away from the features;
	ii. retain non-merchantable trees around the features; and
	iii. maintain a machine-free zone around the feature.
	(8.1) Despite subsections (6), (7) and (8), a Class 2 Haida traditional forest feature may be altered or removed, provided that:
	 (a) the alteration or removal is required for road access or other infrastructure and there is no practicable alternative; and
	(b) an intergovernmental process is completed.
	(9) Haida traditional forest features, reserve zones, management zones and stand level retention required under subsections (1) to (8.1) must be documented and submitted as digital spatial data at the end of each calendar year to the Council of the Haida Nation and the Province of British Columbia.
	(10) Where some or all of the forest within the stand level retention, reserve zones and management zones required under subsections (2) to (8) has been previously altered or harvested, provide for the recruitment of mature forest and old forest through natural processes and voluntary management intervention.
Strategy for FDU 1 and FDU 2	(1) The Holder will protect the integrity of all Class 1 Haida traditional forest features, subject to section 6(5.1). Reserve and management zones consistent with sections 6(2) and 6(3), subject to sections 6(4) and 6(5), will be used to protect the integrity of all Class 1 Haida traditional forest features.
	(2) The Holder will protect the integrity of a minimum of 50% of all Class 2 Haida traditional forest features that occur within a development area, subject to section 6(8.1). Stand level retention, consistent with section 6(7) will be used to protect the integrity of Class 2 Haida traditional forest features, subject to section 6(8).
	(3) The Holder will comply with annual reporting requirements outlined in section 6(9).
	(4) The Holder will comply with the objective outlined in section 6(10) for the recruitment of mature and old forest that has been previously altered or harvested.

4.3.5 Western redcedar and yellow-cedar retention (HGLUOO Objective 7)

Objective 7	(1) Within development areas, retain a minimum of 15% of the combined pre-harvest composition of western redcedar and yellow-cedar with a minimum area of 1 hectare, where:
	(a) the development areas are greater than 10 hectares and the combined western redcedar and yellow-cedar component of pre-harvest stand composition is greater than 30%; or,
	(b) the development areas are equal to or less than 10 hectares and the combined western redcedar and yellow-cedar component of the pre-harvest stand composition is greater than 60%.
	(2) For the purpose of subsection (1), retain areas that are greater than 1 hectare in size and contain a range of diameters of western redcedar and yellow-cedar representative of the pre- harvest stands.
	(3) Where the pre-harvest western redcedar and yellow-cedar species composition is greater than 20% in the total harvested area, regenerate the area to establish a composition of western redcedar and yellow-cedar that are equivalent to the pre-harvest composition.
	(4) All areas retained in accordance with subsection (1) must be documented and submitted as digital spatial data at the end of each calendar year to the Council of the Haida Nation and the Province of British Columbia.
Strategy for FDU 1 and FDU 2	(1) In development areas the Holder will comply with the objectives for western redcedar and yellow-cedar retention.
	(2) For the purpose of complying with the objective the following processes will be followed:
	Cedar retention in development areas
	 i) Cedar retention area requirements will be calculated by summing the weighted western redcedar and yellow-cedar content for the contributing areas, in hectares, based on the inventory mapping for the applicable polygons.
	A cedar retention example is provided the FSP Supporting Document.
	Cedar regeneration requirements in development areas
	 i) Where development areas have pre-harvest cedar (western redcedar and yellow cedar) composition greater than 20% in the harvested area, as indicated in the cruise compilation (measured in percent of cedar sph, not including dead potential or dead useless), the Holder will regenerate the area according to the target and minimum post-harvest cedar composition listed below, subject to Section 3.

iii Post-	cutblock by cutblo regeneration requ multiplying the Ne Post-Harvest Ced below. The locatio (western redceda be at the discretio the pre-harvest st consistency with t	the cedar regenera e growing.	et and minimum ced ock will be calculate ested by the approp indicated in the tak and species select within the cutblock w g Forester, consider the site and ing standards. The rationale for their	lar d by riate ble ion <i>v</i> ill ring
Com				
		Target Post-	Minimum Post-	
	Pre-harvest Cedar Composition %	Target Post- Harvest Cedar Composition (sph)	Minimum Post- Harvest Cedar Composition (sph)	
	Pre-harvest Cedar	Harvest Cedar	Harvest Cedar	
	Pre-harvest Cedar Composition %	Harvest Cedar Composition (sph)	Harvest Cedar Composition (sph)	
	Pre-harvest Cedar Composition % 10-19	Harvest Cedar Composition (sph) 200	Harvest Cedar Composition (sph) 100	
	Pre-harvest Cedar Composition % 10-19 20-29	Harvest Cedar Composition (sph) 200 400	Harvest Cedar Composition (sph) 100 100	
	Pre-harvest Cedar Composition % 10-19 20-29 30-39	Harvest Cedar Composition (sph) 200 400 400	Harvest Cedar Composition (sph) 100 100 150	
	Pre-harvest Cedar Composition % 10-19 20-29 30-39 40-49	Harvest Cedar Composition (sph) 200 400 400 400	Harvest Cedar Composition (sph) 100 100 150 175	
	Pre-harvest Cedar Composition % 10-19 20-29 30-39 40-49 50-59	Harvest Cedar Composition (sph) 200 400 400 400 800	Harvest Cedar Composition (sph) 100 100 150 175 200	
	Pre-harvest Cedar Composition % 10-19 20-29 30-39 40-49 50-59 60-69	Harvest Cedar Composition (sph) 200 400 400 400 800 800	Harvest Cedar Composition (sph) 100 100 150 175 200 250	

4.3.6 Western yew retention (HGLUOO Objective 8)

Objective 8	(1) Within development areas, protect all western yew patches with stand level retention.
	(2) Despite subsection (1), western yew patches may be altered or removed to accommodate operational requirements for road and bridge construction, where no practicable alternative exists.
	(3) Where practicable, also include individual western yew trees in stand level retention that do not constitute a western yew patch.

	 (4) All areas retained or managed in accordance with subsections (5) to (3) must be documented and submitted as digital spatial data at the end of each calendar year to the Council of the Haida Nation and the Province of British Columbia.
Strategy for FDU 1 and FDU 2	 In development areas, the Holder will comply with the objectives for the protection of western yew tree patches in stand level retention, subject to section 8(2).
	(2) To address section 8(3), considering operational factors and safety, individual western yew trees will be maintained in stand level retention.
	Where it is not practicable to maintain individual western yew trees in stand level retention, the Holder, to the extent practicable considering operational factors and safety, will retain a minimum of 75% of the western yew trees identified in the development area.
	Individual yew trees that had to be cut due to operational factors or for safety reasons will be yarded to roadside and be made available to the Haida Gwaii Cultural Wood Access Program.
	(3) The Holder will comply with annual reporting requirements outlined in section 8(4).

4.3.7 Culturally modified trees and monumental cedar (HGLUOO Objective 9)

Objective 9	(1) Protect all cultural cedar stands to support the Haida Nation's present and future cultural use.
	(2) Protect all culturally modified trees to support the Haida Nation's present and future cultural use.
	(3) Protect all monumental cedar greater than 120 centimeters diameter at breast height to support the Haida Nation's present and future cultural use.
	(4) Despite subsections (1), (2) and (3), cultural cedar stands, culturally modified trees and monumental cedar may be altered or removed, provided that:
	(a) an intergovernmental process is completed;
	(b) the alteration or removal is required for road access, other infrastructure, or to address a safety concern, and no practicable alternative exists; and
	(c) any culturally modified tree or monumental cedar harvested will be provided to the Haida Nation.
	 (5) Monumental cedar not located within cultural cedar stands and not the size described under subsection (3), may be harvested provided that the greater of 10% or 1 monumental cedar is

retained within the development area, and it is confirmed through the intergovernmental process that:
(a) the monumental cedar is not required for a cultural cedar use; or
(b) harvesting the monumental cedar is required for road access, other infrastructure, or to address a safety concern, and the monumental cedar will be made available to the Haida Nation or other specific measures will be identified.
(6) For the purposes of subsections (1) to (5), adjacent to cultural cedar stands, culturally modified trees and monumental cedar that are protected or retained, maintain a reserve zone with a minimum width equal to 0.5 tree length.
(7) Despite subsection (6), the area of the reserve zone may be reduced, provided that:
(a) an intergovernmental process is completed;
(b) alteration or harvesting is required for road access, other infrastructure, or to address a safety concern, where no practicable alternative exists; and
(c) the integrity of the cultural cedar stand, culturally modified tree or monumental cedar is maintained.
(8) Adjacent to reserve zones specified in subsection (6), maintain a management zone with an average width equal to 1.0 tree length, in order to protect the integrity of the reserve zone, measured from the outer boundary of the reserve zone.
(9) Within the management zone specified in subsection (8), maintain or recruit, in the shortest possible timeframe, at least 90% of the forest as mature forest and old forest through natural processes and voluntary management intervention.
(10) Despite subsections (8) and (9), the area of the management zone may be reduced, provided that:
(a) an intergovernmental process is completed;
(b) the reduction is necessary to address operational constraints or a safety concern, and
(c) the integrity of the reserve zone is maintained.
(11) All areas retained or managed in accordance with subsections (1) to (10) must be documented and submitted as digital spatial data at the end of each calendar year to the Council of the Haida Nation and the Province of British Columbia.

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Strategy for FDU 1 and FDU 2	(1) In development areas, the Holder will protect all cultural cedar stands, culturally modified trees and monumental cedar > 120 cm diameter at breast height to support the Haida Nation's present and future cultural use, subject to section 9(4).
	(2) Monumental cedar not located within cultural cedar stands and not meeting the size criteria in section 9(3) can be harvested subject to the provisions outlined in section 9(5).
	(3) Reserve zone and management zones consistent with the reserve and management zone widths specified in section 9(6) and 9(8), subject to section 9(7) and 9(10) will be used to protect the integrity of cultural cedar stands, culturally modified trees and monumental cedar. Within the management zone, the Holder will maintain or recruit forest as mature and old forest, consistent with section 9(9) in the shortest possible timeframe.
	(4) The Holder will comply with annual reporting requirements outlined in section 9(11).
	(5) Monumental cedar harvested to allow for road access, other infrastructure or that has been determined to be a safety hazard by a qualified wildlife danger tree assessor or that is not located within a cultural cedar stand and is ≤ 120 cm diameter at breast height and approved for harvest following an intergovernmental process will be provided to the Haida Gwaii Cultural Wood Access Program. Procedures provided by the Haida Gwaii Cultural Wood Access Program and documented in the FSP Supporting Document will be followed to uniquely identify, mark, track and deliver monumental cedar trees to the program.

HGLUOO Part 3 – Aquatic Habitats

4.3.8 Objectives for Type I fish Habitat (HGLUOO Objective 10)

Objective 10	(1) Protect all forest within Type I fish habitat.
	(2) In the event of any inconsistency between the location of Type I fish habitat as shown on Schedule 4 and the actual location of Type I fish habitat identified in the field, the location of Type I fish habitat identified in the field shall apply.
	(3) Adjacent to Type I fish habitat, maintain a reserve zone with a minimum width of 2.0 tree lengths, measured from the outer edge of the Type I fish habitat.
	(4) Despite subsection (3), the width of the reserve zone in any one development area may be increased or decreased by up to 0.5 tree length measured from the outer edge of the reserve zone to address site specific values, provided there is no net loss of

	reserve zone area within the development area.
	(5) Despite subsections (3) and (4), within a development area, up to 5% of the total area of the reserve zone may be altered or removed, provided that:
	(a) the integrity of the Type I fish habitat is maintained; and
	(b) the alteration or removal is required for road and bridge construction, or to address a safety concern, and there is no practicable alternative.
	(5.1) Despite subsections (3) and (4), and in addition to subsection (5), the area of the reserve zone in a development area may be further altered or removed, provided that:
	(a) the alteration or removal is required for road and bridge construction, or to address a safety concern, and there is no practicable alternative;
	(b) an assessment of risk to the fish stream from the forest development and disturbance is completed by a qualified professional;
	(c) the integrity of the Type I fish habitat is maintained;
	(d) an adaptive management plan is developed and implemented; and
	(e) an intergovernmental process is completed.
	(6) Within a development area, up to 5% of the total area of the reserve zone may be altered or removed for purposes other than those referred to in subsection (5)(b), provided that an intergovernmental process is completed.
	(7) All areas retained, managed or varied in accordance with subsections (1) to (6) must be documented and submitted as digital spatial data at the end of each calendar year to the Council of the Haida Nation and the Province of British Columbia.
	(8) Where some or all of the forest within the Type I fish habitat and reserve zones required under subsections (1) and (3) has been previously altered or harvested, provide for the recruitment of functional riparian forest in the Type I fish habitat and reserve zones through natural processes and voluntary management intervention.
Strategy for FDU 1 and FDU 2	(1) The Holder will protect all forest within Type 1 fish habitat, consistent with reserve zone widths specified in section 10(3) and the requirements of section 10(8) to recruit functional riparian forest within the reserve zone, subject to sections10(4),10(5),10(5.1) and 10(6).
	(2) The Holder will comply with annual reporting requirements outlined in section 10(7).

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4.3.9 Objectives for Type 2 Aquatic Habitat (HGLUOO Objective 11)

Objective 11	(1) Protect all forest within Type II fish habitat.
	(2) In the event of any inconsistency between the location of Type II fish habitat as shown on Schedule 4 and the actual location of Type II fish habitat identified in the field, the latter shall apply.
	(3) Adjacent to Type II fish habitat, maintain a reserve zone with a minimum width of 1.0 tree length, measured from the outer edge of the Type II fish habitat.
	(4) Within a development area, up to 5% of the total area of the reserve zone may be altered or removed, provided the integrity of the Type II fish habitat is maintained.
	(5) Adjacent to reserve zones required under subsection (3), maintain a management zone with an average width of 0.5 tree length, to protect the integrity of the reserve zone.
	(6) Within a development area, the area of the management zone required under may be reduced by up to 20%.
	 (7) Despite subsections (3), (4), (5) and (6), the combined area of the reserve zone and management zone may be reduced further, provided that: (a) the alteration or removal is required for road and bridge construction, or to address a safety concern, and there is no practicable alternative;
	(b) an assessment of risk to the fish stream from the forest development and disturbance is completed by a qualified professional;
	(c) the integrity of Type II fish habitat is maintained;
	(d) an adaptive management plan is developed and implemented; and
	(e) an intergovernmental process is completed.
	(8) Areas retained, managed or varied in accordance with subsections (1) to (7) must be documented and submitted as digital spatial data at the end of each calendar year to the Council of the Haida Nation and the Province of British Columbia

Strategy for FDU 1 and FDU 2	 (1) The Holder will protect all forest within Type 2 fish habitat, consistent with reserve and management zone widths specified in section 11(3) and 11(5) and the requirements of section 11(9) to recruit functional riparian forest within the Type 2 fish habitat reserve zones, subject to sections 11(4), 11(6), and 11(7).
	(2) When establishing Type 2 fish habitat reserve and management zones, tree length will be determined using Schedule 5, column A and B of the HGLUOO. The predominate site series will be determined through field assessment by a Qualified Professional and be the dominate site series adjacent to the aquatic habitat feature.

4.3.10 Objectives for Active Fluvial Units (HGLUOO Objective 12)

Objective 12	(1) Protect all forest within active fluvial units.
	(2) Adjacent to the active fluvial units, maintain a management zone with a minimum width of 1.5 tree lengths, measured from the outer edge of the active fluvial unit, to maintain the integrity of the active fluvial unit.
	(3) Within a development area, the total amount of mature forest and old forest in the management zone may be reduced by up to 10%.
	(4) Despite subsection (3), within a development area, the total amount of mature forest and old forest in the management zone may be reduced by an additional 10%, provided that:
	(a) sufficient functional riparian forest is retained to protect the integrity of the active fluvial unit; and
	(b) an adaptive management plan is developed and implemented.
	(5) Areas retained, managed or varied in accordance with subsections (1) to (4) must be documented and submitted as digital spatial data at the end of each calendar year to the Council of the Haida Nation and the Province of British Columbia.
	(6) Where some or all of the forest within the active fluvial unit and management zone required under subsections (1) and (2) has been previously altered or harvested, provide for the recruitment of functional riparian forest in the active fluvial unit and management zone through natural processes and voluntary management intervention.
Strategy for FDU 1 and FDU 2	(1) The Holder will protect all forest within <i>active fluvial units</i> , consistent with the management zone width specified in section 12(2) and the requirements of section 12(6) to recruit

functional riparian forest within the active fluvial unit and management zone, subject to sections 12(3) and 12(4).
(2) When establishing the management zone adjacent to an active fluvial unit, tree length will be determined using Schedule 5, column A and B of the HGLUOO. The predominate site series will be determined through field assessment by a Qualified Professional and be the dominate site series adjacent to the active fluvial unit.
(3) The Holder will comply with annual reporting requirements outlined in section 12(5) for active fluvial units and associated management zones.
(4) For the purposes of this strategy, active fluvial units will be delineated following the principles outlined in the report titled, "Defining Active Fluvial Units", prepared by Glynnis Horel, P.Eng., Ostapowich Engineering Services Ltd., dated April 1, 2006 and updated for Haida Gwaii, dated June 2016. Additional guidance on delineating fan characteristics and assessment of fan activity will follow the hydrogeomorphic criteria from Land Management Handbook 57 and Land Management Handbook 61.
Small low energy fans on small (less than 3 meter wide) upland streams (FRPA S6 streams) that show minimal signs of hydrogeomorphic processes occurring and have a low water transport as determined through assessments are not active fluvial units and are managed under FSP section 4.3.11 Upland stream areas (HGLUOO Objective 13).
hydrogeomorphic processes occurring and have a low water transport as determined through assessments are not active fluvial units and are managed under FSP section 4.3.11 Upland

	4.3.11 Upland stream areas (HGLUOO Objective 13)	
Obj	ective 13	(1) Within each watershed sub-unit shown on the map attached as Schedule 6, retain a minimum of 70% of the forest in the upland stream areas as hydrologically recovered.
		(2) For upland streams that are direct tributaries to Type I fish habitat or Type II fish habitat, retain sufficient vegetation to maintain stream bank and channel stability.
		(3) Adjacent to upland stream with incised channels and steep gradients, retain a sufficient amount of trees and understory vegetation to maintain riparian plant communities that are dependent on high humidity micro- climates.
		(4) Despite subsection (1), less than 70% of the forest in the upland stream area may be retained as hydrologically recovered, provided that:
		(a) an intergovernmental process is completed;

	 (b) an assessment of watershed sensitivity to forest development and disturbance is completed by a qualified professional; (c) an amount, type and distribution of forest cover that is sufficient to sustain natural hydrological and fluvial processes, based on the assessment in subsection (4)(b) is maintained; and
	(d) an adaptive management plan is developed and implemented.
Strategy for FDU 1 and FDU 2	(1) Prior to initiating developments within a designated watershed sub-unit identified in Schedule 6 of the HGLUOO, the Holder will complete an analysis of the watershed sub-unit to determine percent hydrologic recovery. Consistent with section 13(1), subject to section 13(4), a minimum of 70% of the forest in the upland stream area will be maintained as hydrologically recovered.
	(2) Equivalent clearcut area analysis will use the following methodology:
	(3) The most current Vegetation Resources Inventories (VRI) will be used, downloaded from BC Geographic Warehouse, updated with new harvest disturbances from Reporting Silviculture Updates and Land Status Tracking System (RESULTS), blocks submitted for approval in Forest Tenure Administration (FTA) and proposed licensee blocks obtained from licensees operating in the same sub-unit watershed;
	(4) The VRI disturbance layer will be compared with the most recent Landsat imagery to ensure correct block shapes used reflect actual disturbance area and that no areas have been missed;
	(5) Non-timbered natural polygons such as lakes, swamps, other water-bodies > 1.0 hectare and permanently deforested sites (e.g. gravel pits, SUPs, private land) will be removed from the ECA calculation. Natural polygons with low crown closure will be assigned a "1" height in the analysis.
	(6) Natural forests > 250 yrs. old with no harvest history will be assigned an ECA value of 100%, with previously harvested stands receiving a score based on the R1B curve for determining hydrologic recovery. Previously harvested stands will have a maximum Equivalent Clear-cut Area (ECA) value of 97.5%.
	(7) Upland streams that are direct tributaries to Type 1 and Type 2 fish habitat will be managed consistent with the recommendations of a Qualified Professional based on field assessment to ensure that sufficient vegetation is maintained adjacent to the stream to maintain stream bank and stream channel stability.

 (8) Maintain a timbered buffer on small low energy fans on small (less than 3 meter wide) upland streams (FRPA S6 streams) that show minimal signs of hydrogeomorphic processes occurring and have a low water transport potential as follows: (a) Fans of streams with channel widths 2 to 3 meters: Adjacent to the outer edges of the fan, apply a 20-meter buffer. (b) Fans of streams with channel widths less than 2 meters: Adjacent to the outer edges of the fan, apply a 10-meter buffer. Supporting information including considerations and a rationale for these retention measures is provided in the FSP
Supporting Document, Appendix 3 – Haida Gwaii Land Use Order – Small fans on S6 Streams.
(9) No falling or yarding will be permitted within deeply incised steep gradient upland stream channels (e.g. class S5 or S6 streams) that have direct connectivity to Type 1 and Type 2 fish habitat or that have plant communities that are dependent on high humidity micro-climates.
(10) Wind firming treatments will be prescribed and implemented along streams where mature trees are left standing and have a high risk of blowdown. In areas with a moderate risk of blowdown treatments will be prescribed based on the type of feature and the potential consequence to that feature.

4.3.12 Sensitive watersheds (HGLUOO Objective 14)

Objective 14	(1) Within the sensitive watersheds shown on the map attached as Schedule 7, the following rates of harvest apply:
	 (a) for watersheds equal to, or greater than, 500 hectares, up to 5% of the watershed area may be harvested in a 5-year period;
	(b) for watersheds less than 500 hectares, up to 10% of the watershed area may be harvested in a 10-year period.
	(2) Despite subsection (1), no harvesting may occur in sensitive watersheds with an equivalent clearcut area that is equal to or greater than 20%.
	 (3) Despite subsections (1) and (2), a rate of harvest or an equivalent clearcut area that exceeds the specified limits may be maintained, provided that: (a) an intergovernmental process is completed;
	(b) an assessment of watershed sensitivity to past, current

	 and proposed forest development and disturbance is completed by a qualified professional; (c) an amount, type and distribution of forest cover that is sufficient to sustain natural hydrological and fluvial processes, based on the assessment in subsection (3)(b) is maintained; and an adaptive management plan is developed and implemented.
Result for FDU 1 and FDU 2	(1) Prior to initiating developments within a sensitive watershed identified in Schedule 7 of the HGLUOO, the Holder will complete an analysis and maintain a ledger of activities within the sensitive watershed to determine rate of harvest and equivalent clearcut area.
	(2) The rate of harvest in a sensitive watershed will not exceed the rate specified in section 14(1)(a) and (b), subject to section 14(3).
	(3) Consistent with section 14(2), subject to section 14(3), no harvesting will occur in sensitive watersheds with an equivalent clearcut area greater than or equal to 20%.
	(4) Equivalent clearcut area analysis will follow the methodology outlined in the Forest Stewardship Plan Supporting Document section (d) titled; "Upland Stream Areas".

HGLUOO Part 4 – Biodiversity

4.3.13 Objectives for forested swamps (HGLUOO Objective 15)

Objective 15	(1) Protect all forested swamps greater than 0.25 hectares.
	(2) Adjacent to forested swamps greater than 0.25 hectares, maintain a management zone with an average width equal to 1.5 tree lengths to protect the integrity of the forested swamp.
	(3) Within the management zone required under subsection (2), maintain at least 70% of the forest as mature forest and old forest.
	(4) Despite subsections (2) and (3), the amount of mature forest and old forest retained in the management zone may be reduced to 60%, provided that:
	(a) the amount of mature forest and old forest to be retained is sufficient to maintain the integrity of the forested swamp; and
	(b) an adaptive management plan is developed and implemented.
	(5) Where previous alteration or harvesting has reduced the amount of mature forest and old forest below the levels required under subsection (3) or (4), provide for the recruitment of mature forest and old forest in that management zone through natural processes and voluntary management

	intervention.
	(6) Areas retained to meet the requirements in subsections (1) and (2), must be documented and submitted as digital spatial data at the end of each calendar year to the Council of the Haida Nation and the Province of British Columbia.
Strategy for FDU 1 and FDU 2	 The Holder will protect all forested swamps > 0.25 hectares in size using a management zone width as specified in section 15(2) that includes a minimum amount of 70% mature and old forest within the management zone, subject to 15(4).
	(2) The management zone width adjacent to a forested swamp greater or equal to 0.25 hectares in size will be determined using Schedule 5, column A and B of the HGLUOO. The predominate site series will be determined through field assessment by a Qualified Professional and be the dominate site series adjacent to the forested swamp.
	(3) The Holder will comply with the objective outlined in section 15(5) for the recruitment of mature and old forest that has been previously altered or harvested.
	(4) The Holder will comply with annual reporting requirements outlined in section 15(6) for forested swamps and associated management zones.

4.3.14 Ecological representation (HGLUOO Objective 16)

Objective 16	(1) For each common site series and each rare site series in a landscape unit, retain an amount of old forest equal to or greater than the landscape unit targets listed in Schedule 10.
	(2) Where practicable, include within old forest retention areas retained to meet the requirements in subsection (1), habitat for local species at risk and regionally important wildlife species including, but not limited to:
	(a) Northern Goshawk nesting and foraging habitat;
	(b) Marbled Murrelet nesting habitat, Great Blue Heron nesting habitat, and Northern Saw-whet Owl core nesting areas; and
	(c) Black Bear dens and denning habitat.
	(3) Areas retained to meet the requirements in subsection (1), must be documented and submitted as digital spatial data at the end of each calendar year to the Council of the Haida Nation and the Province of British Columbia.

	(4) If there is insufficient old forest available to meet the targets in subsection (1), identify and retain, and recruit where necessary, through natural processes and voluntary management intervention, forest stands to meet representation requirements in the shortest possible timeframe.
Strategy for the portions of FDU 1 and FDU 2 that are within the Skidegate Lake and Honna Landscape Unit	(1) Prior to conducting primary forest activities in the Skidegate Lake or Honna Landscape Unit (LU), and in collaboration with other licensees operating in the LU, the Holder will retain and track an amount of old forest consistent with the target amounts listed in Schedule 10 of the HGLUOO and include, to the extent practicable, habitat for local species at risk and regionally important wildlife species including but not limited to those species identified in section 16(2).
	(2) To ensure old forest representation for common and rare sites series is maintained a spatial analysis of the landscape unit will be completed to determine threshold amounts of old forest as compared to target amounts.
	Old forest site series to be maintained will first be identified in areas reserved as wildlife habitat for species at risk and regionally important wildlife, old forest representation and other areas reserved from harvesting.
	No harvesting will be proposed in areas of common and rare site series where analysis indicates target amounts are near or below threshold amounts.
	For site series with insufficient old forest to meet target amounts, forest stands will be recruited using an oldest first approach considering existing reserve areas in relation to areas considered for harvest.
	(3) The Holder will comply with annual reporting requirements outlined in section 16(3) for the retention of old forest site series areas.

4.3.15 Red-listed and blue-listed ecological communities (HGLUOO Objective 17)

Objective 17	(1) Protect each occurrence of a red-listed and blue-listed ecological community that is a minimum of 0.25 hectares in size.
	(2) Despite subsection (1), up to 5% of the area of each type of red- listed ecological community occurring in a development area may be altered or harvested if required for road access or to address a safety concern.
	(3) Despite subsection (1), up to 30% of the area of each blue- listed ecological community occurring in a development area may be altered or harvested if required for road access or to

	address a safety concern.
	(4) Despite subsection (1), 30% of the area of each blue-listed ecological community occurring in a development area may be altered or harvested for purposes other than those described under subsection (3), provided that an intergovernmental process is completed.
	(5) Areas retained to meet the requirements in subsections (1) to (4), must be documented and submitted as digital spatial data at the end of each calendar year to the Council of the Haida Nation and the Province of British Columbia.
Strategy for FDU 1 and FDU 2	(1) When the Holder conducts primary forest activities, the Holder will protect each occurrence of red-listed and blue-listed ecological communities that is greater than or equal to 0.25 hectares in size, subject to section 17(2) for red-listed ecological communities and sections 17(3) and (4) for blue- listed ecological communities.
	(2) Prior to commencing timber harvesting or road construction activities in a development area, a Qualified Professional will complete an ecological field assessment to determine the occurrence of red or blue listed ecological plant communities. Occurrences of red and blue listed ecological communities greater than or equal to 0.25 hectares in size will be identified in the field, documented and mapped for protection.
	(3) Red and blue listed ecological communities are those listed in Schedule 13.
	(4) The Holder will comply with annual reporting requirements outlined in section 17(5) for the retention of old forest site series areas.

HGLUOO Part 5 - Wildlife

4.3.16 Black Bear dens (HGLUOO Objective 18)

Objective 18	(1) Protect all Black Bear dens within a reserve zone, measuring at least 20 meters in width, around the Black Bear den.
	(2) Despite subsection (1), alteration or removal of a Black Bear den or its reserve zone, or both, may occur, provided that:
	(a) an intergovernmental process is completed;
	(b) the alteration or removal is required for road access or to address a safety concern; and
	(c) the alteration or removal does not occur during the winter hibernation season.
	(3) Adjacent to any reserve zone required in subsection (1), maintain a

	management zone with an average width equal to 1.0 tree length, measured from the outer edge of the reserve zone, to protect the integrity of the reserve zone.
	(4) Where practicable, maintain suitable western redcedar and yellow-cedar in management zones, for long term Black Bear den recruitment.
	(5) Within the management zone required under subsection (3), alteration or removal of trees may occur, outside of the winter hibernation season, to:
	(a) accommodate operational requirements for road and bridge construction, where no practicable alternative exists;
	(b) accommodate road maintenance and deactivation, the removal of danger trees, and brushing and clearing within the right-of-way, for safety purposes, on any existing road under active tenure; or,
	(c) mitigate the impact of windthrow.
	(6) All existing and newly discovered Black Bear dens and areas reserved or managed in accordance with subsections (1) to (5) must be documented and submitted to the Council of the Haida Nation and the Province of British Columbia at the end of each calendar year.
	(7) Where practicable, include trees, snags, stumps and logs that are greater than 0.80 meters in diameter within stand level retention, for the recruitment of future denning habitat.
Strategy for FDU 1 and FDU 2	 (1) The Holder will protect all Black Bear dens with a minimum 20 meter reserve zone width buffer around the den, subject to section 18(2).
	(2) To protect the integrity of the Black Bear den reserve zone, a management zone consistent with the average width equal to 1.0 tree length, will be located adjacent to the reserve zone. Where they exist within the management zone, the Holder will preserve western red and yellow cedar trees that are suitable for future black bear denning.
	(3) Alteration or removal of trees from the management zone may occur as per section 18(5), subject to section 18(4).
	(4) The Holder will comply with annual reporting requirements outlined in section 18(6) for Black Bear dens and adjacent reserve and management zones.
	(5) Prior to commencing timber harvesting or road construction activities in a development area, a Qualified Professional will complete a Black Bear den field assessment to determine the occurrence of Black Bear dens and to identify and recruit future denning habitat consistent with section 18(7).

Objective 19	(1) Maintain an amount of Marbled Murrelet nesting habitat within each landscape unit equal to or greater than the target area listed in Schedule 9.
	(2) Marbled Murrelet habitat referred to in subsection (1) must conform to areas shown in Schedule 11 or must be identified as Class 1 or 2 Marbled Murrelet nesting habitat by a qualified professional.
Strategy for FDU 1 and FDU 2	(1) Prior to conducting primary forest activities in the Skidegate Lake, Honna and Gudal LU and in collaboration with other licensees operating in the LU, the Holder will identify, maintain and track an amount of Marbled Murrelet habitat consistent with the target amounts listed in Schedule 9 of the HGLUOO.
	(2) Consistent with section 19(2), Marbled Murrelet habitat reserved from harvesting will be from the areas shown on Schedule 11 of the HGLUOO or identified as class 1 or 2 nesting habitat through survey by a Qualified Professional.

4.3.17 Marbled Murrelet nesting habitat (HGLUOO Objective 19)

4.3.18 Northern Goshawk habitat (HGLUOO Objective (20)	
Objective 20	(1) Protect all Northern Goshawk reserves shown on the map attached as Schedule 12.
	(2) When a Northern Goshawk nest is discovered that is not located in a reserve shown on Schedule 12:
	(a) report the location to the Province of British Columbia and to the Council of the Haida Nation upon discovery;
	(b) maintain a restricted activity zone with a minimum radial width of 800 meters around the nest site to protect the nest area from disturbance during the Northern Goshawk breeding season; and
	(c) maintain a reserve zone around the nest site, that is a minimum of 200 hectares in area, and that maximizes the best available nesting and foraging habitat, to protect the integrity of the nest site.
	(3) Where some or all of the forest within Northern Goshawk nesting area reserves has been previously altered or harvested, provide for the recruitment of mature forest and old forest in that reserve through natural processes and voluntary management intervention.
	(4) Despite subsections (1) and (2), a Northern Goshawk reserve shown on Schedule 12 and a Northern Goshawk reserve zone may be reduced, provided that:

. . . .

	(a) an intergovernmental process is completed;
	(b) the reduction is required for road access, where no practicable alternative exists, or to address a safety concern;
	(c) the reduction does not occur during the Northern Goshawk breeding season; and there is no net loss to the Northern Goshawk reserve area.
Strategy for FDU 1 and FDU 2	(1) The Holder will protect all draft Northern Goshawk reserve made known to the Holder by the MoF and/or the CHN and approved Northern Goshawk reserves shown on Schedule 12 of the HGLUOO.
	(2) Prior to conducting primary forest activities, an assessment of the development area will be completed by trained field staff to identify previously unidentified Northern Goshawk nests.
	(3) When a Northern Goshawk nest is discovered that is not located in a draft or approved Northern Goshawk reserve the Holder will:
	 report the location to the Province of British Columbia and to the Council of the Haida Nation upon discovery;
	 maintain a restricted activity zone with a minimum radial width of 800 meters around the nest site to protect the nest area from disturbance during the Northern Goshawk breeding season; and
	c. maintain a reserve zone around the nest site, that is a minimum of 200 hectares in area, and that maximizes the best available nesting and foraging habitat, to protect the integrity of the nest site.
	(4) Where some or all of the forest within Northern Goshawk nesting area reserves has been previously altered or harvested, provide for the recruitment of mature forest and old forest in that reserve through natural processes and voluntary management intervention.
	(5) Despite subsections (1) and (3) of this strategy, a draft or approved Northern Goshawk reserve may be reduced, provided that:
	a. an intergovernmental process is completed;
	 b. the reduction is required for road access, where no practicable alternative exists, or to address a safety concern;
	c. the reduction does not occur during the Northern

to the Northern Goshawk reserve area.	Goshawk breeding season; and there is no net loss to the Northern Goshawk reserve area
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4.3.19 Great Blue heron nesting habitat (HGLUOO Objective 21)

Objective 21	 (1) Protect Great Blue Heron nest sites with a reserve zone with a minimum size of 45 hectares and with a minimum distance of 350 meters from any nest site to the edge of the reserve.
	(2) Adjacent to any reserve zone required in subsection (1), maintain a restricted activity zone of a minimum of 150 meters measured from the outer edge of the reserve zone during the Great Blue Heron breeding season.
	(3) Report the location of all new Great Blue Heron nest sites to the Province of British Columbia and to the Council of the Haida Nation when discovered.
Result for FDU 1 and FDU 2	 All known Great Blue Heron nest sites will be protected consistent with sections 21(1) and (2).
	(2) Prior to conducting primary forest activities, an assessment of the development area will be completed by trained field staff to identify previously unidentified Great Blue Heron nest sites.
	(3) If a Great Blue Heron nest site is identified and confirmed to be a Great Blue Heron nest site by a Qualified Professional, the nest site location will be reported as per section 21(3).
	(4) New nest sites will be protected using a minimum 45 hectare reserve zone designed by a Qualified Professional that is a minimum distance of 350 meters from the nest site to the edge of the reserve zone and maximizes the best available nesting habitat around the nest(s). During the breeding season a minimum 150 meter width restricted activity zone adjacent to the reserve zone will be maintained.
	(5) No harvesting or road construction activity will be permitted within the restricted activity zone during the breeding season without the approval to do so by a Qualified Professional.

4.3.20 Northern Saw-whet Owl nesting	habitat (HGLUOO Objective 22)
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Objective 22	(1) Protect all Northern Saw-whet Owl reserves shown on the map attached as Schedule 12.
	(2) When a Northern Saw-whet Owl nest is discovered that is not located in a reserve shown on Schedule 12, maintain a reserve zone measuring at least 10 hectares, centered on the Northern Saw-whet Owl nest.
	(3) Where practicable, maintain Northern Saw-whet Owl core

	nesting areas within stand level retention distributed across the landscape with a maximum inter-patch spacing distance of 1,400 meters.
	(4) Report the location of any new Northern Saw-whet Owl nest to the Province of British Columbia and the Council of the Haida Nation when discovered.
Strategy for FDU 1 and FDU 2	(1) Within FDU 1 and FDU 2 there are no Northern Saw-whet Owl reserves as shown on Schedule 12 of the HGLUOO.
	(2) Prior to conducting primary forest activities, an assessment of the development area will be completed by trained field staff to identify previously unidentified Northern Saw-whet Owl nests.
	(3) If a Northern Saw-whet Owl nest is identified and confirmed to be a Northern Saw-whet Owl nest by a Qualified Professional, the nest location will be reported as per section 22(4).
	(4) Nest sites will be protected by maintaining a 10-hectare reserve zone designed by a Qualified Professional centered on the nest site.
	(5) To provide for Northern Saw-whet Owl nesting habitat, stand level retention will include attributes such as mature and old forest, where they exist, consistent with core nesting habitat requirements. Priority will be given to maintaining patches of core nesting habitat across the landscape with a maximum inter- patch spacing distance of 1400 meters.
	(6) No harvesting or road construction activity will be permitted within the 10-hectare reserve zone without the approval to do so by a Qualified Professional.

HGLUOO Part 6 - Forest Reserves

4.3.21 Areas reserved to meet landscape level objectives (HGLUOO Objective

23)	
Objective 23	(1) Forest reserves shown on the map attached as Schedule 8 are reserved from harvest to assist in meeting objectives for ecological representation and objectives for Marbled Murrelet nesting habitat.
	(2) Despite subsection (1), the area of an individual forest reserve may be reduced by up to 5%, provided that: (a) specified results or strategies address all targets listed in Schedules 9 and 10 for the applicable landscape unit;
	(b) the remaining reserve is no less than 5 hectares in area; and
	(c) the reduction is necessary to:
	 accommodate the operational requirements for road and bridge construction, where no practicable alternative exists;

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	ii. accommodate road maintenance and deactivation, the removal of danger trees, and brushing and clearing within the right-of-way, for safety purposes, on any existing road under active tenure; or,
	iii. mitigate the impact of windthrow.
	(3) Despite subsection (1), any portion of a forest reserve may be moved to another location within the same landscape unit if:
	(a) an intergovernmental process is completed;
	(b) specified results or strategies address all targets listed in Schedules 9 and 10 for the applicable landscape unit;
	(c) the portion is no larger than 20 hectares;
	(d) areas retained are greater than 200 meters in width;
	(e) the relocation does not result in any forest reserve that is less than 5 hectares in area; and
	(f) the relocation follows the recommendations of an assessment completed by a qualified professional.
	(4) Forest reserves and variances to forest reserves made in accordance with subsections (1) to (3) must be documented and submitted as digital spatial data at the end of each calendar year to the Council of the Haida Nation and the Province of British Columbia.
Strategy for FDU 1 and FDU 2	(1) The Holder will not conduct primary forest activities within designated Forest Reserve areas as shown on Schedule 8 of the HGLUOO, subject to sections 22(2) and (3).
	(2) The Holder will comply with annual reporting requirements outlined in section 23(4) for forest reserves and variances to forest reserves.

4.4 Measures

4.4.1 Measure set by government to prevent the introduction and spread of invasive plants (FPPR Section 17)

Measure set by government for preventing the introduction and spread of invasive plants	
Regulation	FPPR Section 17

Measures	For the purpose of FRPA Section 47 <i>[invasive plants]</i> , a person who prepares a forest stewardship plan must specify measures in the plan to prevent the introduction or spread of species of plants that are invasive plants under the Invasive Plants Regulation, if the introduction or spread is likely to be the result of the person's forest practices.
Strategy for FDU 1 and FDU 2	The Holder, will use three complimentary strategies to counter the introduction or spread of invasive plant species, likely to be the result of the Holder's forest practices:
	(1) prevention;
	 (2) detection of invasive plant species that elude prevention; and
	(3) management or elimination of invasive plant species.
	Prevention The Holder's foresters will review the Ministry of Forests Invasive Plant Program web site and review identification, control and management of invasive plants.
	Prevention through Avoidance
	Preventative measures to minimize the occurrence and spread of invasive plants will include:
	• The Holder will ascertain known locations of invasive plants prior to any site or soil disturbance by conducting an invasive plant survey (using the Invasive Alien Plant Program (IAPP) application) and will include the survey results in the pre-work, site plan or other applicable documentation.
	• Grass seeding of exposed soils following soil disturbance where the introduction or spread of invasive plants is likely. Application of grass seed to constructed road cut and fill slopes or recently deactivated roads is timed by compatible weather and season. Re-vegetation of exposed soils following the completion of road construction or deactivation is within two years. When using seed, use native seed or an agronomic grass seed that is a grade of Common No.1 forage mixture free of invasive species listed under the Weed Control Regulation.
	• Contractors and sub-contractors employed by AAHG are required to ensure machines are cleaned and provide notification of such prior to being transported from an area known to contain invasive plant species to areas without. AAHG will provide information on the location of known invasive species within the FDUs to contractors working for AAHG
	Information on the identification, spread and what to do in the event the Contactor encounters an invasive plant species will

be included in the pre-harvest information package and reviewed with crews prior to starting work.
 During road construction, use only gravel and fill materials that do not contain invasive species.
 No brushing or mowing along roads will be done for areas known to have invasive species unless required for safety.
Detection of Invasive Plant Species That Elude Prevention. Invasive plants will be detected through observation, reforestation surveys and through inspections and audits of operations. Action plans will be developed and followed up on to combat the spread of invasive plants, if the introduction or spread is likely to be the result of the company's forest practices. When discovered, invasive plants will be mapped and reported using the IAPP Application.
Management or Elimination of Invasive Plant Species
If invasive plants are reported and if the introduction or spread is likely to be the result of the company's forest practices, then:
• An invasive plant treatment plan will be developed if the introduction or spread is likely to be the result of the company's forest practices. The Holder will develop the invasive plant treatment plan in conjunction with the Council of the Haida Nation, MoF Invasive Plant Specialist and the Northwest Invasive Plant Council. The plan will use the most up to date Northwest Invasive Plant Council Prioritized Plant Lists by Invasive Plant Management Area.
• The Holder will monitor the effectiveness of treatment, repeating the treatment as necessary until it is effective.
• The Holder will enter monitoring and invasive plant treatment information into the IAPP application.

4.4.2 Measure set by government related to Range Barriers (FPPR Section 18)

Measure set by go	Measure set by government for natural range barriers					
Regulation	FPPR Section 18					
Measures	For the purpose of FRPA Section 48 <i>[range barriers]</i> , a person who prepares a forest stewardship plan must specify measures to mitigate the effect of removing or rendering ineffective natural range barriers.					
No measures have and FDU 2.	e been developed as there is no range tenure overlap with FDU 1					

4.5 Stocking Standards

All stocking information including stocking standards tables can be found in Appendix 1 Stocking Standards.

APPENDIX 1 STOCKING STANDARDS

Foreword

Pursuant to the FPPR section 16, Appendix 1 Stocking Standards (the stocking standards) are to be applied to cutblocks harvested under this FSP, for the areas included under this plan within FDU #1 and #2 located within the Haida Nation's Territory on Moresby Island that may be harvested by the Holder. The stocking standards are to be used in-conjunction with Site Plans where required under the FRPA and HGLUOO.

The stocking standards apply to even aged management and cover site series commonly found within FDU #1 and FDU #2. The even-aged stocking standards will be applied to the following Silviculture Systems:

- Clearcut;
- Clearcut with Reserves;
- Small patch openings >0.1 Ha;
- Low level retention constitutes < 5 M2/Ha. (groups or dispersed)

The tables and standards herein are based on the Provincial publications:

- Silviculture Survey Procedures Manual (April 2022);
- Establishment to Free Growing Guidebook (Version 2.3, revised October 2007);
- A Field Guide to Ecosystem Classification and Identification for Haida Gwaii (2014, Land Management Handbook Number 68)

Legal Framework

Situations or Circumstances That Determine Whether Free Growing is Assessed on a Block or Across Blocks

Section 44(1) of the FPPR applies in all situations or circumstances under the FSP where a free growing stand is required to be established under FRPA S.29.

Regeneration Date, Free Growing Height and Stocking Standards

Stocking Standard Tables 1-5 specify the regeneration date, free growing height and stocking standards for the situations or circumstances where s.44(1) of the FPPR applies.

Situations or Circumstances That Determine When Subsection 44(4) Applies and the Standards Applicable FPPR Subsection 16(4)

Where harvesting of special forest products, individual trees, or commercial thinning occurs as per FRPA s.44(3)(h) and (i), the stocking standards will be maintained for a period of at least 12 months following the completion of timber harvesting on the area that the harvesting took place.

Free Growing Characteristics

All free growing trees must be of good form, color, and vigor and be relatively free of significant pest infestations, and meet the minimum heights specified. In addition, an advanced regeneration tree is free growing if it has; greater than 30% continuous live crown, evidence of post-harvest release, and no open injuries (scars) with a horizontal width at the widest point(s) greater than 25% of the circumference of the tree at that point.

Crop trees within browse protectors will not be accepted as Free Growing.

The FS 660 - Silviculture Survey Reference, dated April 2022 *Free Growing Damage Criteria for Even-aged (age class 1) Coniferous Trees* (section 22 b. page 18-21) and the *Broadleaf Forest Health Free Growing Damage Criteria* (section 23. page 22) will be applied to coniferous and broadleaf species respectively, for the purposes of determining a Free Growing tree.

Rules for Modifying General Stocking Standards

Minimum Inter-tree Horizontal Distance (MITD)

In all SUs, the MITD between well-spaced or free growing trees is 2.0 meters unless site specific conditions exist. MITD may be reduced to 1.5 meters within SUs where:

- in very dense heavy slash,
- on thin soils or duff over rock, and
- on hygric and sub-hygric sites.

Riparian Management Areas

In riparian management areas (RMA), timber production may change from a primary to a secondary objective for the protection or enhancement of riparian, biodiversity, wildlife and fisheries values. Stocking standards will follow the standards of the leading site series represented in the RMA. The intent is to manage at the site level along the margins of streams to incorporate ecologically desirable species (such as red alder) without the need for detailed ecological mapping and stratification of all riparian areas. Refer to Footnote 100 in the Stocking Standard Tables 1-5 for specific management of Dr in riparian areas.

Forest Health

Dwarf Mistletoe

Dwarf mistletoe infection on a tree will be evaluated using the Hawksworth six class rating system. On a tree basis, light infection is a rating of 1 to 2; moderate infection is 3 to 4; and sever is 5 to 6. Where dwarf mistletoe is considered a forest health concern (moderate to severe rating) within or immediately adjacent to a cutblock an alternate species management strategy will be used.

Deer Browse

Browse protectors will be installed as deemed necessary by a Qualified Professional for the purposes of post-harvest establishment of either yellow cedar or redcedar.

Stocking Standards Tables

The following tables outline the stocking standards that apply to even-aged management stands. Reference Notes can be found under the final table (Table 5).

Stocking Standards Tables 1-5 are expected to change to include additional stockings standards for site series phases after the Provincial Reference Guide for Forest Development Plan Stocking Standards, September 7, 2021 is formally updated.

Table 1 (C Forests)	CWHvh3 - L	Ipland	Regenera	tion and F	Free G	Growing	g Stock	ing Sta	ndard	1		
ID # Assigned		BGC sification	Spec	cies		ocking (paced/		Regen Delay	Gro	ree wing ssment	Minimum height at Free Growing Species – Height (m)	Footnotes
	Zone/SZ	Site Series	Preferred (p) species	Acceptable (a) species	Target	Minimum pa	Minimum p	(Max yrs)	Earliest (yrs)	Latest (yrs)		
	CWHvh3	101a -Mineral	Cw ⁴⁸ Hw Yc ⁴⁸	PI	900	500	400	6	11	14	Ss-3.0, Hw-2.0, Cw-1.5, Pl-1.5, Yc-1.5	48 - risk of browsing by deer
	CWHvh3	101b - Lithic (Submesic)	Cw ⁴⁸ Hw Yc ⁴⁸	PI	800	400	400	6	11	14	Ss-2.0, Hw-1.25, PI-1.25, Cw-1.0, Yc-1.0	48 – risk of browsing by deer
	CWHvh 3	101c - Peaty (Subhygric)	Cw ⁴⁸ Hw Yc ⁴⁸	PI	800	400	400	6	11	14	Ss-2.0, Hw-1.25, PI-1.25, Cw-1.0, Yc-1.0	48 – risk of browsing by deer
	CWHvh3	105	Hw Ss Cw ⁴⁸ Dr ¹⁰⁰	Yc ⁴⁸	900	500	400	6	11	14	Ss-4.0, Cw-2.0, Yc-2.0, Hw-1.75, Dr-4.0	48 – risk of browsing by deer
	CWHvh3	106	Cw ⁴⁸ Ss, Dr ¹⁰⁰	Hw Yc ⁴⁸	900	500	400	3	8	11	Ss-4.0, Cw-2.0, Yc-2.0, Hw-1.75,	48 – risk of browsing by deer 100 – Dr will be considered a preferred species within 3m of streams and wetlands
	CWHvh3	110	Cw ⁴⁸ Ss, Dr ¹⁰⁰	Hw Yc ⁴⁸	900	500	400	3	8	11	Ss-4.0, Cw-2.0, Yc-2.0, Hw-1.75,	48 – risk of browsing by deer 100 – Dr will be considered a preferred species within 3m of streams and wetlands
	CWHvh3	114	Cw ⁴⁸ Ss, Dr ¹⁰⁰	Hw Yc ⁴⁸	900	500	400	3	8	11	Yc-2.0, Hw-1.75,	48 – risk of browsing by deer 100 – Dr will be considered a preferred species within 3m of streams and wetlands

	WHvh3 - S nd Swamp		Regenera	ation and I								
ID # Assigned	-	BGC	Species			ocking paced/		Regen. Delay	Free Gre Assess		Species – Height	Footnotes
	Zone/SZ	Site Series	Preferred (p) species	Acceptable (a) species	Target	Minimum p/a	Minimum p	(Max yrs)	Earliest (yrs)	Latest (yrs)	(m)	
	CWHvh3	111 – High Bench	Ss	Hw Cw ⁴⁸	900	500	400	3	8	11	Ss-4.0, Cw-2.0, Yc-2.0, Hw-1.75	48 – risk of browsing by deer
	CWHvh3	112 – Medium Bench	Ss ¹	Cw ^{1,48}	900	500	400	3	8	11	$Y_{C}_{2}(1) = H_{W}_{1}_{1} / 5$	1 – suitable on elevated microsites 48 – risk of browsing by deer
	CWHvh3	117a - Mineral	Cw ^{1,48} Yc ^{1,48}	Ss ¹	800	400	400	3	8	11	-,,	1 – suitable on elevated microsites 48 – risk of browsing by deer
	CWHvh3	117b – Organic	Cw ^{1,48} Yc ^{1,48}	Hw ¹	800	400	400	3	8	11		1 – suitable on elevated microsites 48 – risk of browsing by deer
	CWHvh3	104	Ss	Cw ⁴⁸ Hw	900	500	400	3	8	11	Ss-3.0, Hw-2.0, Cw-1.5	48 – risk of browsing by deer
	CWHvh3	115	Cw ^{1,48} Hw ¹	Pl ¹ Yc ^{1,48}	800	400	400	3	8	11	Hw-1.25, Pl-1.25, Cw-1.0, Yc-1.0	1 – suitable on elevated microsites 48 – risk of browsing by deer

Forest Stewardship Plan

Site Series	Preferred (p) species Hw Ss Cw ⁴⁸ Dr ¹⁰⁰	Acceptable (a) species	Target	Minimum p/a	Minimum p			Latest (yrs)		
400			900	500	400	6	11	14	Ss-3.0, Hw-2.0,	48 – risk of browsing by deer 100 – Dr will be considered a preferred species within 3m of streams and wetlands
102	Cw ⁴⁸ Hw Ss	PI ⁵³	900	500	400	6	11	14		48 – risk of browsing by deer 63 – retired July 2017
110	Cw ⁴⁸ Hw	PI, Ss ¹⁰¹	900	500	400	6	11	14	Ss-2.0, Hw-1.25,	48 – risk of browsing by deer 101 – natural Ss can contribut towards stocking
111	Cw ⁴⁸ Ss Dr ¹⁰⁰	Hw	900	500	400	3	8	11	Ss-4.0, Hw-2.75, Cw-2.0	48 – risk of browsing by deer 100 – Dr will be considered a preferred species within 3m of streams and wetlands
105	Ss Cw ⁴⁸ Dr ¹⁰⁰	Hw	900	500	400	3	8	11	Ss-3.0, Hw-2.0, Cw-1.5, Dr-4.0	48 – risk of browsing by deer 100 – Dr will be considered a preferred species within 3m of streams and wetlands
	111	111 Cw ⁴⁸ Ss Dr ¹⁰⁰ Ss Cw ⁴⁸	111 Cw ⁴⁸ Ss Dr ¹⁰⁰ Hw Ss Cw ⁴⁸ Ss	111 Cw ⁴⁸ Ss Dr ¹⁰⁰ Hw 900 Ss Cw ⁴⁸	111 Cw ⁴⁸ Ss Dr ¹⁰⁰ Hw 900 500 Ss Cw ⁴⁸ Ss Ss <td< td=""><td>111 Cw⁴⁸ Ss Dr¹⁰⁰ Hw 900 500 400 Ss Cw⁴⁸ Ss <t< td=""><td>111 Cw⁴⁸ Ss Dr¹⁰⁰ Hw 900 500 400 3 Ss Cw⁴⁸ Ss Ss</td><td>111 Cw⁴⁸ Ss Dr¹⁰⁰ Hw 900 500 400 3 8 Ss Cw⁴⁸ Ss Cw⁴⁸<</td><td>111 Cw⁴⁸ Ss Dr¹⁰⁰ Hw 900 500 400 3 8 11 Ss Cw⁴⁸ Ss Cw⁴⁸</td><td>111 Cw⁴⁸ Ss Dr¹⁰⁰ Hw 900 500 400 3 8 11 Ss-4.0, Hw-2.75, Cw-2.0 105 Ss Cw⁴⁸ Dr¹⁰⁰ Hw 900 500 400 3 8 11 Ss-4.0, Hw-2.75, Cw-2.0</td></t<></td></td<>	111 Cw ⁴⁸ Ss Dr ¹⁰⁰ Hw 900 500 400 Ss Cw ⁴⁸ Ss Ss <t< td=""><td>111 Cw⁴⁸ Ss Dr¹⁰⁰ Hw 900 500 400 3 Ss Cw⁴⁸ Ss Ss</td><td>111 Cw⁴⁸ Ss Dr¹⁰⁰ Hw 900 500 400 3 8 Ss Cw⁴⁸ Ss Cw⁴⁸<</td><td>111 Cw⁴⁸ Ss Dr¹⁰⁰ Hw 900 500 400 3 8 11 Ss Cw⁴⁸ Ss Cw⁴⁸</td><td>111 Cw⁴⁸ Ss Dr¹⁰⁰ Hw 900 500 400 3 8 11 Ss-4.0, Hw-2.75, Cw-2.0 105 Ss Cw⁴⁸ Dr¹⁰⁰ Hw 900 500 400 3 8 11 Ss-4.0, Hw-2.75, Cw-2.0</td></t<>	111 Cw ⁴⁸ Ss Dr ¹⁰⁰ Hw 900 500 400 3 Ss Cw ⁴⁸ Ss Ss	111 Cw ⁴⁸ Ss Dr ¹⁰⁰ Hw 900 500 400 3 8 Ss Cw ⁴⁸ <	111 Cw ⁴⁸ Ss Dr ¹⁰⁰ Hw 900 500 400 3 8 11 Ss Cw ⁴⁸	111 Cw ⁴⁸ Ss Dr ¹⁰⁰ Hw 900 500 400 3 8 11 Ss-4.0, Hw-2.75, Cw-2.0 105 Ss Cw ⁴⁸ Dr ¹⁰⁰ Hw 900 500 400 3 8 11 Ss-4.0, Hw-2.75, Cw-2.0

Forest Stewardship Plan

ID # Assigned	BGC Clas	C Classification Species					Dolow Growing		Minimum height at Free Growing Species – Height (m)			
	Zone/SZ	Site Series	Preferred (p) species	Acceptable (a) species	Target	Minimum p/a	Minimum p	(Max yrs)	Earliest (yrs)	Latest (yrs)		
	CWHwh1	112	Ss Dr ¹⁰⁰	Cw ⁴⁸ Hw	900	500	400	3	8	11		48 – risk of browsing by deer 100 – Dr will be considered a preferred species within 3m of streams and wetlands
	CWHwh1	113	Ss ¹ Dr ¹⁰⁰	Cw ^{1,48}	900	500	400	3	8	11	Ss-4.0, Hw-2.75, Cw-2.0	1 – suitable on elevated microsites 48 – risk of browsing by deer 100 – Dr will be considered a preferred species within 3m of streams and wetlands
	CWHwh1	104	Ss Dr ¹⁰⁰	Cw ⁴⁸ Hw	900	500	400	3	8	11	Ss-3.0, Hw-2.0, Cw-1.5	48 – risk of browsing by deer 100 – Dr will be considered a preferred species within 3m of streams and wetlands
	CWHwh1	116	Cw ^{1,48} Ss ¹ Dr ¹⁰⁰	Hw ¹	800	400	400	3	8	11	Ss-4.0, Hw-2.75, Cw-2.0	1 – suitable on elevated microsites 48 – risk of browsing by deer 100 – Dr will be considered a preferred species within 3m of streams and wetlands

Forest S	Stewardship P	Plan										
Table 5 (CHW	/wh2 - Uplar	nd Forests)	Regenera	tion and Fr	ee Gr	owing	Stockir	ng Star	ndard			
ID # Assigned	BGC Clas	ssification	Spe	cies		ocking (paced/			Free Gro Assessr		Minimum height at Free Growing Species – Height	Footnotes
	Zone/SZ	Site Series	Preferred (p) species	Acceptable (a) species	Target	Minimum p/a	Minimum p	(Max yrs)Earliest (yrs)	Latest (yrs)	(m)	
	CHWwh2	101a (mesic) and 101b (drier phase)	Hw Ss ¹⁴ Yc ⁴⁸ Dr ¹⁰⁰	Cw ^{14,48} Hm ¹³	900	500	400	6	11	14		 13 - suitable at upper elevations 14 - suitable at lower elevations 48 - risk of browsing by deer 100 - Dr will be considered a preferred species within 3m of streams and wetlands
	CWHwh2	101c – (moister phase)	Hw Yc Dr ¹⁰⁰	Cw ^{14,48} Hm ¹³ Ss ¹⁴	900	500	400	6	11	14	Hw-2.0, Cw-1.5, Ss-1.5, Yc-1.5, Hm-1.0	13 - suitable at upper elevations 14 - suitable at lower elevations 48 – risk of browsing by deer 100 – Dr will be considered a preferred species within 3m of streams and wetlands
	CWHwh2	110	Hw Ss ¹⁴ Yc ^{48,63} Dr ¹⁰⁰	Cw ^{14,48} Hm ¹³	900	500	400	3	8	11	Hw-2.0, Cw-1.5, Ss-1.5, Yc-1.5, Hm-1.0	 13 – suitable at upper elevations 14 - suitable at lower elevations 48 – risk of browsing by deer 100 – Dr will be considered a preferred species within 3m of streams and wetlands

Reference Notes

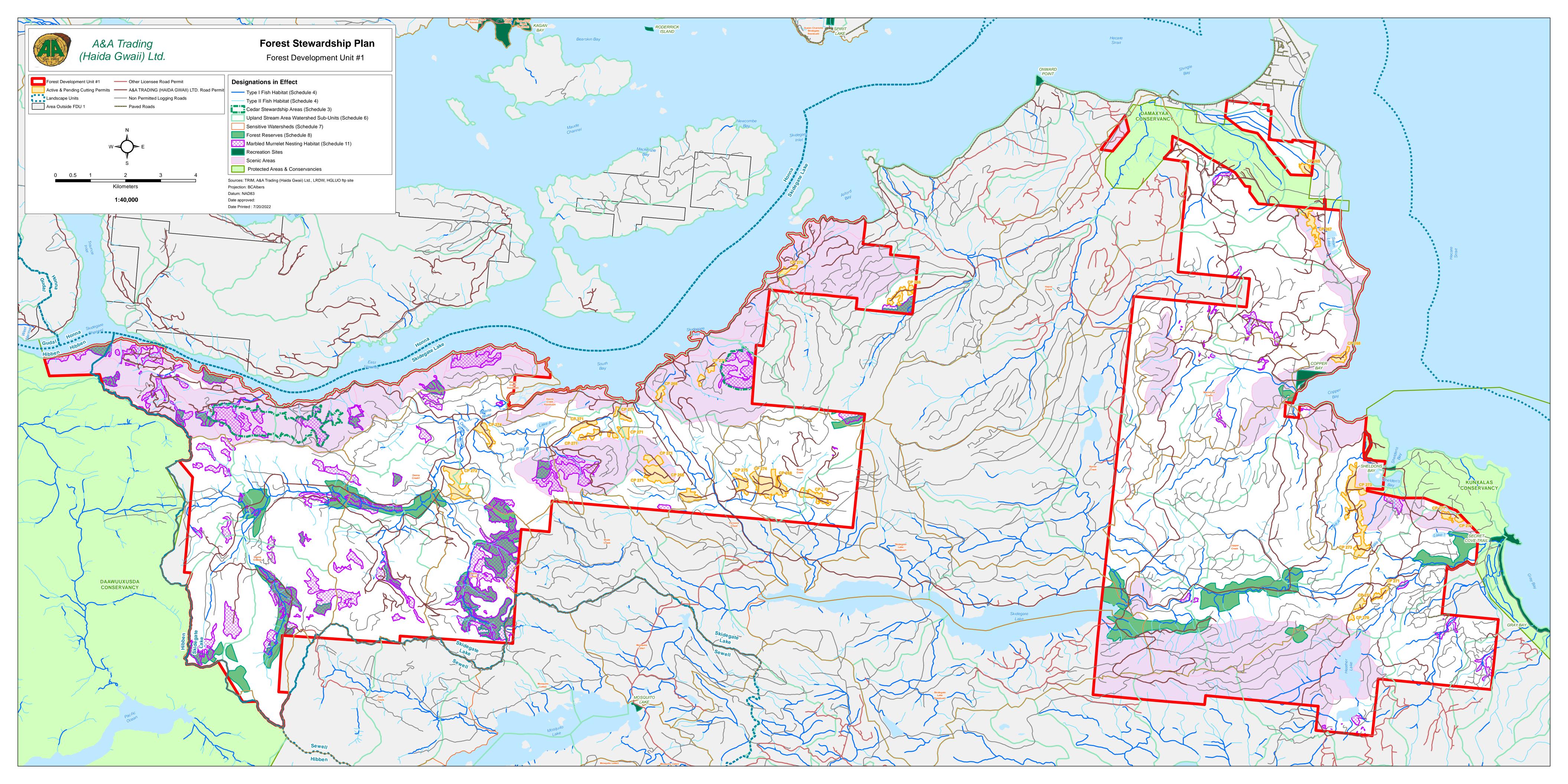
Conifer Tree Species

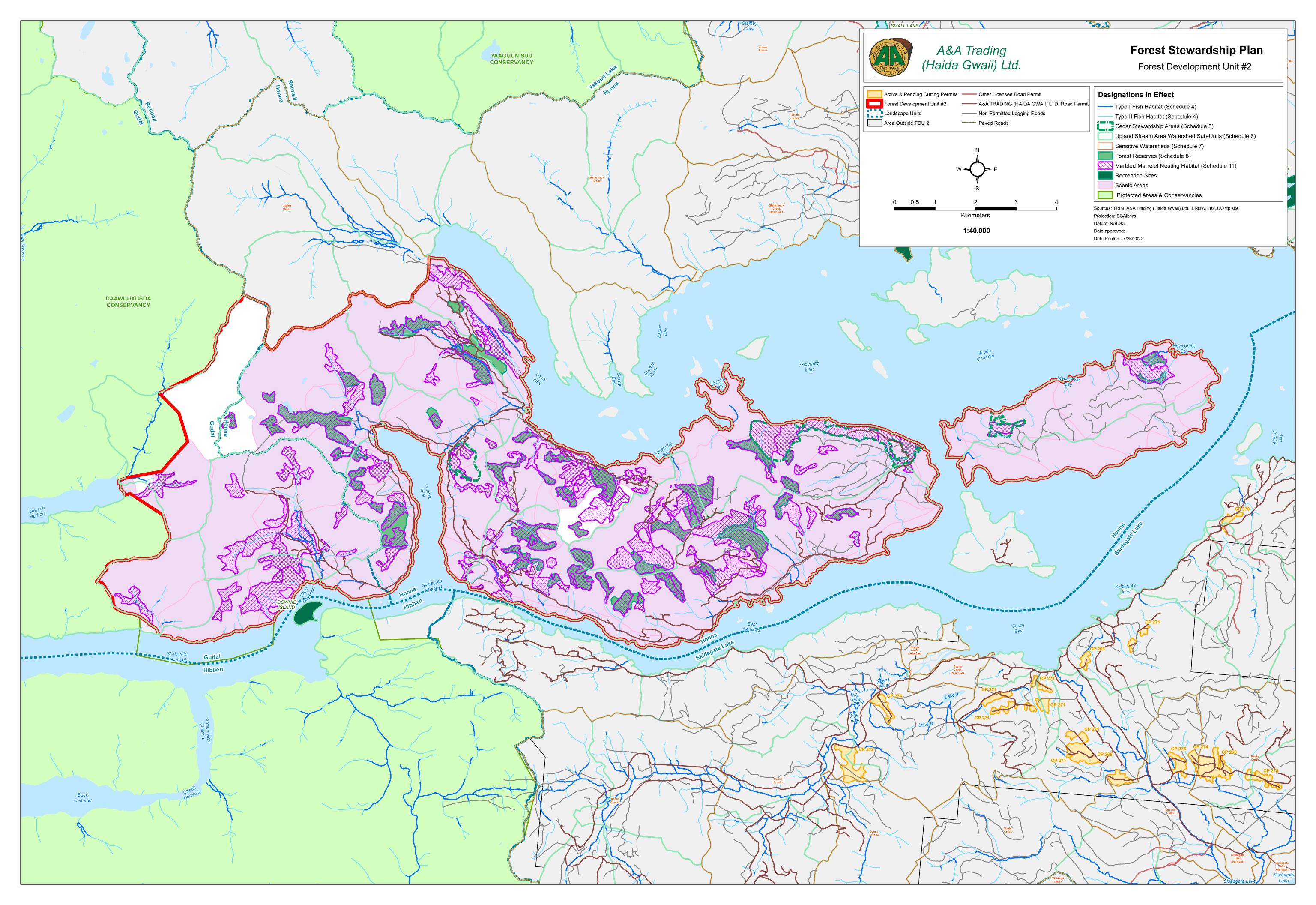
"Cw" means western redcedar; "Hm" means mountain hemlock; "Hw" means western hemlock; "PI" means coastal lodgepole pine; "Yc" means yellow cedar; "Ss" means sitka spruce

Broadleaf Tree Species

"Dr" means red alder

APPENDIX 2 MAPS





APPENDIX 3 ADVERTISEMENT

Place holder (Advertisement)

APPENDIX 4, 5 AND 6 CONFIDENTIAL INFORMATION

The information contained in Appendix 4, 5 and 6 is considered confidential and is removed from the main Forest Stewardship Plan document. Appendix 4, 5 and 6 demonstrate the Holder's consistency with FPPR Section 22(2).

APPENDIX 4 Public and Stakeholder Review and Written Comments

Review and Comment History for FSP:

Public FSP Presentation Location and Date	Responses as a Result of Public FSP Presentation	Result of FSP Presentation
Newspaper and Other Advertise	ements	
Forest Tenure Holders		
Commercial Recreation Tenure	Holders	
Guide Outfitters		
Sandspit Community Society		
Trap line Tenure Holders		

APPENDIX 5 Council of the Haida Nation Review and Comment

Forest Stewardship Plan

Council of the Haida Nation Review and Comment History for FSP:

FSP Presentation Location and Date	Responses as a Result of FSP Presentation	Result of FSP Presentation

APPENDIX 6 REVISIONS

Revisions History for FSP:

FSP Version and Date	Reason for version change