Tla’amin Nation
Forest Resource Plan

Version 1.0 – August 14th, 2024

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Preamble

The Tla'amin Nation Forest Resource Plan (FRP) was developed to guide resource management across ʔəms giǰɛ (Tla'amin Territory). The FRP is guided by Tla'amin taʔow and we raise our hands to our Ancestors whose teachings continue to guide our responsibility and relationship to ʔəms giǰɛ.

The FRP describes Tla'amin's commitment to sustainable forest resource management throughout ʔəms giǰɛ. It aims to balance economic development with sustainable forest management practices, while integrating values related to good stewardship.

Tla'amin people have lived here and cared for this place since time immemorial. ʔəms giǰɛ spans the northern part of British Columbia's Sunshine Coast, extending down both sides of the Salish Sea. Our Ancestors depended on this land for their survival, with numerous permanent and temporary settlements across ʔəms giǰɛ.

Tla'amin culture and teachings come from only one place in the world. Our economic and political systems, along with our spirituality, are based on our relationship with the land. The interdependence of the land and our people continue through to today.

The Tla'amin year is a never-ending cycle of interconnected events based on the tending, harvesting, processing, sharing, and trading of natural resources, as well as the cultural and social events and activities associated with this seasonal harvest. This interconnectedness is perhaps best exemplified by the fact that the word ǰɛǰɛ means both "tree" and "relative" in the ʔayʔaǰ uθəm language.

The measures in this plan are intended to protect core Tla'amin cultural values, support ecosystem integrity, and provide environmental benefits by maintaining the diversity and abundance of life across the ʔəms giǰɛ. Human well-being will be safeguarded through policies and initiatives designed to achieve socio-economic benefits, including a positive carbon benefit, and timber harvest levels that will support a viable forest industry.

The implementation of the FRP will be monitored and if the intent of the plan is not being met, the plan will be updated. The management assumptions in this plan have a long-term focus, with a lens for supporting a framework to support our relationship to the land for seven generations and beyond. The principles we follow today will enable a healing of the land and provide an opportunity for our čuy to enjoy it in perpetuity.

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LIST OF SCHEDULES

PART 1 – Interpretation

1. Planning framework

The Forest Resource Plan (FRP) establishes a higher-level forest resource plan approved through Tla'amin Executive Council that covers forest resource development in the ʔəms giǰɛ. The content of this plan has built upon previous planning initiatives from the Tla'amin Nation and has been updated with guidance from Tla'amin Citizens. The development of objectives, stewardship measures, and outcomes were led by the Tla'amin Nation in collaboration with provincial forest tenure holders, private forest landowners, stakeholder groups, and the Province of British Columbia.

The FRP includes general stewardship measures that apply across the plan area, with further direction outlined in broad planning zones, and additional management strategies applied for specific priority value areas. The FRP is intended to guide future forest resource planning and determinations, including provincially legislated Forest Landscape Plans, Forest Operations Plans, Timber Supply Reviews, and other higher level planning projects. Measures and practices as outlined in the FRP apply to Treaty Settlement Land as per the Tla'amin Forest Law and related Land Use Plans.

The FRP is intended to complement, not replace, existing provincial and federal legislation and associated regulations. Where there is conflict between FRP measures and provincial and federal legislation and regulations, the intent is to manage resources to a higher standard.

The planning horizon looks forward seven generations and is intended to provide an incremental benefit to the land and the people that depend on it. The result of these actions will provide many environmental and socio-economic benefits, encompassed by a long-lasting benefit to carbon storage and resilience to climate change.

Where overlaps with other applicable Nation land-use planning occurs, Nation-to-Nation agreements are established and will be used to guide development.

2. Definitions

(1) In this FRP:

"active fluvial unit" means an active floodplain, where water flows over land in a normal flood event, and includes low and medium benches and the hydrogeomorphic zone of an active fan;

"cedar stewardship area" means an area identified in Schedule E, or a similar area that is identified by the Tla'amin Nation that is for the purpose of maintaining, enhancing and growing cedar for cultural use;

"community interface areas" means the areas shown on the map attached as Schedule I for the purpose of managing to reduce the risk to communities and community infrastructure;

"conservation network" means the areas shown on the map attached as Schedule C, for the purpose of carbon storage, while managing cultural sites and practices, protecting wildlife habitat, preserving ecosystem health, conserving our water, and creating a resilient landscape;

“cultural cedar stands” a group of mature cedar trees (greater than 200 years old) that have the characteristics and potential to become monumental cedars. A group of trees is defined as 3 or more trees within 15 m of each other;

“cutblock” means an area within which a tenure holder or land manager is authorized to harvest timber, as identified in a cutting permit, timber sale licence or other cutting authority;

“development area” means a specific location defined on a map where timber harvesting or road development is planned or carried out, and includes any stand retention, management zones, reserve zones, mapped reserves, or other areas where timber harvesting is restricted or managed pursuant to this FRP and/or the Forest and Range Practices Act and the regulations made thereunder;

“digital spatial data” means information in the form of a geographic information system feature class format, shapefile format, or coverage;

“elk management areas” means the areas shown on the map attached as Schedule H for the purpose of managing elk habitat;

“equivalent clearcut area” means an indicator which expresses, as a percentage of an entire watershed, the degree to which regenerating forest stands are hydrologically similar to clearcuts, relative to the hydrological status of the hydrologically recovered stand;

“fisheries sensitive feature” means an area that is seasonally occupied by a salmonid or a red- or blue- listed fish species and may include any of the following:

(a) the littoral zone of a lake,
(b) a freshwater area where the water is less than 10 m deep, or
(c) a flooded depression, pond or swamp that contains perennial or seasonal water and is not a stream, wetland or lake as defined in Section 47, 48 or 49 of the FPPR;

“forest influence” means an area that is half a tree length from a single tree or group of trees less than 0.25 ha, or one tree length from a patch of trees greater than 0.25 ha, or one tree length from an intact forest edge. Forest influence is determined using the average codominant/dominant height of the retained trees or cutblock boundary segment that provides influence. Where LIDAR is available, GIS tools can be built to calculate the overlapping zones of forest influence from each stand tree inside and on the edge of a cutblock;

“identified watershed” means an area shown on the map attached as Schedule F for the purpose of protecting watershed function by limiting cumulative impacts to aquatic species and drinking water;

“intact cultural use area” means the areas shown on the map attached as Schedule G for the purpose of developing a conservation and restoration plan within these areas;

“landscape unit” means the areas identified in Schedule B;

“management zone” means an area referred to in the FRP for the protection of a feature and that specifies direction on the alteration, removal, recruitment, or management of trees;

“marine sensitive feature” means a marine-based sensitive area identified in the Tla’amin Nation Marine Plan or through engagement with the Tla’amin Stewardship Team or any of the following:

(a) a herring spawning area,
(b) a shell fish bed,
(c) a saltwater marsh area, or

(d) a juvenile salmonid rearing area or an adult salmon holding area in the marine environment;

“monumental cedar tree” means a cedar tree that meets monumental cedar specifications as outlined in the Schedule P for present and future use;

"occurrence" means a single patch, or polygon, where an Identified Red-Listed Plant Community as per Schedule K has been mapped, or has been identified through a field verification process, and is greater than 0.25 ha;

“old forest” means a stand of trees older than 250 years or structural stage 7;

“opening” means an open and contiguous previously harvested area of forest that is predominantly younger than 20 years and is not separated by a contiguous area of forest older than 20 years for at least 200 m, unless the separation is naturally occurring or is a road that is external to the harvest area. The opening size is calculated using the total net area to be reforested in addition to roads that are internal to the harvest area. Openings apply to landscape-level planning analysis and monitoring and do not apply to adjacency and green-up requirements;

“operational plan assessment” means an assessment conducted by the Tla’amin Stewardship Team that reviews development for cultural and archaeological features and consistency with Tla’amin stewardship measures. The Operational Plan Assessment may identify opportunities for adaptive management and future monitoring. Operational Plan Assessments may integrate into a collaborative Annual Operational Review process that includes a rolling multi-year harvest schedule shared annually with the Tla’amin Stewardship Team to provide site-level considerations early in the engagement process;

“qualified person” means a person that has received training specific to a scope of work;

“qualified professional" means an applied scientist or technologist, acting alone or together with another professional, if

(a) the individual is registered and in good standing in British Columbia with an appropriate professional association constituted under an Act, is acting under that association’s code of ethics and is subject to disciplinary action by that association, and

(b) the individual is acting within that individual’s area of expertise;

"red-listed plant community" means a plant community listed in Schedule K that is sufficiently established;

“riparian management area” means the area in Schedule L, Tables 1 or 2 that consists of the combined riparian reserve zone and riparian management zone as shown in columns 1 and 2;

“riparian management zone” means the area in Schedule L, Tables 1 and 2, column 2 that is established to protect the integrity of the riparian reserve zone and where required to protect fish, wildlife habitat, biodiversity, and the water values of the riparian management zone;

“riparian reserve zone” means the area in Schedule L, Tables 1 and 2, column 1 that is established to protect fish, wildlife habitat, biodiversity, and the water values of the riparian reserve zone;

“stand retention” means individual trees, small patches of trees, and understory vegetation that are located in a development area; stand retention percentages are calculated using the total net area to be reforested in addition to roads that are internal to the harvest area;

"sufficiently established" means for Identified Red-Listed Plant Communities in Schedule K, any of the following:

(a) an occurrence within an old forest stand;
(b) a low bench floodplain ecosystem or a mid bench floodplain ecosystem
(c) an occurrence with a mature forest that has structures and understory approaching those of an old forest;

"Tla'amin Nation engagement" means to collaborate, communicate, share information, engage in dialogue, and identify and work to resolve issues and concerns brought forward by the Tla'amin Nation Stewardship Staff or Executive Council;

"tree length" means the horizontal distance equal to the measured height of a tree height measured adjacent to the feature;

"veteran tree" means a tree that is older than 250 years; "large veteran tree" means a veteran tree that is greater than 60 cm diameter at breast height;

"watershed planning unit" means a watershed or watershed sub-unit that is used as a unit of analysis for watershed assessments;

(2) Words and expressions used but not defined in this FRP have the meaning given to them in Tla'amin Laws, in combination with Provincial Legislation including the *Forest and Range Practices Act*, the *Forest Act*, the *Heritage Conservation Act*, and the regulations made under those Acts, unless the context indicates otherwise.

(3) Where a measure refers to an area shown on a schedule and the area is also defined by a spatial dataset, the boundaries of the area as defined by the spatial dataset apply in the event of any inconsistency. A complete list of spatial datasets is available from the Tla'amin Stewardship Team.

(4) References to elements in this plan follow this general structure:

PART
Division
Section
(x) Subsection.

PART 2 - General Stewardship Measures

Division 1 - General

1. Application

(1) Within the FRP Plan Area as shown on the map attached as Schedule A, unless otherwise modified by another measure in this plan, measures identified in Part 2 apply.

2. Measures for Tla'amin Nation engagement

(1) For the purpose of implementing and achieving the intent of the FRP, conduct Tla'amin Nation engagement with the Tla'amin Stewardship Team through an identified Tla'amin Stewardship Program, collaborative working group, operational review process, established joint management table, or through an otherwise designated representative or process approved by Tla'amin Executive Council.

(2) Unless otherwise identified through engagement, all proposed development areas will require an Operational Plan Assessment.

3. Measures for the conservation network

(1) Reserve from road construction and industrial harvesting in a conservation network area shown on the map attached as Schedule C. The conservation network is for the protection and management of cultural sites and practices, old forests, wildlife habitats, ecosystem health, riparian function, water, species at risk, special resource features, climate resiliency, recreation values, and carbon storage. Conservation network areas incorporate legally established landscape-level reserves that include important wildlife habitat areas for marbled murrelet, northern goshawk, ungulate winter ranges, and old growth management areas.

(2) Despite subsection (1), an area of conservation network may be moved, impacted, or improved consistent with the Tla'amin Nation policy and guidance for modifying and restoring conservation network areas, and the plans to alter or harvest a conservation network area has been developed and approved through a process of engagement with the Tla'amin Stewardship Team. Cultural resource use, road access, and recreational use in a conservation network is permitted subject to the objectives in the specific conservation network area.

(3) Conservation network area modifications must be documented and submitted as digital spatial data at the end of each calendar year to the Tla'amin Stewardship Team. Modifications will be tracked according to total area as represented in a BEC Subzone Variant within a Landscape Unit.

Division 2 – Ecological Integrity

4. Measures for ecological integrity at the landscape level

(1) Reserve from harvesting all existing patches of old forest.

(2) Reserve from harvesting each occurrence of an identified red-listed plant community that is a minimum of 0.25 hectares in size listed in Schedule K. Include occurrences of identified red-listed plant communities as an anchor for stand retention where applicable.

(3) Despite subsection (1) and (2) harvesting may occur provided

(a) that the alteration or harvesting is required for road access or other infrastructure, or to address a safety concern, where there is no practicable alternative, or

(b) for an identified cultural purpose, and

(c) the harvest plans have been developed through a process of engagement and approved by the Tla'amin Stewardship Team.

(4) Alteration or removal of forests identified in subsection (1) and (2) must be documented and submitted as digital spatial data at the end of each calendar year to the Tla'amin Stewardship Team.

5. Measures for ecological integrity related to stand retention

(1) Maintain forest structure and diversity at the stand level by:

(a) maintaining a minimum of 15% of the cutblock area as stand retention within the development area, unless a rationale is provided for a lesser amount and has been approved by the Tla'amin Stewardship Team;

(b) maintaining more than 15% stand retention as necessary, considering opening size and the structural characteristics that resemble an opening that would result from the dominant natural disturbance regime on the landscape;

(c) for cutblocks larger than 5 ha and less than or equal to 20 ha, distributing stand retention throughout the development area as both internal and external retention. Internal retention includes peninsulas, small and large groups of trees, and single leave trees. The amount of internal retention will be guided by harvest systems, topography, cutblock shape, and feature management;

(d) maintaining all groups of veteran trees and individual large veteran trees as stand retention, where practicable, with consideration to the relative scarcity and unique characteristics of the veteran trees in a particular landscape;

(e) for cutblocks greater than 20 ha,

(i) forest influence must be maintained for more than half the cutblock; or

(ii) stand retention must be primarily internal to the cutblock, spatially distributed across the development area, and include a range of retention types; or

(iii) to recover timber damaged by a natural disturbance, stand retention and development area design will be considered according to the characteristics as a result of the natural disturbance;

(2) Prioritize the following within stand retention:

(a) Tla'amin cultural resources identified in an Operational Plan Assessment;
(b) habitat elements important for ecological function including large coarse woody debris, large standing snags, and large mature trees;
(c) habitat elements important for wildlife;
(d) riparian areas important for aquatic species and hydrologic function;
(e) mature forests;
(f) recreational features;
(g) occurrences of red-listed plant communities;
(h) areas <0.25 ha of red-listed plant communities;
(i) features, elements, and designs described in Schedule N - Stand Retention Guidance.

(3) Stand Retention measures described in subsection (1) does not apply to woodlots or privately managed forest land.

6. Measures for ecological integrity related to invasive species and vegetation management

(1) Within the first year of implementation of this plan and at least annually thereafter, tenure holders and private land managers will query existing inventories in their operating areas for locations of invasive knotweed species (Reynoutria spp. and Persicaria wallichic). Existing inventories will be updated as new locations are found. Tenure holders and private land managers will collaboratively develop strategies to eliminate knotweed where found in their operating area. Where knotweed is located within a riparian management area, the least toxic method must be used that is considered equally effective. The location of knotweed species and measures taken to eliminate the species, including if herbicide was used, is to be provided to the Tla'amin Stewardship Team annually as a digital shapefile.

(2) Provincial Priority Invasive Plant Species near planned developments, including where work is planned on access roads, will be monitored and site-specific measures will be implemented to eliminate, or control spread of the invasive species.

(3) No herbicide use will be permitted to achieve silviculture vegetation management objectives unless a detailed rationale has been submitted and approved by the Tla'amin Stewardship Team. Priority will be given to the use of chemicals intended for the elimination and control of invasive species. Manual brushing is encouraged to replace herbicide use where feasible. Herbicide use will be documented and submitted as digital spatial data at the end of each calendar year to the Tla'amin Stewardship Team. It is recognized that this approach could result in stands that have higher amounts of deciduous species than is currently being achieved in free growing stands, and declarations may be required under section 97 of FPPR.

Division 3 – Heritage and Culture

7. Measures for spiritual sites and areas of high cultural significance

(1) Protect sensitive spiritual sites and areas of high cultural significance, as identified by the Tla'amin Stewardship Team.

(2) Allow for safe access, where required, for Tla'amin Citizens to access identified spiritual sites and areas of high cultural significance.

8. Measures for taχamay (western redcedar), tiχʷay (yellow cedar), tᶿač̓aɬpay (spruce), and χʷɛʔɛtay (western yew)

(1) Manage Cedar Stewardship Areas according to measures identified in Part 4 Section 2.

(2) Manage the availability and access to cultural tree resources as identified in Schedule P - Tla'amin Cultural Tree Resource Technical Guidance, including active management of taχamay (western redcedar), tiχʷay (yellow cedar), tᶿač̓aɬpay (spruce), and χʷɛʔɛtay (western yew) for current and future use;

(3) Retain or make available for cultural use all Monumental Cedar Trees and Cultural Cedar Stands, with consideration to access and availability.

(4) Manage culturally modified trees consistent with Schedule R - Tla'amin Archaeology Forest Practices guidance.

(5) Within cutblock site units, regenerate western redcedar and yellow cedar on ecologically suitable sites appropriate for cedar establishment and growth, with consideration to climate change, forest health, and animal browsing.

(6) Development areas that consist of resources identified in subsection (2) to (4) will be assessed through an Operational Plan Assessment and will be either managed in stand retention, made available for cultural use, or harvested subject to approval from the Tla'amin Stewardship Team.

(7) All areas and individual trees retained or managed in accordance with subsections (2) to (4) must be documented and submitted as digital spatial data at the end of each calendar year to the Tla'amin Stewardship Team.

9. Measures for cultural plants

(1) Manage the availability and access to cultural plants as identified in Schedule Q - Sensitive and Rare Cultural and Medicinal Plant Guidance.

(2) Despite subsection (1), an Operational Plan Assessment may identify and provide measures to protect cultural plants not identified in Schedule Q.

(3) All cultural and medicinal plant areas retained or managed in accordance with subsection (1) and (2) must be documented and submitted as digital spatial data at the end of each calendar year to the Tla'amin Stewardship Team.

10. Measures for archaeological sites

(1) Protect the integrity of all known and previously unidentified features and sites according to Schedule R - Tla'amin Archaeology Forestry Practices.

(2) Prior to undertaking road construction or harvesting, a preliminary archaeological field reconnaissance (PAFR) survey must be completed by a Qualified Professional that is acceptable to the Tla'amin Stewardship Team. For clarity, areas with an existing PAFR may be used to contribute to this measure.

(3) Despite subsection (2), the development area may be assessed for archaeological potential by a Qualified Person, approved by the Tla'amin Stewardship Team, in an Operational Plan Assessment following an archaeological risk determination by the Tla'amin Stewardship Team.

Division 4 – Water and Aquatic Habitat

11. Measures for streams, wetlands, and lakes

(1) Within and immediately adjacent to development areas, utilizing a Qualified Professional, classify streams, wetlands and lakes as per Section 47(2)(3), 48(1)(2) and 49(1) of the Forest Planning and Practices Regulation of British Columbia, and apply stream, wetland and lake riparian reserve and management zone buffers consistent with stream, wetland and lake class as shown in Schedule L, Table 1, columns 1 and 2.

(2) Modify or apply additional measures to protect aquatic habitat or drinking water, consistent with Riparian Area Guidance identified in Schedule L and document these measures in a site plan or site level plan and document as part of the Operational Plan Assessment.

12. Measures for fisheries sensitive features

(1) Protect all fisheries sensitive features.

(2) Adjacent to fisheries sensitive features, maintain a five-meter machine free zone (MFZ) and where practicable leave understory vegetation and non-merchantable trees.

(3) Despite subsections (1) and (2), alteration of a fisheries sensitive feature and MFZ may occur provided:

(a) the alteration is required for road access or other infrastructure, or to address a safety concern, where there is no practicable alternative, and

(b) a prescription has been developed by a Qualified Professional that results in the least impact to the fisheries sensitive feature, and

(c) the plans to alter the fisheries sensitive feature have been identified and developed as part of the Operational Plan Assessment.

13. Measures for active fluvial units

(1) Protect all forests within active fluvial units.

(2) Adjacent to active fluvial units, maintain a management zone as recommended by a Qualified Professional, measured from the outer edge of the active fluvial unit, to maintain the integrity of the active fluvial unit.

(3) Despite subsections (1) and (2), alteration of an active fluvial unit may occur provided:

(a) the alteration is required for road access or other infrastructure, or to address a safety concern, where there is no practicable alternative, and

(b) a prescription has been developed by a Qualified Professional that results in the least impact to the active fluvial unit, and

(c) the plans to alter the active fluvial unit have been documented in an Operational Plan Assessment and approved by the Tla'amin Stewardship Team.

14. Measures for marine sensitive features

(1) Protect all marine sensitive features and mitigate sediment input for upland areas connected to marine sensitive features.

(2) Adjacent to marine sensitive features, maintain a 15 m reserve zone, measured from the outer edge of the marine sensitive feature, to maintain the integrity of the feature.

(3) Despite subsections (1) and (2), activities and alterations may occur provided:

(a) the alteration is required for road access or other infrastructure, or to address a safety concern, where there is no practicable alternative, and

(b) a prescription has been developed by a Qualified Professional that results in the least impact to the marine sensitive feature, and

(c) the plans have been documented in an Operational Plan Assessment and approved by the Tla'amin Stewardship Team.

Division 5 – Wildlife

15. Measures for the identification and protection of wildlife features

(1) Identify wildlife features referred to in Schedule O - Wildlife Features Guidance by conducting a field assessment utilizing a Qualified Person prior to undertaking road construction or timber harvesting. The results of the field assessment must be documented in the site plan or site level plan including recommended management strategies for the protection and maintenance of the feature.

(2) The wildlife feature must be documented on a map, or made available as digital spatial data, and provided to the Tla'amin Stewardship Team for consideration in the Operational Plan Assessment.

(3) The location of identified wildlife features and any reserve and/or management zones must be documented and submitted as digital spatial data at the end of each calendar year to the Tla'amin Stewardship Team.

PART 3 – Zones

Division 1 – General

1. Application

(1) The zones in Part 3 have been identified to give strategic level direction to current and future initiatives that require a management focus on a broader scale. This approach offers a level of predictability in long-term planning and will allow for a focused effort towards the measures listed for each zone. Where there is a direct conflict between measures in Part 3 and Part 2, the intent is to manage to Part 3 measures.

Division 2 – Ecosystem Health Zone

The goal for the Ecosystem Health Zone is to manage for a high-level of ecological integrity at the landscape and stand-level to ensure the maintenance and restoration of ecosystem health, alongside the healing of Tla'amin cultural lifeways; this will be informed by the traditional resource management principles that respects the spirit of all living things and encourages a holistic interconnected view of the land. The Ecosystem Health Zone will be a focus area for future habitat and land use planning initiatives that increase ecosystem health.

2. Measures for the ecosystem health zone

(1) Within the Ecosystem Health Zone as shown on the map in Schedule D, conduct the following:

(a) increase stand retention and reduce opening sizes, as required, with consideration to forest influence, maturing forest represented near openings, rotation age, and surrounding cultural values;

(b) develop and share an annual access management plan with the Tla'amin Nation, that may include a map, digital file, or online system, that displays active road locations, deactivation plans, and other access considerations;

(c) develop and implement stocking standards, reforestation strategies, and silvicultural systems that promote long term resilience to ecosystem health, including the management for diversity and natural succession;

(2) In addition to subsection (1), The Tla'amin Nation will lead the development of a priority restoration strategy for conservation network areas in the Ecosystem Health Zone that improves the long-term ecological integrity of the area and broader landscape.

Division 3 – Investment Zone

The goal in the Investment Zone is to manage forests sustainably with a long-term investment focus to encourage high-value products while providing consistent economic benefit to the local community; the Investment Zone will be a focus area for future investment initiatives in stand quality improvement for timber and other identified forest assets.

3. Measures for the investment zone

(1) Within the Investment Zone as shown on the map in Schedule D, conduct the following:

(a) manage harvest patterns to include a range of opening sizes and stand retention, while considering cultural values, access management and forest economics;

(b) within the first 5 years of FRP implementation, areas identified for conservation or avoidance outside the conservation network will be tracked and considered according to landscape-level protection represented in the conservation network;

(c) develop and implement stocking standards that increase timber yield and promote the long-term protection of forest assets, including the management for resilience and climate change;

(d) in partnership with the Tla'amin Nation, develop an integrated silviculture strategy that identifies priority areas for investment, innovative silviculture practices, and the management for high value forest products that includes consideration to rotation ages.

Division 4 – tiskʷət Stewardship Zone

The goal for the tiskʷət Stewardship Zone is to respect the cultural legacy and significance of tiskʷət as a cultural corridor throughout the connected waters of θayɛɬ, while enabling the restoration of salmon to the watershed; the tiskʷət Stewardship Zone will be a focus for future cultural and ecological restoration initiatives that serve to increase the Tla'amin cultural lifeways associated with this area.

4. Measures for the tiskʷət stewardship zone

(1) Within the tiskʷət Stewardship Zone as shown on the map in Schedule D, conduct the following:

(a) implement stand retention and forest influence rules according to Schedule M, with consideration to Part 2 Section 5 Subsection (2);

(b) within the areas identified as intact watersheds shown on the map attached as Schedule J, no new development is permitted unless it has been approved through a process of engagement with the Tla'amin Stewardship Team;

(c) The Tla'amin Nation will explore the development of an integrated restoration strategy with direction from the Tla'amin Marine Plan to restore salmon habitat to the tiskʷət system.

Division 5 – saʔyayın Stewardship Zone

The goal for the saʔyayın Stewardship Zone is to retain ecologically rare and endangered ecosystems with a focus on cultural plants; the saʔyayın Stewardship Zone will be a focus for future rare plant community identification and restoration projects, contemporary-use focus studies, and karst-based planning.

5. Measures for the saʔyayɪn stewardship zone

(1) Within the saʔyayɪn Stewardship Zone, as shown on the map in Schedule D, conduct the following:

(a) prior to development in areas identified as karst bedrock areas, complete a karst survey utilizing a Qualified Professional and include the results in a site plan or site level plan for consideration as part of the Operational Plan Assessment;

(b) karst features considered to be sensitive or vulnerable as identified through a karst survey or identified during operations will be protected from development; and

(c) increase stand retention as required, in addition to Part 2 Section 5, with consideration to rare plant communities and unique cultural plants identified during field work or in an Operational Plan Assessment.

(2) The Tla'amin Nation will develop additional strategies to guide priority cultural plant management in the saʔyayɪn Stewardship Zone in future contemporary use studies.

PART 4 – Areas Identified for Priority Management

1. Application

(1) The areas in Part 4 have been identified for the priority management of a particular value, which will include detailed assessments and action plan development. This does not preclude managing these values across the plan area. These areas serve as an expression of the importance of this value and the need for detailed management at appropriate planning scales. These priority areas continue to follow measures outlined in Part 1, Part 2, and Part 3 unless a detailed management plan or landscape planning outcome identifies alternative measures and is approved through a process of engagement with the Tla'amin Stewardship Team.

2. Measures for areas identified as a priority for cedar stewardship

(1) Within Cedar Stewardship Priority Areas shown on the map attached as Schedule E, the following measures apply:

(a) manage cedar stewardship areas to provide a supply of cedar for present and future cultural use;

(b) retain or make available for cultural use all Monumental Cedar Trees and Cultural Cedar Stands;

(c) reserve from harvesting cedar stands, identified using the most current vegetation resources inventory information or through field verification, where cedar is the leading species or is > 40 percent of the stand composition;

(d) utilize a retention silvicultural system or an alternative silviculture system that promotes a distribution of cedar in a range of stand types;

(e) where practicable, include cedar in retention areas, and

(f) develop and implement cedar management stocking standards compatible with site conditions.

(2) All cedar stands, Monumental Cedar Trees and Cultural Cedar Stands retained in accordance with subsections (2)(b) and (c) must be documented and submitted as digital spatial data at the end of each calendar year to the Tla'amin Stewardship Team.

3. Measures for areas identified as a priority for watershed health

(1) Within the Identified Watersheds shown on the map attached as Schedule F, protect watershed function by limiting cumulative impacts to aquatic species and drinking water while managing resilient riparian ecosystems, subject to the measures in this section.

(2) Prior to proposing development in an Identified Watershed:

(a) complete a watershed assessment utilizing the services of a Qualified Professional, that among other things, identifies active fluvial units, fans, sensitive sites, areas of high risk to landslides, considers the cumulative effects of development at a watershed scale, and considers factors that may alter resilience to climate change; a coordinated forward-looking planning process will occur among licence holders and the Tla'min Stewardship Team to mange for recommendations outlined in the watershed assessment;

(b) maintain an equivalent clearcut area (ECA) that is less than or equal to 25%, across the total watershed area and sensitive sub basins, as identified in a watershed assessment;

(c) apply stream, wetland and lake riparian reserve and management zone buffers for Identified Watersheds consistent with stream, wetland and lake class as shown in Schedule L, Table 2, columns 1 and 2;

(d) Modify or apply additional measures, where required, to protect aquatic habitat or drinking water, consistent with Riparian Area Guidance in Schedule L and document these measures in a site plan or site level plan and document this as part of the Operational Plan Assessment.

(3) Despite subsection 2(b), the ECA may exceed 25% if increasing the ECA will not result in a material adverse impact to fish and drinking water consistent with recommendation from a Qualified Professional and is approved through a process of engagement with the Tla'amin Stewardship Team.

(4) Despite subsection (2)(c), alteration or harvesting of a riparian reserve may occur provided:

(a) the alteration or harvesting is required for a road, bridge, stream crossing, or other infrastructure, or to address a safety concern, where there is no practicable alternative; and

(b) the alteration or harvesting is supported in a report completed by a Qualified Professional, that considers impacts to fish, riparian and water; and the information is documented for review as part of an Operational Plan Assessment process;

(5) Alteration or harvesting of a riparian buffer in accordance with subsection (4) must be documented and submitted as digital spatial data at the end of each calendar year to the Tla'amin Stewardship Team.

4. Measures for areas identified as a priority for intact cultural use

(1) For areas identified as a priority for intact cultural use as shown on the map attached as Schedule G, the following apply:

(a) no new forest development is permitted until the Tla'amin Nation develops a collaborative conservation and restoration plan for part or all of the intact cultural use area, or the development is detailed in a landscape level rationale, tactical outcome process, or conservation initiative that supports access, restoration, regenerative forestry, or availability of cultural activities such as cultural tree use, cultural plant harvesting, spiritual practice, access to fish, or access to hunting and is approved by the Tla'amin Stewardship Team.

Planning for intact cultural use areas will consider incremental benefits to carbon as a management priority as part of the conservation and restoration planning in these areas;

(b) Roads under road permit will be assessed by a Qualified Professional and an access management plan developed in conjunction with the Tla'amin Stewardship Team that will ensure continued access to cultural use areas while maintaining the hydrological function and stability of the road and clearing width.

5. Measures for areas identified as a priority for elk management

(1) Within elk management areas, the following apply:

(a) utilizing a Qualified Professional, define elk critical winter range (foraging and thermal habitats) and important spring and summer forage areas (e.g., vegetated slides, wetlands and riparian areas); and

(b) adjacent to important spring and summer forage areas, establish treed buffers that provide elk security cover; and

(c) reserve from harvesting critical elk winter range area(s) or treed buffers adjacent to important spring and summer forage areas.

(2) Within elk management areas, design forest harvesting that:

(a) supports sustainable seasonal elk habitats (e.g., winter, spring, and summer) through sequential harvest timing and development area design (e.g., irregular shaped block boundaries);

(b) maintains suitable elk security and thermal cover within and adjacent to development areas; and

(c) protects special habitats (e.g., riparian areas, small wetlands, wallows, and rock bluffs) located within harvest openings; and

(3) Regenerate disturbed roadsides within cutblocks using native grass seed mixes.

(4) Encourage conditions in cutblocks that do not restrict mobility (e.g., redistribute slash accumulations and avoid piling slash along known travel routes), with consideration to the potential need to obstacle plant for seedling survival.

(5) Develop and share an annual access management plan with the Tla'amin Stewardship Team, that may include a map, digital file, or online system, that displays active road locations, deactivation plans, and other access considerations.

6. Measures for community interface areas

(1) Within the areas identified as community interface areas shown on the map attached as Schedule I, the following apply:

(a) prior to harvesting timber within a cutblock, maintain a fire preparedness plan to minimize the risk of fire initiation and spread that could occur because of forest operations; and

(b) ensure workers have appropriate fire training (e.g., S-100), that there is appropriate fire equipment on-site during active operations and that fire equipment is in good working condition; and

(c) following harvest completion combatable with weather conditions, complete fire hazard abatement (i.e., pile burning, chipping, or debris removal) to reduce the risk of fire ignition and spread; and

(d) where practicable, restrict access to active and recently completed harvest areas where abatement has not been completed during periods of extreme fire danger rating; and

(e) where practicable, minimize waste through improved utilization to $\leq$ 10 m3 per hectare including removal of pulp logs, firewood, and other secondary products. Where improved utilization is not practicable, fire hazard abatement must be prioritized, which may include pile-burning, chipping, or debris removal.

(2) Maintain permitted roads in a condition that minimizes sediment into streams, lakes and other waterbodies and develop a stream crossing and culvert monitoring program to assess and monitor risk to downstream infrastructure. Ensure road conditions are suitable for safe public access where applicable.

(3) Within and immediately adjacent to development areas that may have an impact on priority infrastructure, complete a terrain stability field assessment (TSFA) utilizing a Qualified Professional, and follow recommendations in the TSFA to a low-risk threshold.

(4) The Tla'amin Nation will develop additional tactical planning outcomes related to wildfire risk reduction, which may prioritize the use of cultural burning.

PART 5 – Outcomes

The following eight value objectives define a set of future forest outcomes that show how forest conditions are forecast to change through time based on the measures outlined in this plan. The outcomes in this section of the plan are based on modelling assumptions at the time of plan approval and will need to be updated or replaced as new initiatives and additional planning occurs.

Division 1 - Cultural sites and practices

The objective for cultural sites and practices is to protect sensitive cultural and spiritual sites while managing the availability and access to resources for cultural practice, informed by the taʔow and 13 Moons Calendar.

1. Outcomes for Cultural Tree Species

Taχamay (western redcedar) and tiχʷay (yellow cedar) play a vital role in Tla'amin culture, traditions, and contemporary practices. Both species are utilized across their life-cycles, emphasizing the critical need to manage for a diversity of size and age classes. They are also important economically as highly valued timber species. Increasing the prevalence of taχamay and tiχʷay across a range of age and size classes will lead to important benefits both culturally and economically for the Tla'amin Nation.

Young taχamay and tiχʷay stands are culturally important for bark stripping and root digging. For this outcome, suitable stands are between ages 50 and 80, with >10% of either species, less than 1 hours' drive from tišosəm and <100m from a major road or mainline. Under both current practices and the measures proposed in this plan, the area of such stands is forecast to increase from current levels over time (Figure 1). The area of such stands is forecast to be generally lower under the proposed measures than current practices, which can be attributed to greater protection of cedar stands in this plan which over time will mature into older ages classes. Access to this cultural resource will be monitored over time, which will include additional analysis in the contribution of older age classes for bark stripping trees alongside access to bark stripping in harvest areas. Management direction for protected areas and cultural use will need to be considered over the long term to maintain this resource.

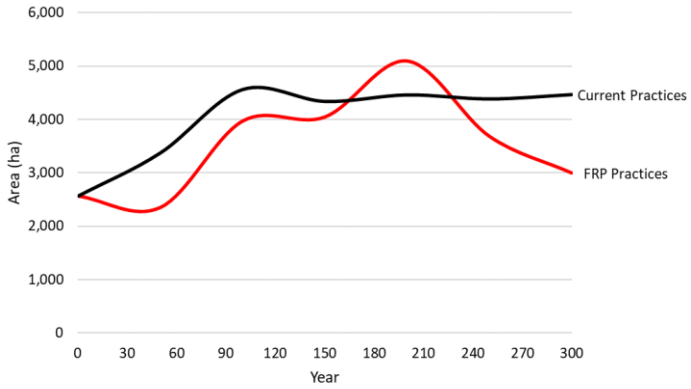


Figure 1 – Area of taχamay and tiχʷay suitable for bark stripping and root digging through time.

Large taχamay and tiχʷay trees are critically important for several carving resources. Uses vary by log size and species, so each species was considered separately using three diameter classes: 100-119 cm, 120-149 cm, 150 cm+.

Under the measures proposed in this plan, there are forecast to be >18,000 (+34%) more 150+ cm taχamay trees in 50 years than would be expected under current practices (Figure 2). In 300 years, there are forecast to be >26,000 (+24%) more 150+ cm taχamay trees than under current practices.

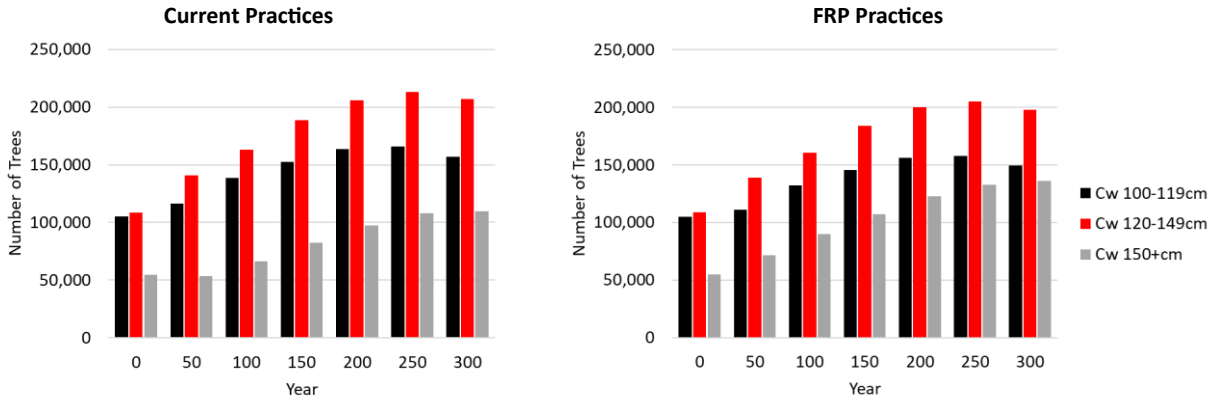


Figure 2 – Estimated number of taχamay trees by diameter class through time throughout FRP area.

The number of large tiχʷay trees are also forecast to be higher as a result of this plan than under current practices. Under the measures proposed in this plan, there are forecast to be >2,000 (+94%) more 150+ cm tiχʷay trees in 50 years, and >3,000 (+46%) more trees in 300 years than would be expected under current practices (Figure 3).

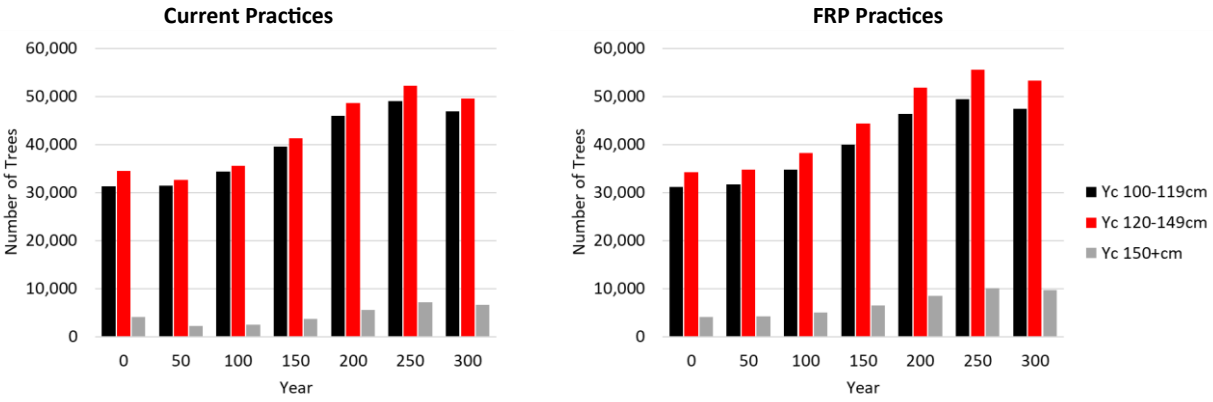


Figure 3 – Estimated number of tiχʷay trees by diameter class through time throughout FRP area.

The age class distribution of taχamay and tiχʷay stands is also important to consider. Mature and older stands play an important role in maintaining biodiversity and ecosystem health as well as providing potential sources for cultural logs. Under the measures outlined in this plan, the area of mature and old forests (age 141+) inside of the conservation network containing at least 10% taχamay and tiχʷay are forecast to more than double in the next 120 years, from 16,000 ha currently to over 40,000 ha (Figure 4). Under current practices, the area of these stands would be forecast to increase from 13,000 ha to 29,000 ha.

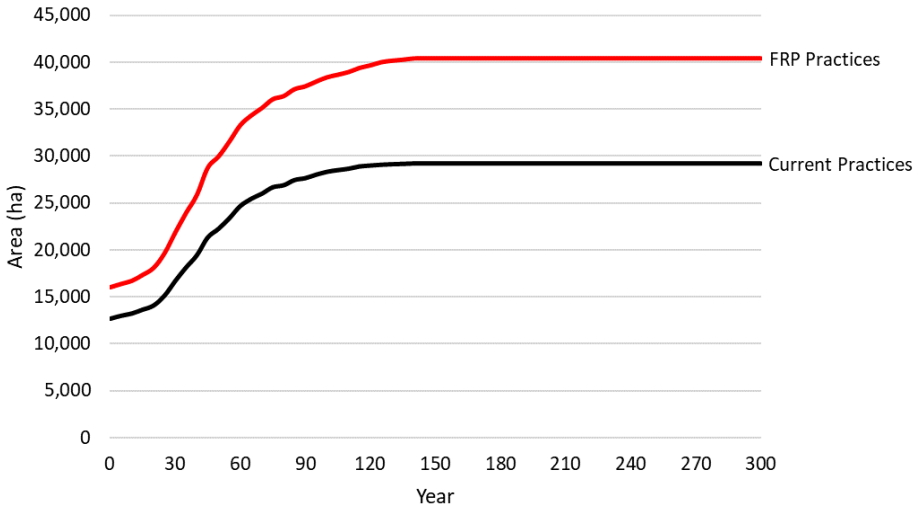


Figure 4 – Area of stands containing >10% taχamay and tiχʷay by age class within the Conservation Network through time.

Tθačaɬpay (spruce) is an important cultural resource for the Tla'amin Nation. For this outcome, the area of stands containing tθačaɬpay of age class 4 (60 years old) or greater, that were <1 hours' drive from tišosəm and within 100m of major roads or mainlines were used. Under the measures outlined in this plan, the area of such stands is forecast to be 27% higher than under current practices in 300 years, however under both scenarios, there are forecast to be less tθačaɬpay stands than there are today (Figure 5).

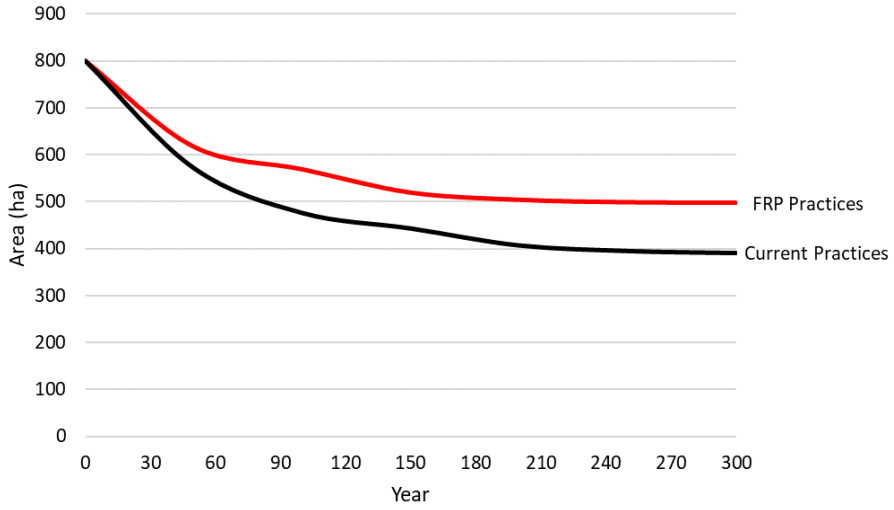


Figure 5 – Area of tθačaɬpay stands suitable for cultural purposes through time.

Division 2 - Ecosystem Health

The objective for ecosystem health across the ʔəms giǰɛ is to encourage diverse complex ecosystems, maintain ecological integrity, and protect old forests. This will be informed by cultural practices and natural patterns of disturbance.

2. Outcomes for ecosystem integrity

Maintaining biodiversity and healthy ecosystems are critically important to the Tla'amin Nation as it supports all living things and provides the essential services such as clean air, fresh water, food and medicines that contribute to our well-being today and into the future.

To assess ecosystem integrity, we followed the approach developed by Banner et al. (2024). This method employs six attributes to assign an integrity score to each stand:

- Canopy complexity (mean and standard deviation): Measured using LiDAR using rumple
- Stand Age
- Tree Species Diversity
- Polygon Size
- Landscape Context

The integrity score is classified into four classes (I – IV), each with two subclasses (a & b), with class I,a representing the highest ecosystem integrity and class IV,b the lowest.

We assessed current conditions (year 0) using recent LiDAR and forest inventory information. We used the Patchworks™ model outputs and the predicted change in canopy complexity through time to assess future conditions resulting from the measures outlined in this plan (years 100 and 300).

Under the measures outlined in this plan, the ecosystem integrity across the ʔəms gi̓ɣɛ is forecast to increase significantly over time (Figure 6). The area of class I ecosystem integrity is forecast to increase from 32% of the plan area today, to 74% in the next 100 years. The area of class I,a ecosystem integrity is forecast to increase from 15% today to 53% of the plan area in 300 years' time. The improved ecosystem integrity can be seen throughout the plan area, and especially in toqʷanan (Figure 7).

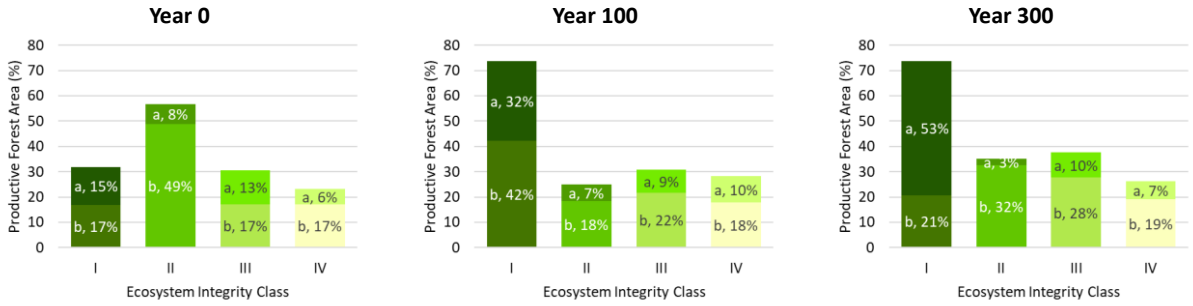


Figure 6 – Area by ecosystem integrity classes through time under FRP practices

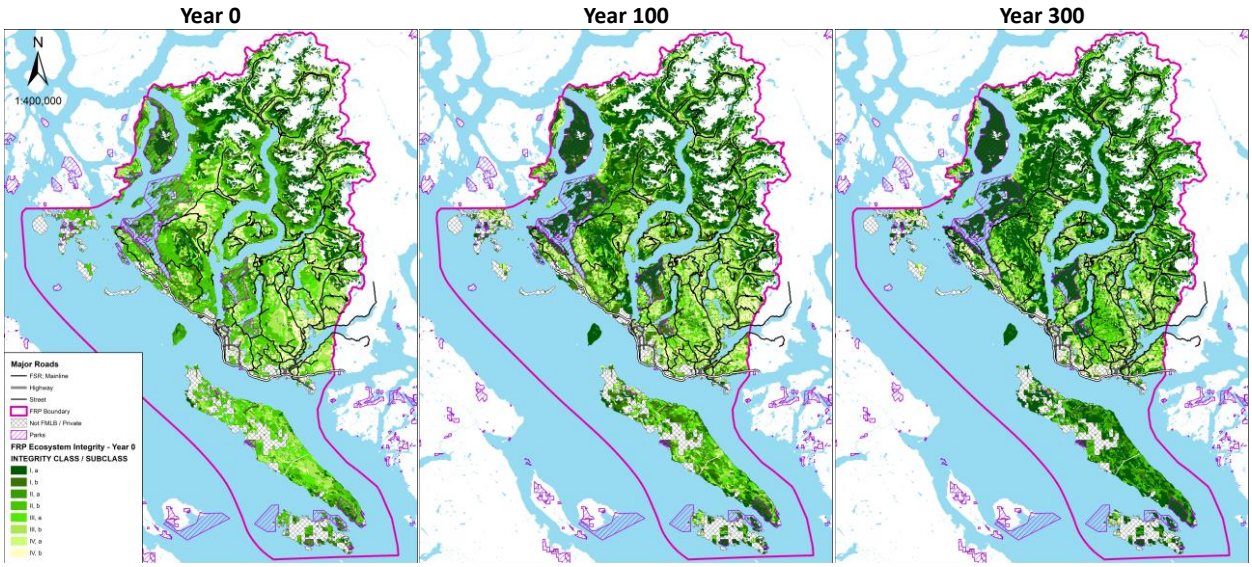


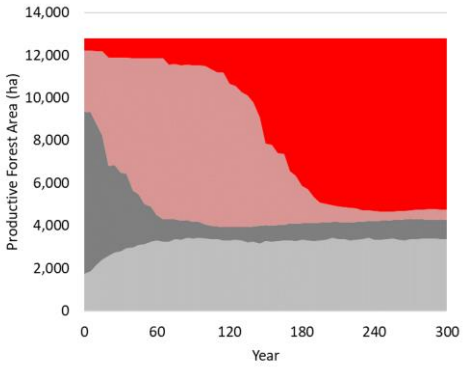
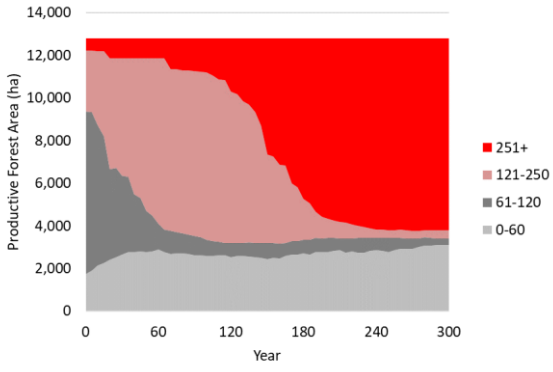
Figure 7 – Spatial pattern of ecosystem integrity classes through time under FRP practices

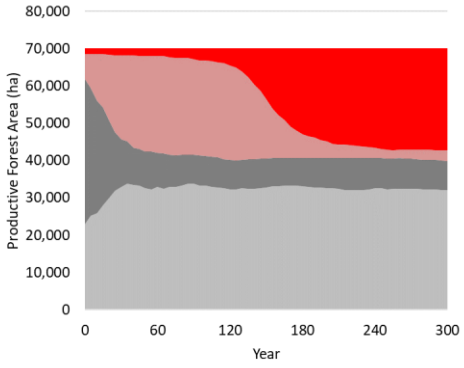
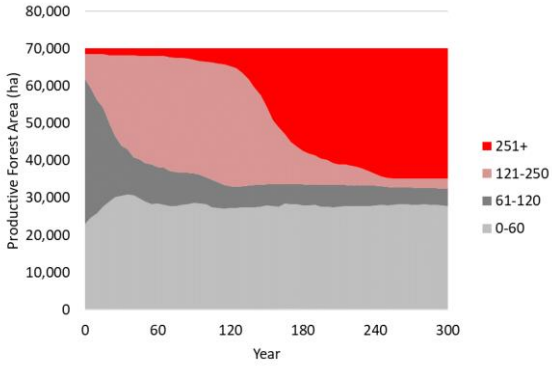
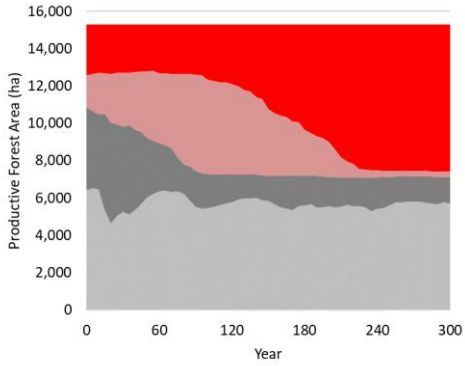
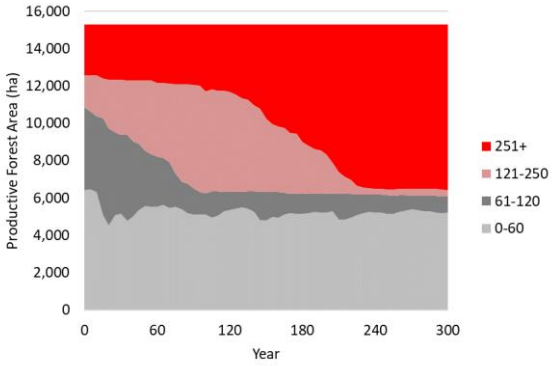
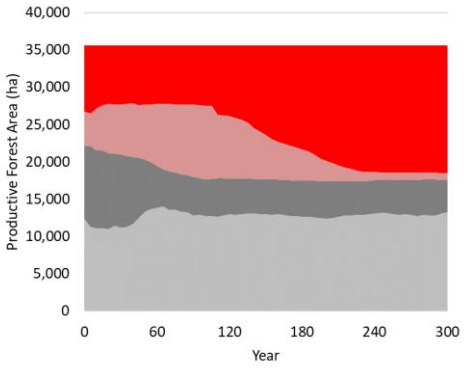
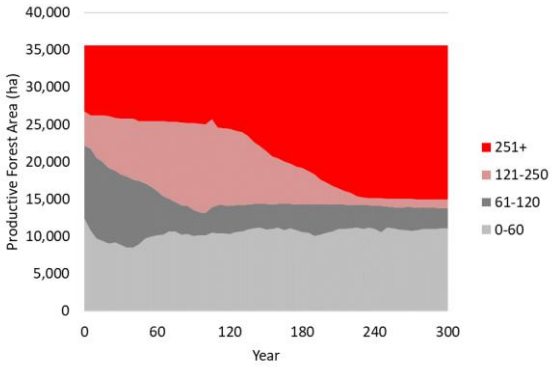
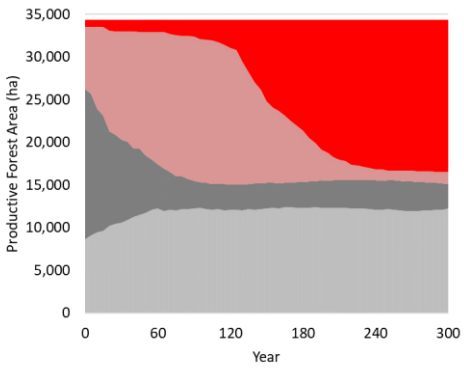
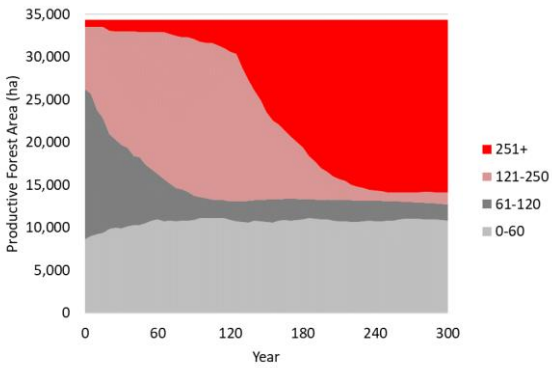
3. Outcomes for forest ages and ecosystem representation

Maintaining a diversity of forest age classes across the ecosystems found in the ʔəms gi̓ɣɛ supports biodiversity and promotes a broad range of species over time. A variety of forest ages increases structural diversity, supporting a variety of habitats and ecosystem services. A diverse age class profile also improves ecosystem resilience, as uneven-aged systems are more able to withstand external stressors, including pests, natural and man-made disturbances, and climate change.

The projected forest age profile in each biogeoclimatic subzone variant is shown in Figure 8. All variants other than MHmm1 are shown to have a rapid increase in the projected area of 251+ year old stands beginning in approximately year 120. The forests in the MHmm1 variant are already predominantly 251+, and the age class profile of this variant is therefore projected to remain more stable through time.

All variants are projected to have ≥50% of 251+ year old stands by age 300 under the measures in this plan. Under current practices, two variants (CWHdm and CWHvm2) were projected to have less than 50% (39% and 48% respectively) of 251+ year old stands in 300 years.

BEC Variant	Current Practices	FRP Practices
CDFmm		

BEC Variant	Current Practices	FRP Practices
CWHdm		
CWHvm1		
CWHvm2		
CWHxm		

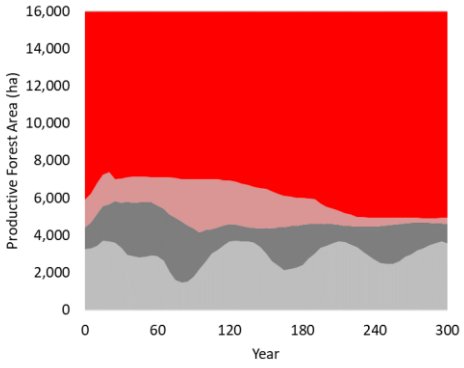
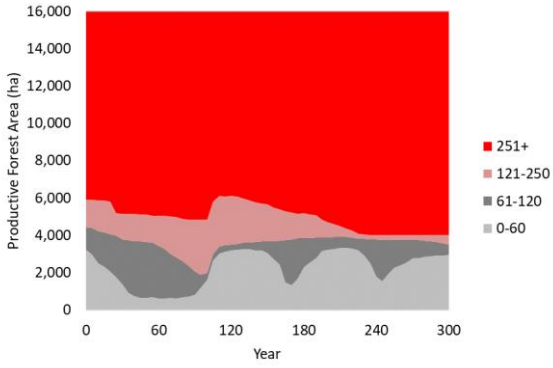
BEC Variant	Current Practices	FRP Practices
MHmm1		

Figure 8 – Productive forest area (ha) by age by biogeoclimatic subzone variant through time under current practices and FRP practices.

4. Outcomes for landscape forest connectivity

Forest connectivity plays an important role in the survival and adaptation of species, the resilience of ecosystems, and the ability of forests to adapt to a changing climate. Connected forests allow animals, plants, and other species to move freely across landscapes, which is essential for finding food, mates, suitable conditions as seasons or climates change, and for avoiding predators. Forest connectivity also improves ecosystem resilience, as forests can more easily withstand and recover from disturbances and changing climates than highly fragmented ones.

Landscape forest connectivity was assessed for the mainland portion of the ʔəms gi̓ɟɛ as well as saʔyayɪn and Lasqueti Islands. Man-made barriers such as paved roads, communities and BC Hydro lines were considered to break forest connectivity as did the ocean and large lakes (>1000m). This resulted in fourteen discrete sectors, for which forest connectivity was assessed for each. Connectivity was determined for stands 60 years and older and reported in two age categories: 60-140 and 141+ years old. Within each sector, the largest stand ≥60 years old was identified, and then connectivity established if neighbouring stands were also ≥60. This process was repeated until there were no neighbouring stands ≥60 years old. Forest connectivity was assessed at three periods: year 0, 100, and 300.

Under the measures outlined in this plan, connectivity of 141+ year old stands across the ʔəms gi̓ɟɛ is forecast increase by over 270% (Figure 9). The overall connectivity is forecast to decrease slightly, due to a significant decrease in connectivity scores for 60-140 year old stands. This is likely due to a considerable portion of these maturing into 141+ year old stands, and others being harvested and moving into younger age classes.

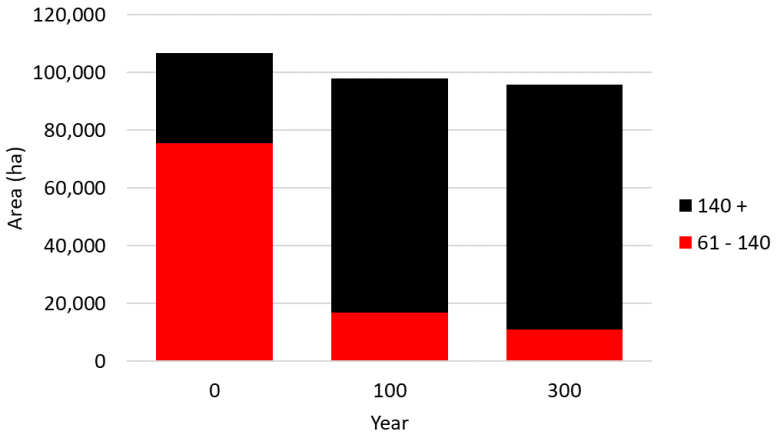


Figure 9 – Forecast change in landscape connectivity through time under FRP practices

Spatially, the increase in connectivity of 141+ year old stands through time can be seen across the ʔəms giǰɛ (Figure 10).

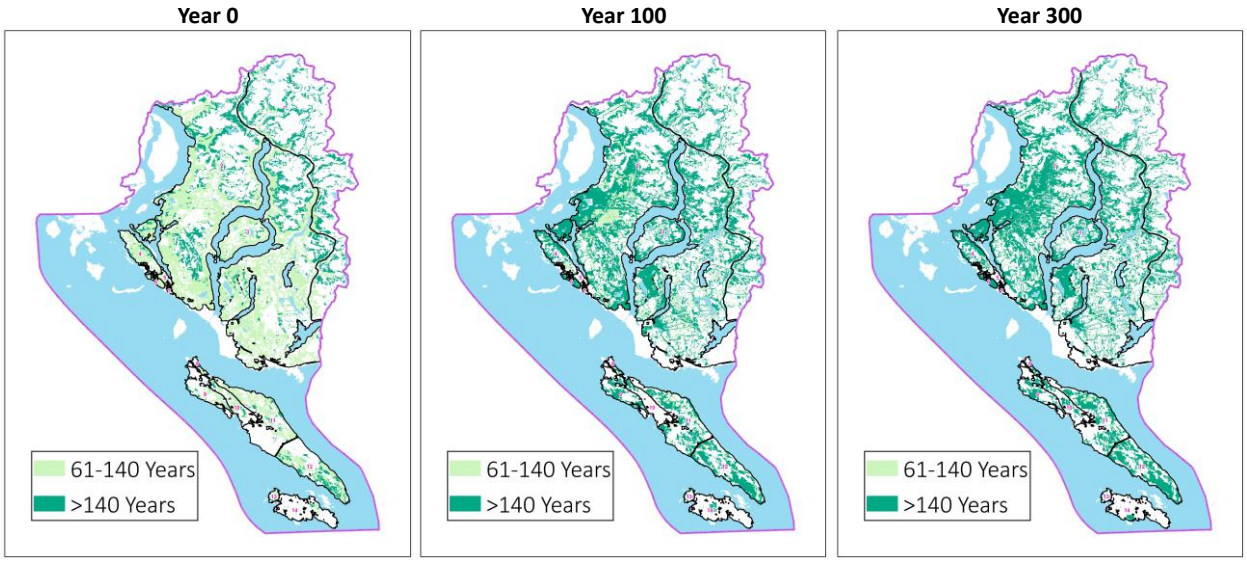


Figure 10 – Spatial distribution of landscape connectivity through time under FRP practices

5. Outcomes for forest interior condition

The amount of interior forest is an important component of ecosystem health at a landscape-level. Forest interiors provide important habitat for certain species that are generally not found near edges, such as the red-breasted nuthatch and brown creeper, and they provide important refuge for certain species. Interior forests are also less susceptible to certain disturbances (i.e. windthrow), invasive pests and diseases. The amount of interior forest is therefore an important indicator of ecosystem resilience.

Forest interior condition was measured as the areas within an old (251+) or mature forest stand (120-250 years old), >100m from an edge of a neighbouring stand that is <30 years old due to man-made activities. If the neighboring stand is >30 years old or is <30 years old due to natural disturbance, the edge effect is assumed to be negligible.

Under the measures outlined in this plan, the amount of interior forest across the ʔəms gi̓ɣ is forecast to increase by over 300% over the next 100 years (Figure 11). Both age classes show significant increases in interior forest over this time frame. Between years 100 and 300, the total amount of interior forest is forecast to decrease, however the area of 251+ year old interior forest is forecast to more than double.

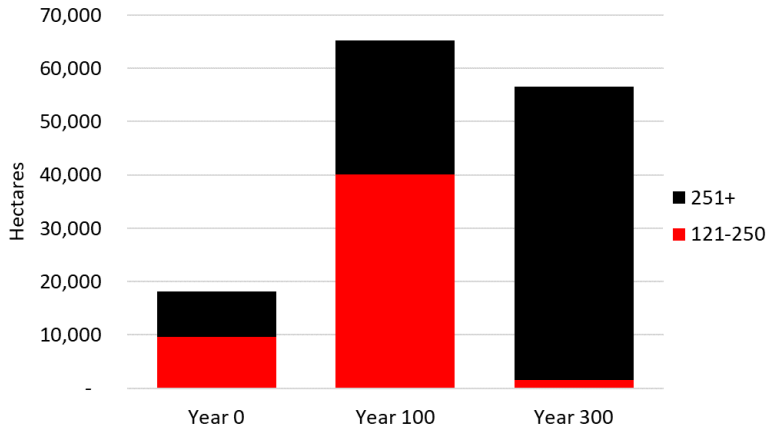


Figure 11 – Change in area of forest interior conditions by age through time under FRP practices

Division 3 - Watershed health

The objective for watershed health is to protect watershed function by limiting cumulative impacts to fish and drinking water while managing for resilient riparian ecosystems.

6. Outcomes for riparian forest condition

Riparian forests are the interface between terrestrial and aquatic ecosystems and they play a crucial role in maintaining and enhancing fish habitat and water quality. Research has highlighted the importance of the root systems of conifer trees to maintaining channel bank stability, which prevents erosion and sedimentation of stream channels. Maturing riparian forests are also an important source of large wood debris, which regulate waterflow, create pools and sheltering areas and contribute nutrients to streams. As climates change, which is likely to impact the timing and intensity of peak stream flows, the importance of riparian forests to maintain channel bank stability and to regulate stream flows will only increase.

The minimum ages of the riparian forest buffer that were considered to support channel bank stability and provide functional large wood debris input are outlined in Table 1.

Table 1 Minimum age of riparian forest considered to provide channel bank stability and large wood debris inputs

Stream	Channel Bank Stability	Large Wood Debris Inputs
Theodosia River	≥150	≥150
All other S1	≥60	≥60
S2	≥30	≥60
S3	≥15	≥60

Four streams in the ʔəms gi̓ɣ were assessed: Theodosia River, Okeover Creek, Lang Creek and Tla'amin Creek. The riparian forest condition along the Theodosia River is projected to improve over the next 150 years as the forests mature, providing channel bank stability and large wood debris inputs (Figure 12).

The other three streams are at or above 90% functional condition for both channel bank stability and large wood debris inputs at year 0 and are projected to all reach 100% function by year 50.

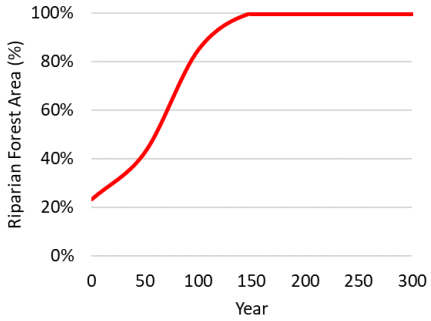
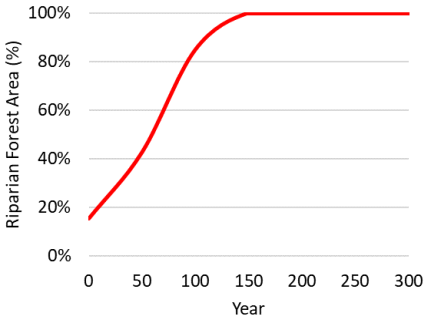
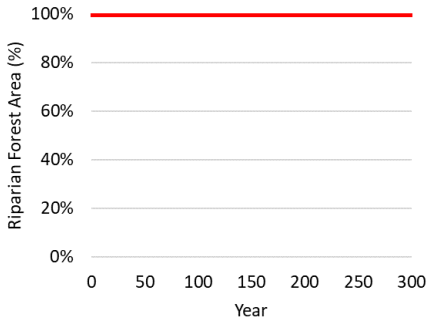
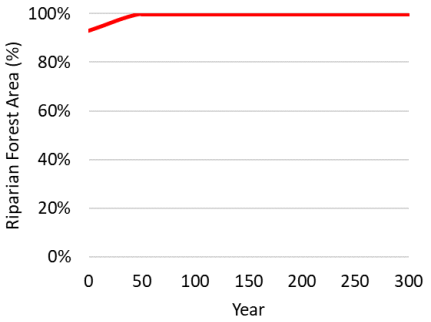
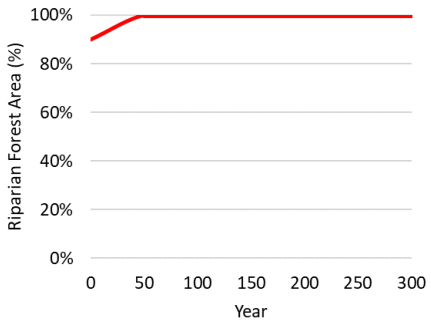
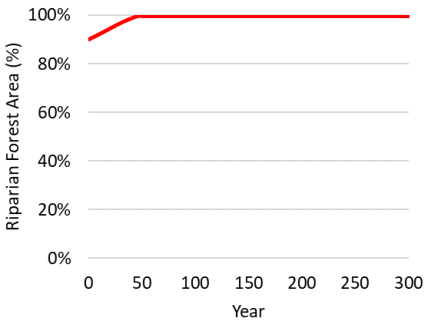
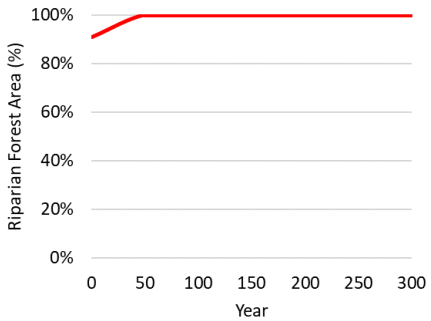
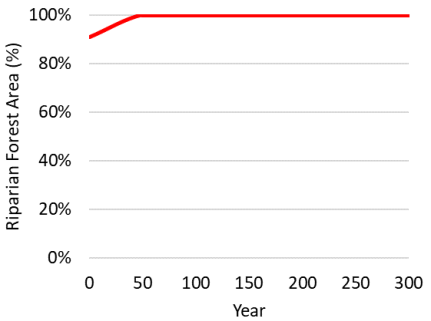
Stream	Channel Bank Stability	Large Wood Debris Inputs
Theodosia River		
Okeover Creek		
Lang Creek		
Tla'amin Creek		

Figure 12 – Proportion of riparian forest area by stream of sufficient age to maintain channel bank stability and large wood debris inputs

7. Outcomes for harvest levels in Identified Watersheds

Changes in forest cover, whether natural or man-made, can impact hydrologic processes by changing rates of interception, evaporation and transpiration. The equivalent clearcut area (ECA) is an indicator

that was developed in the 1970s to assess the impacts of timber harvesting on watersheds, by measuring the area harvested over time, with a reduction factor to account for the hydrologic recovery resulting from regeneration and tree growth.

ECAs were projected for 13 identified watersheds over the 300-year planning horizon. All watersheds were projected to remain under a 25% ECA limit for the entire 300 years, other than Appleton Creek, which exceeded it in years 140-145, 190-195 and 245-255 in the model (Figure 13). It should be noted that modelling assumptions do not directly translate to management as it occurs and appropriate ECAs are expected to be managed over time.

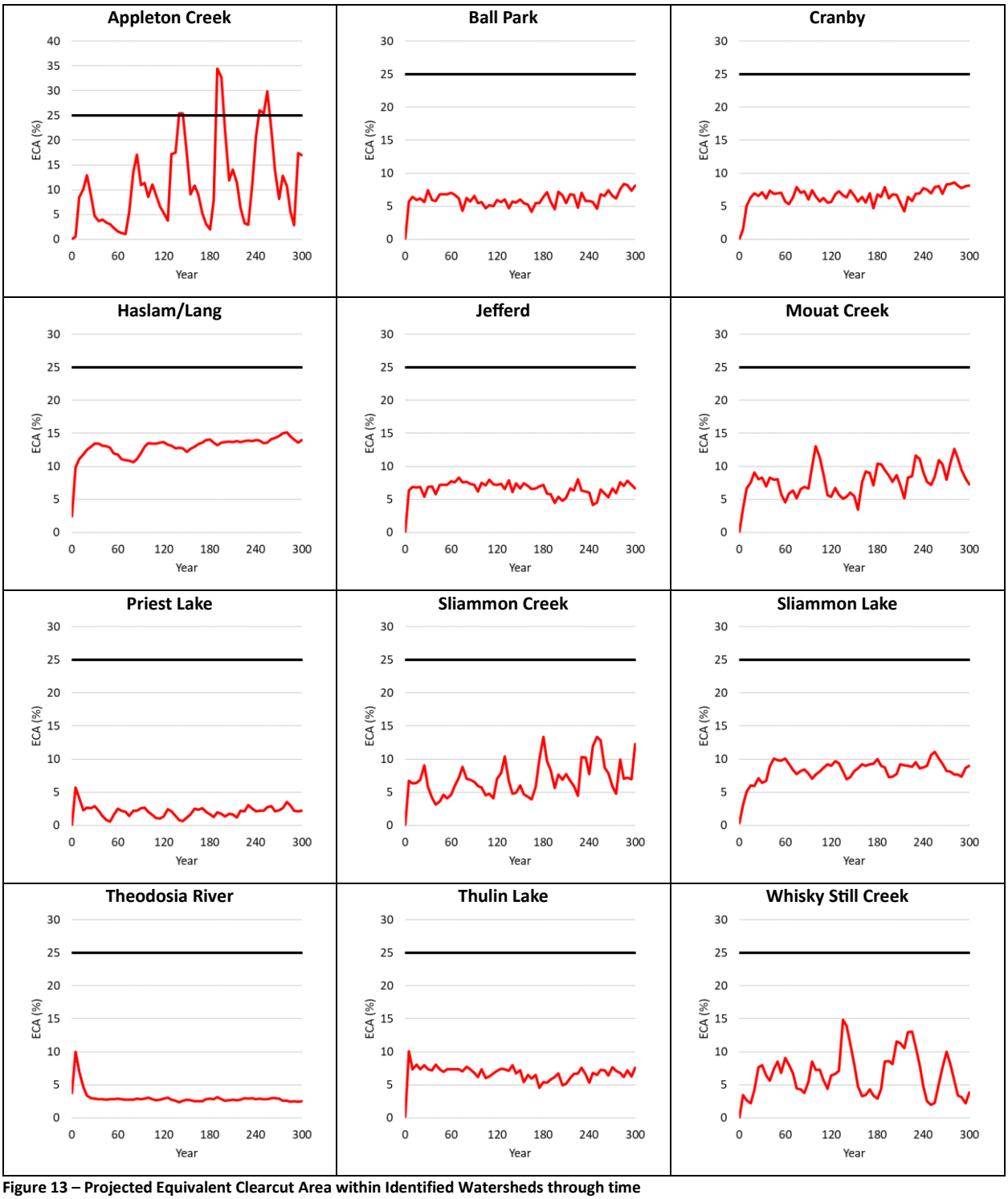


Figure 13 – Projected Equivalent Clearcut Area within Identified Watersheds through time

Division 4 - Sustainable Economic Development

The objective for sustainable economic development in the ʔəms gi̓ɟɛ is to manage forests sustainably to prevent overharvesting while providing economic benefit to the Tla'amin community and broader public.

8. Outcomes for sustainable timber production in the ʔəms gi̓ǰɛ

The sustainable production of timber is an important economic driver for the Tla'amin Nation and the wider community. The ʔəms gi̓ǰɛ produces an assortment of coastal timber species that are internationally regarded for their distinctive beauty, structural performance and durability. Sustainable timber production plays an important role in the global fight against climate change by providing renewable, biodegradable, low carbon building materials.

The projected harvest flow through time, shown as FRP Practices in Figure 14, reflects the measures as outlined in this plan. The projected harvest potential is forecast to decrease by an average of 173,000 m^3/year in the first 30 years, and by an average of 144,000 m^3/year over the next 300 years (Figure 14). These decreases incorporate updated management assumptions since current practices in 2022 and are not wholly as a result of the FRP. The Current Practices Scenario comparison was determined using harvest potential and may not align with Allowable Annual Cut decisions across tenures and management areas. The harvest flow outcome is not a formal Timber Supply Review or Allowable Annual Cut decision but may inform assumptions in timber supply processes where appropriate.

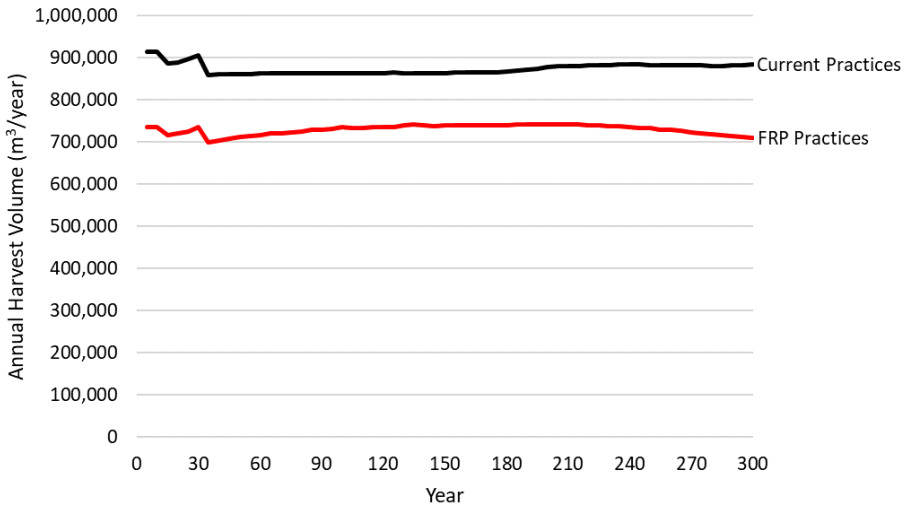


Figure 14 – Projected annual harvest through time across the ʔəms gi̓ǰɛ under current and proposed management practices

Division 5 - Wildlife

The objective for wildlife is to maintain an amount of suitable habitat throughout the ʔəms gi̓ǰɛ to sustain wildlife populations and species at risk.

9. Outcomes for wildlife habitat type representation

Maintaining a diversity of forest habitat types is an important landscape level approach to managing wildlife habitat. The approach used here was based on a species accounting system that assigns species into six groups with similar habitat requirements[1]:

[1] Species Accounting System for Western Forest Products, Laurie L. Kremsater, Fred l. Bunnell, and Pierre Vernier, Centre for Applied Conservation Research University of British Columbia, February 2012

1. Generalists, species that inhabit many habitat types or respond positively to forest practices.
2. Species that can be statistically assigned broad habitat types as defined within forest cover.
3. Species with strong dependencies on specific habitat elements (e.g. snags or understory).
4. Species restricted to specialized and highly localized habitats.
5. Species for which patch size and connectivity are considered important, and
6. Included for completeness and contains species that are not dependent on forest environments.

Groups 1, 3, 4, 5 and 6 either require management of specific or localized habitat that requires management at the site level or are unlikely to be affected by forest practices. Group 2 contains 35 species which are associated with the following habitat types:

- Non-treed
- Recent disturbance: < 20 years old
- Conifer: 21-60 years old, 61-140 years old, > 140 years old
- Deciduous: < 40 years old, ≥ 40 years old
- Riparian forest: S1, S2, and S3 streams.

Figure 15 shows the proportion of these habitat types through time under the proposed FRP practices. The coniferous habitat types are forecast to change considerably through time, with a 58,000 ha increase in conifer >140 and a 68,000 ha decrease in conifer 61-140. The other habitat types are forecast to remain relatively stable through time.

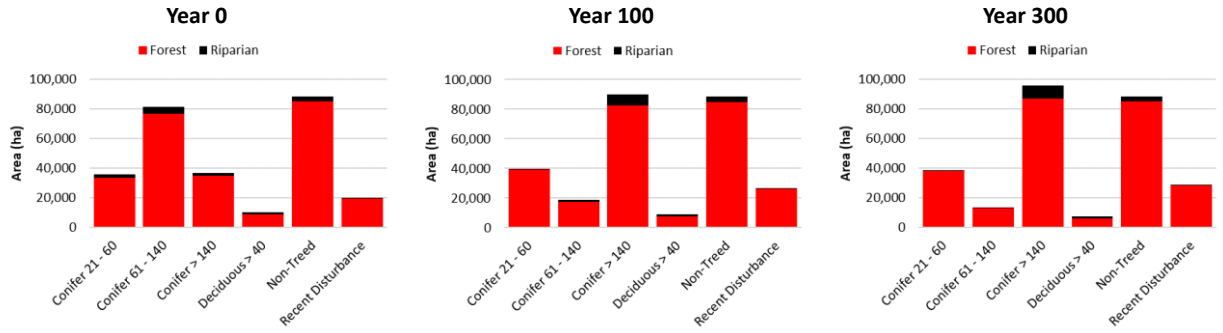


Figure 15 – Area by wildlife habitat classes through time.

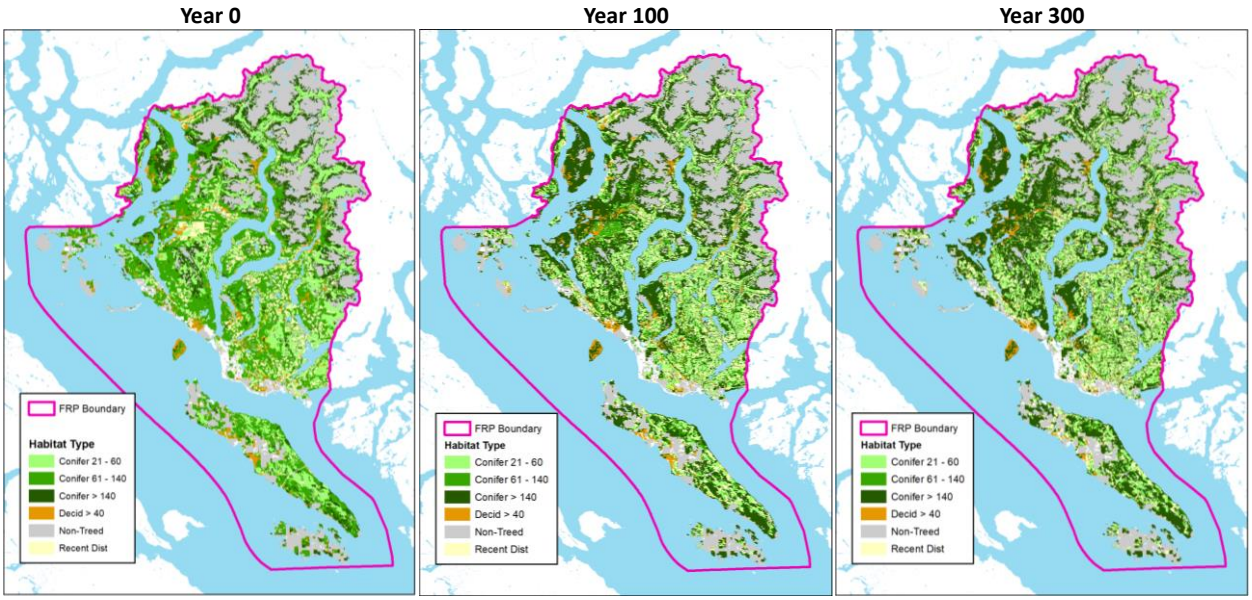


Figure 16 – Spatial pattern of wildlife habitat classes through time.

10. Outcomes for elk in Elk Management Areas

Ensuring the ʔəms gi̓ɉɛ supports a healthy elk population is a particular focus for the Tla'amin Nation. Outcomes will be developed to outline a landscape planning approach that can serve to meet the measures as outlined in areas identified as a priority for elk management such as treed buffers, security cover, forage, and winter range.

11. Outcomes for road access in toqʷanan

Roads in the toqʷanan area (Theodosia) support a wide range of cultural activities for Tla'amin community members including harvesting of cultural resources, hunting, and recreation. Ensuring that roads remain accessible through time allows safe and reliable access for community members to continue these cultural traditions. The outcomes for road access in toqʷanan will be monitored and developed through additional conservation and harvest planning.

Division 6 - Community Resiliency

The objective for community resiliency is to identify current community assets and future settlement areas to manage for resiliency to natural disturbances such as fires, floods, landslides, and storms.

12. Outcomes for fire risk reduction in the Wildland Urban Interface

The Tla'amin Nation will develop future forest outcomes related to this objective alongside additional initiatives, such as a tactical wildlfire risk reduction program that is developed collaboratively with the Province of BC.

Division 7 - Carbon and Climate Change

The objective for carbon and climate change is to manage forest landscapes that are resilient to climate change while sequestering and storing carbon.

13. Outcomes for life cycle carbon storage

Both the forests in the ʔəms giǰɛ, and the wood products it produces play a crucial role in the global fight against climate change. Forests and wood products both store carbon. Forests store carbon in live and dead trees, in aboveground and belowground biomass and in dead organic matter. Wood products store carbon until their end of life, while they further support the fight against climate change by displacing higher polluting materials like steel and concrete. Our goal is to maintain and enhance the net carbon balance of the ʔəms giǰɛ, including the wood products derived from it. A carbon offset program will be sought, related to all measures with a carbon benefit in this FRP, including measures related to the conservation network, old forests, intact cultural use areas, and riparian buffers. Where a carbon benefit is not possible through an offset program, the FRP will be amended.

Division 8 - Recreation

The objective for recreation is to manage the forest to allow for a range of recreational opportunities while protecting cultural resources and sensitive areas.

14. Outcomes for road networks and access

The ʔəms giǰɛ has an extensive network of roads that support a variety of social and cultural activities for Tla'amin members and the broader community, such as cultural access, gathering non-timber products, and recreation. In the short-term, the length of active roads is forecast to be less under FRP practices than under current practices (Figure 17). Over the longer-term, there is forecast to be between 1500-2000 km of active roads across the ʔəms giǰɛ.

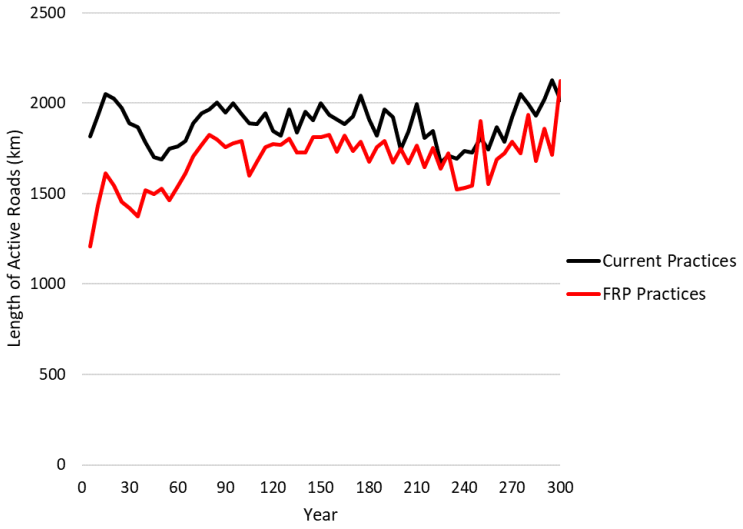


Figure 17 – Length of active harvest roads through time

PART 6 – Implementation

1. Transition

Planned road construction and harvesting that has been referred to and received approval from the Tla'amin Stewardship Team that has an approved cutting permit or timber sale license issued by the Province of British Columbia may proceed to completion provided the completion date is not more than four years after the approval date of the cutting permit document or timber sale license and the area does not include harvesting of old forest, is not located in an Intact Cultural Use Area, or is not in an Intact Watershed.

Proposed development areas that have received approval by the Tla'amin Nation prior to the beginning of 2020 and are not currently in an approved cutting permit or timber sale licence, must be resubmitted for review by the Tla'amin Stewardship Team and assessed on a case-by-case basis.

2. Monitoring

The Tla'amin Stewardship Team, public forest tenure holders, and private forestry land managers will implement an adaptive management and monitoring program within the area covered under the FRP. Monitoring will include both field and desktop-based exercises according to the future forest outcomes listed in Part 5 and implementation indicators listed in Part 6.

Monitoring may be fulfilled and integrated into a forest operator's monitoring system. The monitoring system will monitor and report the outcomes of operating performance with respect to FRP measures. Forest development project results will be shared with the Tla'amin Stewardship Team and summarized annually and over a five-year period. At the request of the Tla'amin Stewardship Team, Tla'amin Nation Staff will be invited to participate in project monitoring inspections.

Independent third-party audits will be completed annually to measure conformance to FRP measures and legal requirements including the Forest and Range Practices Act, Private Managed Forest Land Act, associated regulations and other applicable acts and regulations.

The Audit Coordination Team, consisting of representatives of the FRP partners and the Tla'amin Stewardship Team will develop focus areas specific to values identified in the FRP and may include random sampling for specific indicators. Information will be drawn from existing processes and data, such as Operational Plan Assessments, where possible. The annual audits provide a review of conformance and offer conclusions and recommendations on implementation of the FRP measures and plans. The Audit Coordination Team will review external audit findings (including non-conformities, opportunities for improvement, and best management practices) related to operations within ʔəms giǰɛ. The audit findings will be shared with Tla'amin Leadership and Senior Company Representatives. An action plan will be developed to address findings from the audit.

The Audit Coordination Team will use the following indicators in periodic auditing programs.

General Measure Indicator Group

Indicators related to general measures apply to the FRP area except where otherwise agreed to in a Shared Territory Agreement.

General Stewardship Indicators (GSI)

GSI-1 Tenure holders and private land managers do not propose or harvest within the Conservation Network inconsistent with policies for modifying the conservation network with consideration to approval requirements from the Tla'amin Stewardship Team.

GSI-2 Old forest stands and remnant patches are not harvested without approval from the Tla'amin Stewardship Team.

GSI-3 Ecosystem integrity is improving throughout the territory compared to baseline scores (2024 Ecosystem Integrity score) measured at the Territory level. Ecosystem integrity will be assessed every 10 years.

GSI-4 Occurrences of a red-listed plant communities that are a minimum of 0.25 hectares in size listed in Schedule K are reserved from harvesting.

GSI-5 Within development areas, a minimum of 15% as wildlife tree retention patches and/or stand retention is maintained consistent with stand retention guidance.

GSI-6 Invasive species queries for knotweed are updated annually.

GSI-7 Streams, wetlands, lakes, fisheries sensitive features, and marine sensitive features are classified by a qualified professional with prescribed reserve and management zones implemented according to Schedule L. Classification and protection measures are documented in a site plan or site level plan.

GSI-8 Active fluvial units are identified by a qualified professional with protection measures identified and implemented.

Cultural Tree Indicators (CTI)

CTI-1 Western redcedar and yellow cedar is made available for current cultural use needs, including monumental cedar and trees suitable for bark harvest and roots. Harvest application and community surveys will be relied on to assess current use needs.

CTI-2 All proposed developments within the ʔəms gi̓ǰɛ are assessed in an Operational Plan Assessment for cultural trees (e.g., large cedar, monumental cedar, yellow cedar, yew trees, bark strip tree patches and cedar trees suitable for root digging). The results of the assessments are provided to and tracked by the Tla'amin Stewardship Team using the Tla'amin Nation Cultural Features Database.

CTI-3 Cultural trees and cultural cedar stands are protected through avoidance. Where impacts are unavoidable (ex., constrained road building), cultural trees and cultural cedar stands, including large and monumental cedar trees, are made available to the Tla'amin Nation for cultural use.

CTI-4 Prior to harvesting, cutblocks with cultural cedar suitable for bark stripping or root digging are made available for collection to Tla'amin Nation Citizens via the Tla'amin Stewardship Team.

CTI-5 Within development areas, where ecologically suitable, western redcedar and yellow cedar will be prioritized for planting. Tracking of cedar planting within the ʔəms gi̓ǰɛ will be done through the Province of British Columbia's applications and reviewed by the Tla'amin Stewardship Team.

Cultural and Archaeological Sites Indicators (CASI)

CASI-1 Operational Plan Assessments are completed prior to each development.

CASI-2 A Preliminary Archeological Field Reconnaissance (PAFR) is completed where recommended by the Tla'amin Stewardship Team. Archeological Impact Assessments are completed for areas of potential where avoidance is not practicable. Reports are provided to the Tla'amin Stewardship Team.

CASI-3 Sensitive cultural and archaeological sites are protected, and management is tracked through the Operational Plan Assessment process.

Cultural and Medicinal Plants Indicators (CMPI)

CMPI-1 Cultural and medicinal plant field observations from proponent field crew and from the Operational Plan Assessment are provided to the Tla'amin Stewardship Team utilizing the cultural and medicinal plant observation form. Cultural and medicinal plant locations and protection measures are tracked by the Tla'amin Stewardship Team in the Tla'amin Nation Cultural Features Database. The locations of cultural and medicinal plants are made available to Tla'amin Nation Citizens upon request.

Access to Cultural Resources Indicators (ACRI)

ACRI-1 Roads are designed, constructed, and deactivated following road construction and road deactivation best management practices.

ACRI-2 Where applicable, information showing the active network of roads and current road status is shared with the Tla'amin Stewardship Team annually through annual plan reviews.

Zone Indicator Group

Indicators related to each zone apply to the specific FRP zone area.

Ecosystem Health Zone Indicators (EHI)

EHI-1 Within development areas or in a tactical-level planning process, stand retention is increased above baseline retention amounts (15%) where required with consideration to forest influence, maturing forest representation near openings, rotation age, and surrounding cultural values.

EHI-2 Where they exist, elements of structural diversity are retained within stand retention patches and within wildlife tree retention areas (WTRA). Development area site plans or site level plans describe existing stand conditions and how elements of structural diversity have been retained. Examples of structural diversity include wildlife trees, veteran trees, special habitat (e.g., bear dens), snag, large coarse woody debris, and non-merchantable trees.

Investment Zone Indicators (IZ)

IZ-1 Harvest patterns include a range of opening sizes spatially distributed across the Investment zone (e.g., <20 ha, 20-40 ha, >40 ha). An analysis of opening sizes within the investment zone is completed annually.

IZ-2 Within development areas, stand retention includes a range of retention types (e.g., individual tree, tree clusters and contiguous patches).

tiskʷət Stewardship Zone Indicators (TS)

TS-1 Retention silvicultural systems and stand retention percentages are implemented according to Schedule M.

TS-2 Intact Watersheds do not have new development areas.

saʔyayɪn Stewardship Zone Indicators (SS)

SS-1 Development areas are surveyed for ecologically rare and endangered ecosystems. Where identified, ecologically rare and endangered ecosystems, with a focus on cultural plants within stand retention patches, are retained. Rare and endangered ecosystems are documented in the site plan or site level plan and Operational Plan Assessment.

SS-2 Karst surveys utilizing a Qualified Professional are completed for development areas that overlap karst bedrock areas. Sensitive/vulnerable karst features identified through survey or identified during operations are protected.

Priority Management Areas Indicator Group

Priority management indicators apply to each of the priority management areas.

Cedar Stewardship Area Indicators (CS)

CS-1 Monumental cedar trees and cultural cedar stands are protected or made available for cultural use within development areas.

CS-2 Cedar stands (>40% stand composition) are reserved from harvest.

CS-3 Cedar trees are replanted compatible with site conditions.

Watershed Health Area Indicators (WH)

WH-1 A watershed assessment is completed for an Identified Watershed prior to proposing development.

WH-2 Equivalent clearcut area does not exceed 25% for identified watersheds when measured across the total watershed area or follows ECA recommendations identified in a watershed assessment report.

WH-3 Within Identified Watersheds, streams, wetlands, and lakes are classified by a Qualified Professional as per Schedule L, Table 2 with prescribed reserve and management zones implemented. Classification and protection measures are documented in a site plan or site level plan.

Elk Management Area Indicators (EM)

EM-1 Within elk management areas shown on Schedule H map, elk winter range and important spring and summer forage areas and associated treed security cover buffers are identified in the first year of the FRP or included as part of an outcome in the FRP.

EM-2 Elk winter range and forage area security cover treed buffers are not harvested.

EM-3 Proposed development is consistent with elk management design criteria.

Community Interface Area Indicators (CI)

CI-1 Fire preparedness plans are completed prior to harvest for each development area.

CI-2 Fire hazard risk assessments and prescribed abatement is completed for all development areas. Abatement (e.g., pile burning) is carried-out combatable with season.

CI-3 Development area waste levels confirmed through survey is ≤10 m3 per hectare where practicable.

CI-4 Permitted roads are maintained in a condition that minimizes sedimentation into water courses and allows for safe public access. Road infrastructure monitoring is completed and documented in an inspection report.

CI-5 Terrain stability field assessments (TSFA) are completed for all development areas and recommendations implemented where there is a risk to downslope priority infrastructure.

3. Amendments

The Tla'amin Nation may make an amendment to this Forest Resource Plan with approval from Tla'amin Executive Council. Within the first six months of the FRP implementation, an interim review will occur and the FRP will be amended as necessary. At the end of the first year of the FRP implementation, a formal implementation review will occur and the FRP will be amended as necessary.

4. Working Groups

A licensee working group will be formed within the first year of FRP implementation and meet on a quarterly basis to discuss priority planning issues, coordinate landscape-level management, and develop FRP amendment recommendations.

Additional working groups will be explored upon implementation of the FRP, including a public working group and a Tla'amin cultural working group.