huu ay aht

ANCIENT SPIRIT, MODERN MIND

Huu-ay-aht Old Growth Interim Report based on the Hišuk ma c̓awak Integrated Resource Management Plan

Led by: Huu-ay-aht First Nations in partnership with HFN Forestry Limited Partnership, C̓awak ʔqin Forestry Limited Partnership (Tsawak-qin) and Mosaic Forest Management Corp. (Mosaic) with technical support from Western Forest Products Inc. (Western)

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Executive Summary

The Huu-ay-aht led Hišuk ma c̓awak Integrated Resource Management Plan (HIRMP) is a collaborative planning approach to land and resource management. In partnership with HFN Forestry Limited Partnership, C̓awak ʔqin Forestry, Mosaic Forest Management (Mosaic), the HIRMP integrates a full range of values and stewardship measures across the entire Ḥahuuɬi (traditional territory). The HIRMP is anchored in the connectivity of values and balances the ecological, cultural, and economic benefits aligned with the Sacred Principles of:

- ʔiisaak - utmost respect
- ʔuuʔałuk - taking care of
- Hišuk ma c̓awak - everything is one.

The Huu-ay-aht Old Growth Interim Report outlines the work completed to-date on an integrated approach to ecosystem health and biodiversity. Care has been taken to bring together the many elements of ecosystem health and biodiversity into detailed forest estate modelling to forecast the resulting future forest condition. This modelling work will be ongoing through the spring and summer and will assist with finalizing the HIRMP this fall.

This interim report is, in part, Huu-ay-aht's response to the Province of British Columbia's proposed old growth deferral areas across the Ḥahuuɬi. In recognition that everything is connected, while old forests are identified as a critical element of ecosystem health and biodiversity, they do not exist in isolation. The HIRMP therefore takes a more detailed, bottom-up, and holistic approach to resource management. This includes the design of the Ḿaƛasap (to take a bite out of) Network that integrates old forests, riparian habitat, rare ecosystems, wildlife habitat and features, and cultural and traditional use areas to maintain connectivity across the Ḥahuuɬi.

For comparative purposes, the interim report provides a review of the proposed Provincial polygons relative to the Ḿaƛasap Network. A total of 8,727 hectares of deferral polygons were proposed across the Ḥahuuɬi, whereas the draft Ḿaƛasap Network has now identified 19,819 hectares of old and recruitment forests aligned with important values within the Ḥahuuɬi.

Huu-ay-aht's HIRMP and the Old Growth Interim Report demonstrates the value of taking locally collaborative, holistic, and detailed bottom-up approach to implementing the Old Growth Strategic Review recommendations. The recommendations in this interim report are made-in Huu-ay-aht, by Huu-ay-aht, and for Huu-ay-aht.

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We would like to thank the Citizens and Administration of the Huu-ay-aht First Nations for all the support through this process so far. We would also like to acknowledge our fellow professionals and the contributions they have made to this process through their knowledge and experience.

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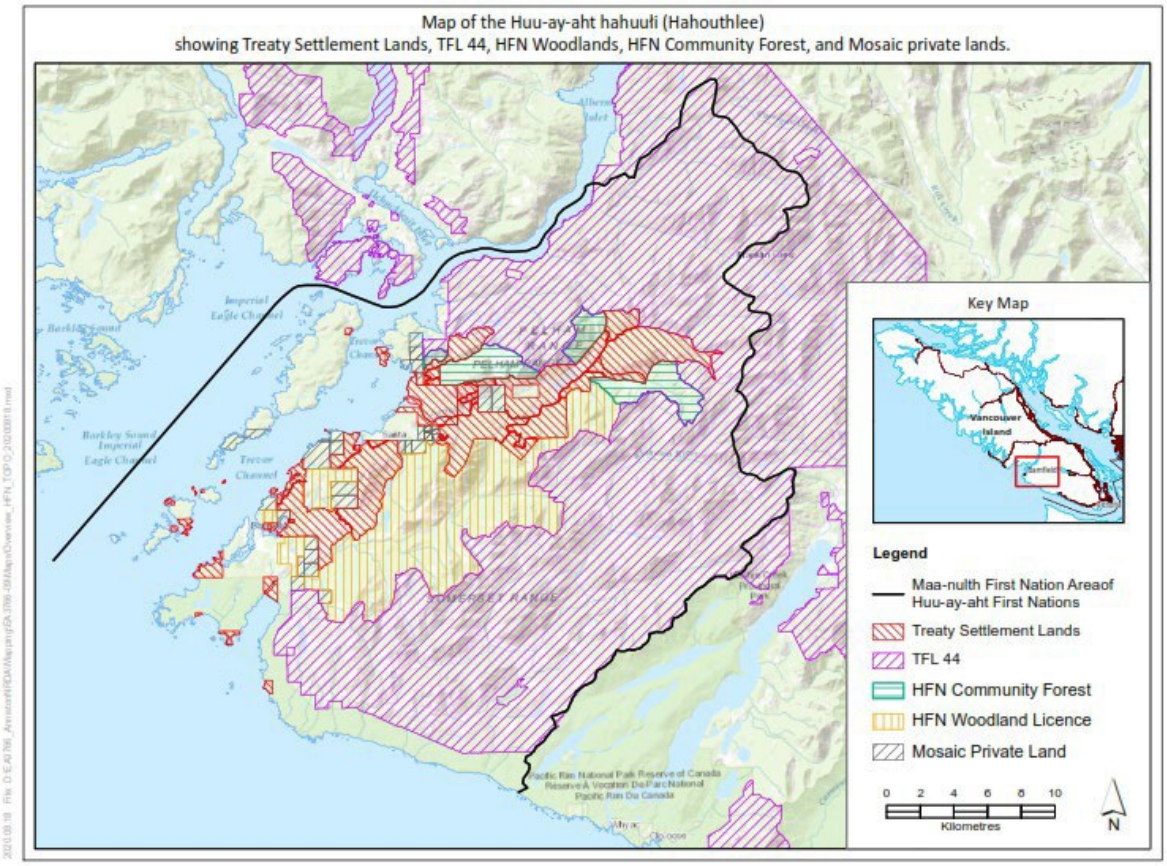


Figure 1: The Huu-ay-aht Ḥahuułi

Introduction

Huu-ay-aht Peoples have always respected the interdependent relationship with the Ḥahuułi (Traditional Territory) and taken the stewardship role seriously when considering how the Ḥahuułi would be managed guided by Huu-ay-aht's Sacred Principles (ʔiisaak - utmost respect, ʔuuʔałuk - taking care of, Hišuk ma c̓awak - everything is one). Over the last two centuries Huu-ay-aht has witnessed the depletion and extraction of resources in the Ḥahuułi as a bystander. Now, as a Modern Treaty Nation, Huu-ay-aht has regained the stewardship role and can develop and implement management strategies to restore balance and the interdependent relationship once again guided by the Sacred Principles.

Huu-ay-aht's philosophy of *Ancient Spirit – Modern Mind* has guided the development of a strategy to manage old growth in the Ḥahuułi through the merging of traditional and cultural values with western science and the latest data. The basis of ecosystem health and biodiversity is a concept that is inherently rooted in Huu-ay-aht resource management (Sacred Principle of Hišuk ma c̓awak – Everything is one, interconnected, one cannot be whole without the other). Huu-ay-aht, C̓awak ʔqin Forestry (Tsawak-qin) and Mosaic Forest Management (Mosaic) are pleased to be able to work together, without the constraints of tenure boundaries, and use this concept to develop a strategy that works for all.

The development of the Hišuk ma c̓awak Integrated Resource Management Plan (HIRMP) was already underway with Huu-ay-aht, C̓awak ʔqin and Mosaic when the Province of British Columbia provided a map of potential old growth deferral areas to Huu-ay-aht in the spring of 2021. This enabled Huu-ay-aht to provide a timely response and remain focused on integrated planning consistent with the Old Growth Strategic Review (OGSR) which recognizes that old growth is only one component of the larger management system. Over time, it became increasingly clear that the holistic approach taken by the HIRMP is the optimal way for all the partners involved, to proactively implement the 14 OGSR recommendations as even these are all connected in some way.

This interim report outlines the work completed to date to develop an integrated approach that recognizes the many elements of ecosystem health and biodiversity, including old forests. Extensive research, analysis, and collaborative work with subject matter experts, has been completed and the HIRMP technical team does not anticipate the final plan straying far from the approach outlined in this document. The HIRMP technical team is currently in the process of integrated forest estate modelling to develop a forecast of the Ḥahuułi 7 generations into the future. The results of this modeling will enable the HIRMP technical team to evaluate the integrated outcome including new implementation opportunities such as life cycle carbon sequestration and storage. The final HIRMP will be inclusive of all the values for the Ḥahuułi including the information outlined in this interim report.

Background

Initial Provincial Direction

In November of 2021, the Provincial Government of British Columbia provided the following commitment to First Nations based on its approach to implementing OGSR recommendation 6:

- Intent of the 30 days for First Nations to respond to Government was to let Government know if they need more time – **government fully intends to spend up to 2 years with First Nations to allow them to properly respond to the deferrals in their area**. Government will only implement deferrals that First Nations agree to. (FLNRORD briefing to Industry)
- **Premier John Horgan said** his government is acting on the panel's recommendations by "taking steps to fundamentally transform the way we manage our old-growth forests, lands and resources." "Forests are a part of who we are as British Columbians. We have a responsibility to ensure the benefits are shared, today and with future generations."
- **Katrine Conroy, Minister of Forests, Lands, Natural Resource Operations and Rural Development, said** "Our long-term vision means taking care of our oldest forests, building meaningful partnerships with Indigenous Peoples, and securing innovative forestry jobs for generations to come." "This is a new vision for how we're going to do forestry in this province. We have to look at the whole picture, the whole ecosystem."

Huu-ay-aht Response

The HIRMP process is underway within the Ḥahuuƚi. While there will be review and consideration of the analysis and recommendations of the Technical Advisory Panel (TAP), it will be the HIRMP processes that guide any future forest, resource, and land-use decisions by Huu-ay-aht, including any further deferrals.

- As a Modern Treaty Nation implementing the Maa-nulth Final Agreement, Huu-ay-aht will decide what is best for our people. Our citizens have a constitutionally protected right to manage and benefit from our lands, waters, and resources throughout our Ḥahuuƚi.
- From our historic existence, our value system, and our membership in the community of man, we possess certain fundamental and inalienable human rights which have never been extinguished, ceded or surrendered. These include:
    - The right to our traditional territory including the waters and beds of water.
    - The right to the resources of our traditional territory.
    - The right to govern within our traditional territory.
    - The right to utilize and protect our language.
    - The right to practice, protect and enhance our culture.
    - The right to the wealth of our traditional territory and a sound economic foundation.
    - The right to protect our spiritual sites.
    - The right to preserve our family kinship systems.
    - The right to define ourselves and the criteria for the identification of our citizens.
- Our analysis will be conducted as part of our Hišuk ma c̓awak Integrated Resource Plan (HIRMP) process, which is already underway.
- The HIRMP and our response to the proposed deferrals will be a made-in Huu-ay-aht, by Huu-ay-aht, and for Huu-ay-aht decision.
- To assist in our decision making, Tayii Ḥaẃiƚ ƛiišin (Head Hereditary Chief Derek Peters) and Elected Chief Councillor Robert J. Dennis, Sr. will host the Anacla Old Growth Summit on November 23 (Actual Date April 28/22) on old growth management and process for Huu-ay-aht's Hišuk ma c̓awak Integrated Resource Management Plan. The purpose of the summit is to hear from forestry professionals regarding discrepancies in the scientific data related to old-

growth (the “science gap”), to tour the Huu-ay-aht Ḥahuuƚi (traditional territory of the hereditary chief), and to discuss Huu-ay-aht’s approach to old growth management and the Integrated Resource Management Plan process.

- The recording of the Summit can be viewed at https://www.youtube.com/watch?v=_ed6R5wU2zg and the following are some sentiments reiterated at the Old Growth Summit:
    - Hereditary governance structure is here forever and that’s our biggest advantage to guiding how we manage our forests. We have been here since time immemorial and will continue to be indefinitely.
    - Halting all old growth logging means an impact to Huu-ay-aht’s (cultural, traditional, and community) use of old growth in a sustainable way.
    - Huu-ay-aht has and have always had the capacity to manage our lands.
    - We have the right to economic growth from sustainable use of the lands how Huu-ay-aht sees appropriate.
    - In 1993, Huu-ay-aht Elders mandated the Nation to enhance and renew our forestry and fisheries values.
    - In 1997, Huu-ay-aht Ha’wiih and Government approved the Guiding Principles of sustainability based on the mandate by the Elders.

Hišuk ma c̓awak Integrated Resource Management Plan

The HIRMP is a coordinated plan for resource management within the Ḥahuułi. The HIRMP has been developed through a collaborative planning approach including the Huu-ay-aht First Nations (including HFN Forestry Limited Partnership), C̓awak ʔqin (supported by Western Forest Products' Inventory and Analysis & Forest Stewardship department) and Mosaic Forest Management. The HIRMP balances the environmental, cultural, and economic benefits from use of the resource land base with sound sustainable management aligned with the Sacred Principles of:

- ʔiisaak - utmost respect
- ʔuuʔałuk - taking care of
- Hišuk ma c̓awak - everything is one.

Additionally, Huu-ay-aht have articulated their forestry principles which are:

- Managing forest and fishery values to meet present needs without compromising the needs of future Huu-ay-aht generations.
- Managing forests based on Huu-ay-aht values ʔiisaak (utmost respect), ʔuuʔałuk (taking care of), and hišuk ma c̓awak (everything is one).
- Balancing forest values to meet economic and cultural needs of peoples within the Ḥahuułi of the Huu-ay-aht Ḥaẇiiḥ, including the Huu-ay-aht citizens.
- Restoring the damaged ecologies and the most critical 15 watersheds within the Ḥahuułi of the Huu-ay-aht Ḥaẇiiḥ.
- Conserving biological diversity, soil, water, fish, wildlife, scenic diversity, and other forest resources within the Ḥahuułi of the Huu-ay-aht Ḥaẇiiḥ.
- Giving serious consideration about what needs to be left behind as well as what can sustainably be harvested. And putting back what you take out.

This is, to the team's knowledge, one of the first cases where a First Nation has coordinated planning across the full range of tenures and multiple tenure holders within their territories to create a comprehensive and transparent plan to manage the full range of values. A detailed process was undertaken to ensure the range of values within the Ḥahuułi were identified along with a cohesive suite of stewardship approaches. Values were collected from Huu-ay-aht input along with those provided by the HIRMP technical team and through Huu-ay-aht, provincial and federal legislation.

The HIRMP is integrating the full range of values and stewardship measures in the Ḥahuułi. It is being done through a transparent and thorough methodology to assess risk to values and incorporates suitable precaution where necessary. The key to the HIRMP is the recognition that everything is connected, and while old growth is an important component, it cannot stand alone, and is therefore only one component of the integrated HIRMP process.

This plan is being constructed from the bottom up using local knowledge, expertise, and the most up to date information, specific to the plan area from a wide range of data sets. This includes, for example, the use of LiDAR to inform the forest inventory, stream classifications, growth and yield projections, and even terrain stability management.

The HIRMP remains a work in progress, with an expected initial product in the fall of 2023. This document provides an update on how the HIRMP has taken an integrated approach to sustaining ecosystem health and biodiversity across the Ḥahuułi based on the two years of work that has been completed to date.

Ecosystem Health and Biodiversity

To provide for a truly sustainable future, multiple elements have been identified as key to sustaining ecosystem health and biodiversity. Figure 2 provides a simplified blueprint of the main elements. Each element has sub elements that are addressed through a range of stewardship approaches, both static (i.e., spatially derived) and dynamic based on the modeling of changes over time.



Figure 2: Everything is one – the basis of the HIRMP

Biodiversity from Huu-ay-aht Knowledge

Huu-ay-aht Ha'wiih, Elders, and Citizens recognize that they are the stewards of the Ḥahuułi, it does not belong to, but provides for Huu-ay-aht and needs the attention and care to be able to do so. The longstanding (since time immemorial) connection to the Ḥahuułi provides Huu-ay-aht with the inherent understanding of what the lands and resources within the Ḥahuułi need. There is no one single resource that is not connected with another or with the land and Huu-ay-aht knowledge provides the guidance to understand and help this interconnectedness flourish. A few of the measures for success in the role as stewards are:

- Making decisions regarding land and resource management using the sacred principles of:
    - ʔiisaak - utmost respect. Is this decision respecting the vision of the Nation as a whole, the lands as we understand it currently needs, the resources and the effect one has on the other? Is this decision respecting our ancestors and the following 7 generations of Huu-ay-aht who will be left to care for the Ḥahuułi?
    - ʔuuʔałuk - taking care of. Is the stewardship decision thoughtful enough to respect the biodiversity in the Ḥahuułi?
    - Hišuk ma c̓awak – everything is one. Are the impacts to all resources clearly understood?
- The resources are plentiful to ensure a sustainable harvest with low to no impact and what impacts are made are remedied and addressed (e.g., planting adequate and appropriate species after harvest while maintaining existing structure utilizing Variable Retention).
- Planning is adequately accounting for the next 7 generations and reflective of what Huu-ay-aht ancestors intended.

A Cohesive Framework for Ecosystem Health and Biodiversity

It is important that all the elements that comprise ecosystem health and biodiversity integrate in a structured way as they connect across multiple-scales and objectives. To achieve this, C̓awak ʔqin's structured and multi-scale Wildlife and Biodiversity Program provides a functioning framework for implementation. This framework is founded on over 20 years of local research and adaptive management learnings which are summarized in *Forestry and Biodiversity-Learning to Sustain Biodiversity in Managed Forests* (Bunnell & Dunsworth, 2009).

The program is designed to achieve the three indicators for the successful management of biodiversity in coastal forests:

- Ecologically distinct ecosystem types are represented to maintain lesser-known species and ecological function;
- The amount, distribution, and heterogeneity of stand and forest structures important to sustain native species richness are maintained over time; and
- The abundance, distribution and reproductive success of native species are not substantially reduced by forest practices.

This locally relevant framework cohesively links together the elements of ecosystem health and biodiversity and the associated stewardship approaches described below.

Part 1: Elements of Ecosystem Health and Biodiversity

The following provide a list of important elements in management of the Ḥahuuƚi. Each has specific requirements that will be briefly addressed here.

Ecosystem Integrity

Both old and young forests contribute to ecosystem health and biodiversity. As stands age, they develop attributes of old stands including height, horizontal and vertical structural diversity, species composition and cover, and forest floor development. An innovative approach has been developed to evaluate the integrity of managed forest landscapes using attributes available through forest cover inventory, LiDAR data, and terrestrial ecosystem mapping. This approach is being utilized to not only assess the current condition, but also forecast the spatial and temporal change in ecosystem integrity.

Retaining habitat elements associated with old forests at a landscape level is an important component of a multi-scale approach to maintaining species habitat. Old forests are required in a variety of patch sizes across the forest landscape with consideration of different ecosystem types and species mixes.

It is recognized that age is only one aspect of retaining habitat elements and structural diversity and other attributes are also important such as canopy structure and complexity. A wide range of biophysical anchors including wildlife features such as bear dens, raptor nests, snags, riparian forests, and other localized elements also need to be retained to help maintain the full suite of old forest values.

Connectivity

Connectivity is an essential attribute for many species and requires a network at multiple scales. A static and dynamic approach is needed to fully account for species use and changes of structure over time.

Forest Interior Condition

Forest interior is generally defined as the portion of the forest that is not influenced by edge effects. An edge is the interface between two distinct habitats (e.g., a cutblock and the adjacent old forest) where a microclimate gradient exists between two habitat types. Forest interior conditions is a measure of quality of retained forests for species that are not typically found near forest edges.

Interior condition is seen as an important element to limit climate induced changes that may negatively affect habitat elements. Healthy forest interior conditions are needed to minimize predator prey interactions of susceptible species.

Fish and Aquatic Habitat and Features

Fish and other aquatic features are critical components of the ecosystem within the Ḥahuuƚi and vitally important to Huu-ay-aht. Managing for the sustainability and rebuilding of salmon stocks within the Ḥahuuƚi is one of the primary considerations in the development of the HIRMP.

Wildlife Habitat and Features

Wildlife management considers the wide range of species and habitats. The overall goal of managing species is to ensure they have their required habitat elements. This requires both static and dynamic management.

Species at Risk

Species at Risk are species that are legally listed as Threatened or Endangered under the *Federal Species at Risk Ac*t (SARA), and fish species that have a final Federal Recovery Strategy, or non-fish species that have a final BC Implementation Plan.

Riparian Function

Riparian function is a key element in managing a coastal landscape. Salmon and other fish habitat and their life requirements is a key driver in managing the full range of attributes a riparian network delivers.

Forest Health

To ensure a sustainable future, forest health agents need to be identified and understood on how climate change will potentially influence their impacts.

Cultural and Traditional Use Areas

Huu-ay-aht history and future is reflected in the lands of the Ḥahuuƚi. Originally the use of the lands was seasonal, transient, and to the extent of all corners of the Ḥahuuƚi. Today, through colonization and the tenure systems, cultural and traditional uses are limited. The HIRMP aims to expand the utilization by Huu-ay-aht through several measures including protection of identified cultural and traditional areas. These areas have been incorporated into the full suite of elements that support Huu-ay-aht needs along with their association with ecosystem health and biodiversity. This too is an element that has spatial and dynamic components, e.g., the management of western red cedar.

Life Cycle Carbon Accounting

To address the cost of additionality as described in Section 6.2 of the DRAFT FCOP II protocol[1] and Section 14 of the GCCER[2] the HIRMP will assess the feasibility and incrementality of actions that exceed regulatory standards to capture Carbon Credits. While this element may not seem to be directly linked to ecosystem health and biodiversity, it is as important. The Intergovernmental Panel on Climate Change (IPCC) has concluded that "in the long term, a sustainable forest management strategy, aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fiber, or energy from the forest, will generate the largest sustained mitigation benefit". Detailed life cycle carbon accounting will be completed as a basis for exploring opportunities for carbon crediting projects including nature-based solutions.

[1] fcop_20_draft_2023.pdf (gov.bc.ca)

[2] Section 14(3)(n)(iv) and (xi) of GGECR require the Project Plan to include assertions that there are financial, technological, or other obstacles to carrying out the Project that are overcome or partially overcome by the incentive of having the Project Reduction recognized as Offset Units under the Act, and justification for the assertions required under Section 14(3)(n)(xi).

Part 2: Stewardship Approaches

The following is an overview of the stewardship approaches used to implement each of the elements.

Variable Retention

There is strong scientific evidence that using variable retention across the landscape contributes to the management of biological diversity. Variable retention is comprised of both landscape and stand level retention to conserve biodiversity by sustaining species and ecological processes. This is accomplished through maintaining habitats over time and reducing micro-climate effects of harvesting. In turn, retention enriches soil for regenerating trees by maintaining soil mycorrhizae and enhances connectivity by supporting the movement of mature and old forest species across the forested landscape.

Ḿaƛasap Network (landscape level retention)

To promote long term sustainable management and enhance connectivity, values that are fixed on the land base were identified and incorporated into the Ḿaƛasap (to take a bite out of) network. These included locations where cultural values have specific locations: e.g., salmon habitat, key riparian and aquatic features, habitat for Species at Risk, visual management, cultural sites, WHAs, UWRs, eagle nests, bear dens, trees > 70m tall, old forest, connectivity, potentially unstable terrain, rare ecosystems, western red cedar and yellow-cedar (see Figures 3-5).

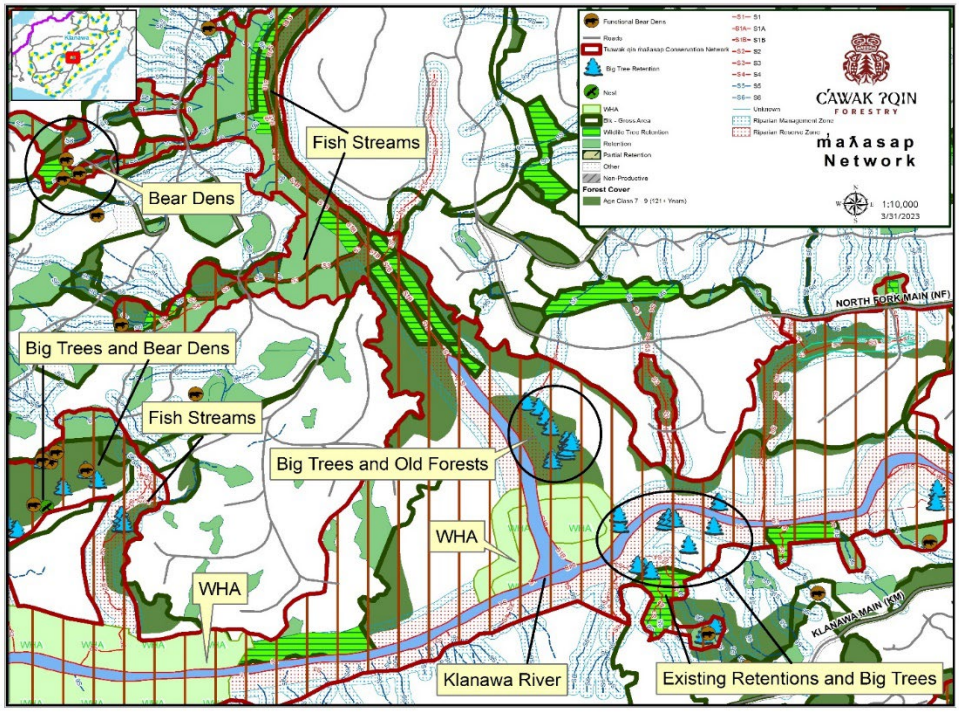


Figure 3: Detail view of Ḿaƛasap Network in Klanawa Watershed highlighting spatially identified anchors

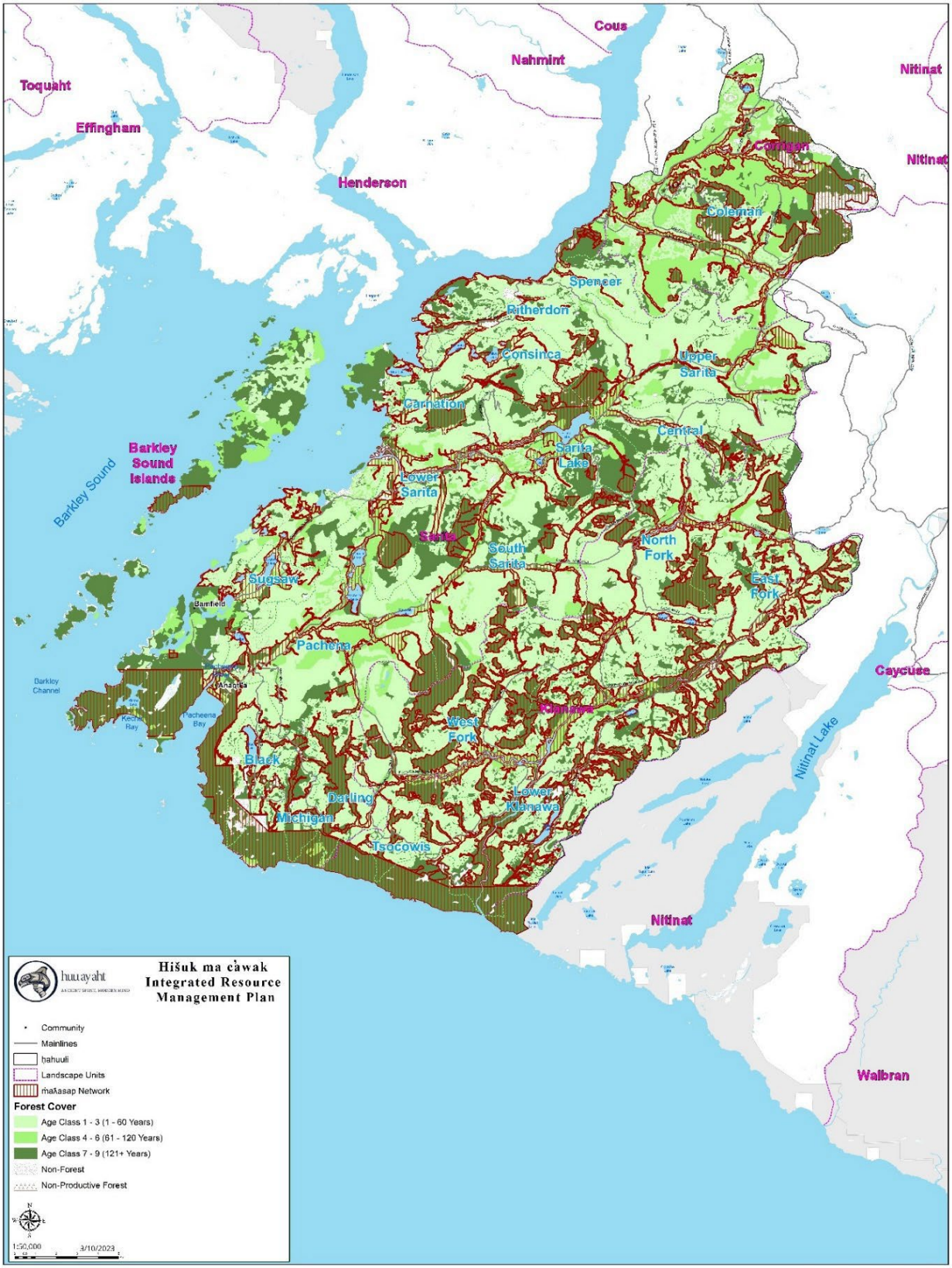


Figure 4: Maƛasap Network over three forest age class groups for the Ḥahuuḥi

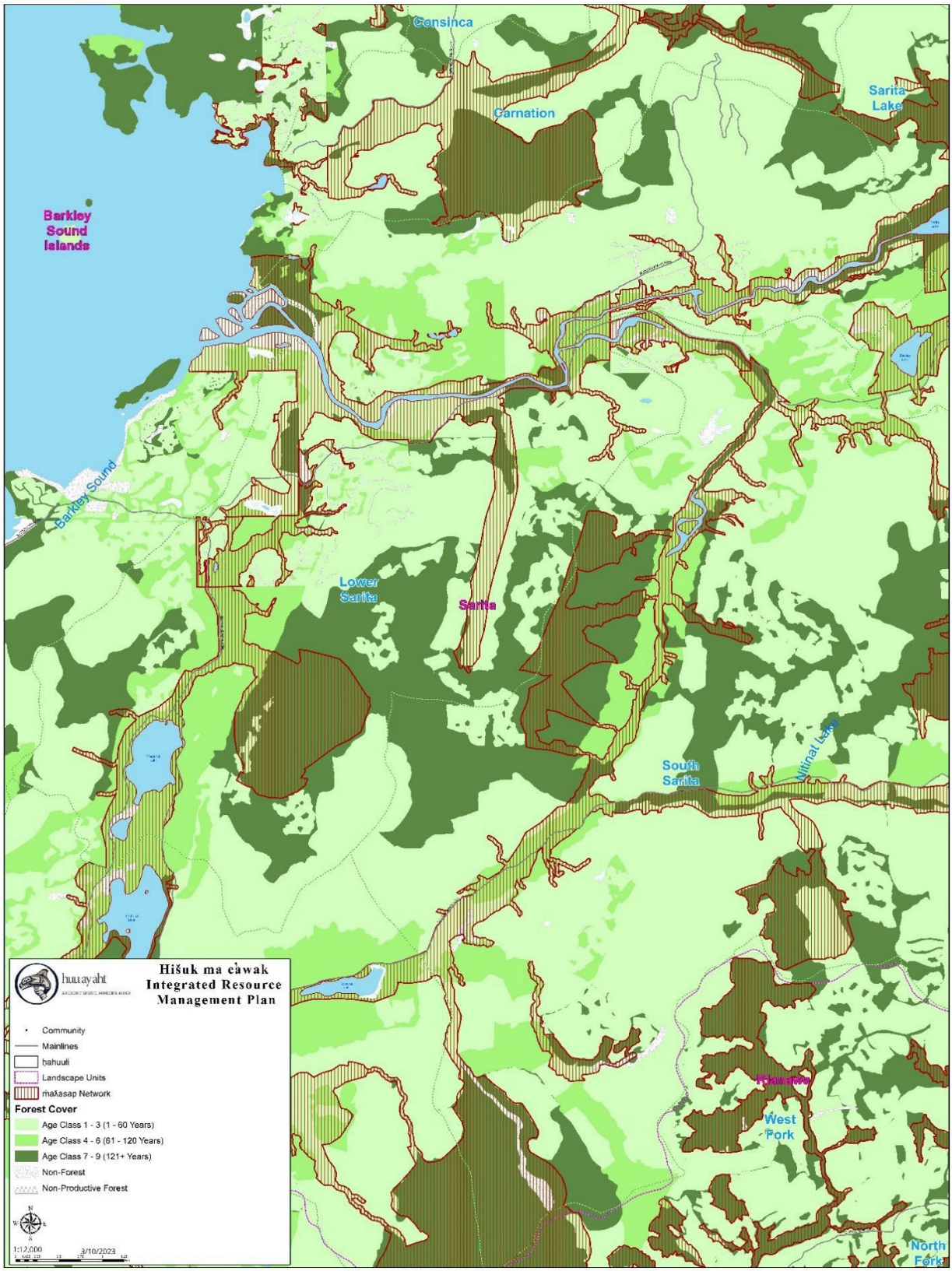


Figure 5: Ṁaƛasap Network, Sarita Basin

Values incorporated in Figure 3 within the Ḿaƛasap Network include Wildlife Habitat Area (WHA), large fish-bearing waterbodies (Klanawa River), smaller fish-bearing streams identified in the field, trees > 70m tall, existing retention, bear dens, and old forests. All the values are spatially connected to create a quality landscape-level network for long-term stewardship. The spatial delineation of the Ḿaƛasap Network forms one component of stewardship that functions in conjunction with the full suite of stewardship approaches for all values.

Retention Silvicultural System (stand level retention)

Stand level retention is used to augment landscape level retention as a proportion of all harvesting. The system maintains legacies of the original stand and provides connectivity to adjacent areas. Stand level retention is a combination of retention used in retention silvicultural system cutblocks and Wildlife Tree Retention Areas (WTRAs). Both types of stand-level retention contribute to biodiversity at the landscape-level. The three Vancouver Island Land Use Plan (VILUP) Stewardship Zones (Special, General, and Enhanced) are used as a basis for setting retention targets. The General and Enhanced Zones have been refined to provide more retention in the drier ecosystems due to the disturbance history and biodiversity values with less retention in the windy zones of Western Vancouver Island due to higher windthrow risk. The Huu-ay-aht HIRMP utilizes the retention silvicultural system consistent with the targets established for each zone. The amount of old forest captured by the Retention Silvicultural System is not provided as part of the Old Growth summary at the end of this report and will be additive to it in the final HIRMP.

Rare Ecosystems

The HIRMP implements a landscape-level approach for identifying and conserving high-quality element occurrences of rare forest ecosystems. High-quality element occurrences of these rare ecosystems are conserved within the Ḿaƛasap Network aligned with established targets.

Watershed and Terrain Risk Management

Watershed management strategies are part of a multi-scale approach including risk control measures that are developed and implemented based on measurable data on physical watershed processes. These strategies are then connected to site-level decision-making consistent with the identified risk tolerance. This approach complements the Ḿaƛasap Network by ensuring the integrity of the full area is managed considering the overarching objectives of watershed management including the protection of salmon habitats.

Management of Salmon and Aquatic Habitats

The renewal and restoration of watersheds supporting salmon has been a focus for the Huu-ay-aht and the Nation is committed to the recovery and sustainability of all salmon populations within the Ḥahuuƚi. The HIRMP includes objectives and strategies for the preservation of salmon habitats within the Ḥahuuƚi and the safeguarding of investments made in restoration.

Management of Wildlife and Terrestrial Habitats

The HIRMP manages for wildlife habitats associated with species of significant concern. This includes:

- Maintaining winter ranges and forage habitat for Columbian black-tailed deer and Roosevelt Elk;
- Identifying and retaining bear dens and associated forested buffers;
- Identifying and retaining raptor and heron nests and associated forest buffers;
- Identifying and retaining breeding ponds with an associated forested buffer for amphibians including the red-legged frog and Western toad.

Cedar

Management of cedar has been identified as a key value of the HIRMP. This includes management of both old and younger trees through recruitment, in normal forestry reforestation, as well as a dedicated area to grow cedar for cultural purposes in perpetuity. Cedar is managed for utilizing a multi-scale approach comprised of:

- Cedar Gardens - Areas have been identified as good cedar growing sites and will be set aside where cedar will be planted at high densities and thinned to promote their application over the range of Huu-ay-aht use (Figure 6). The concept is that the forest structure will promote attributes that allow for many cultural and traditional uses including but not limited to bark stripping, wood for masks, poles, and canoes. The gardens are located near habitation to allow for easy access and transfer of knowledge and practices. These areas are to be set aside for centuries to provide for multiple generations.
- Large Cultural Tree Program - This program will allow for identification, inventory, and retention of large cultural trees that have desired attributes for Huu-ay-aht use. The option to keep a standing inventory allows for Huu-ay-aht to follow traditional practices of only taking what is needed when its needed. This program will also help grow the accessibility for future carvers and encourage the next generation to continue with this practice.
- Cedar focused silviculture - This approach is to promote the reforestation of cedar on all ecosystems where it is ecologically and climatically suited. These areas will provide for a range of cedar products through harvesting or provide an opportunity to leave as legacies within the Retention Silvicultural System.
- Big Tree Retention - The fourth approach is the maintenance of Big Trees. LiDAR informed data and field verification are used to locate and retain Big Trees using Variable Retention which exceed the requirements in the provincial Special Tree Protection Regulation.

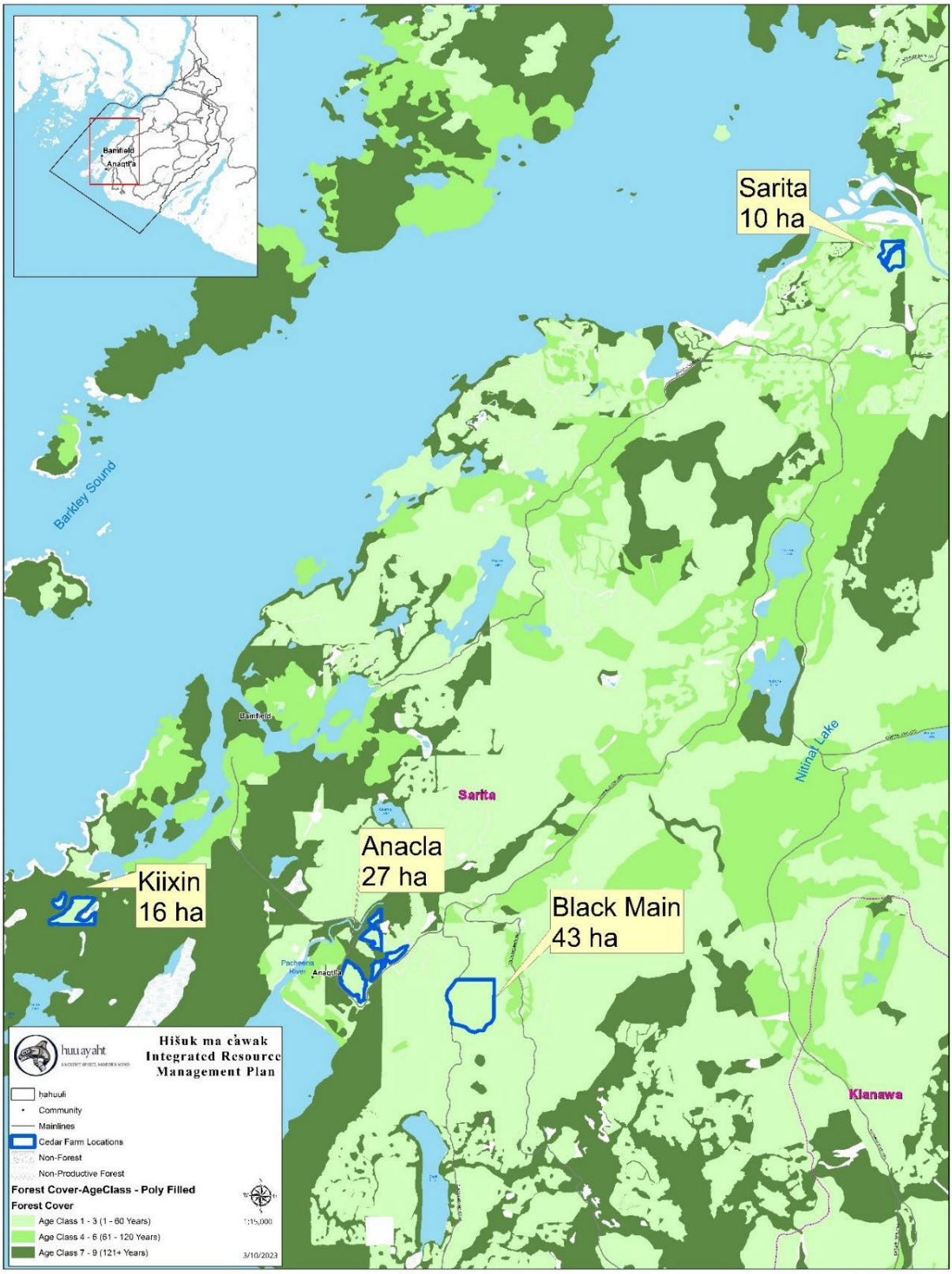


Figure 6: Cedar Garden Locations

Part 3: Preliminary Results

The results in this section are preliminary and will be refined as the integrated modelling is completed.

A draft Ḿaƛasap Network of approximately 20,784 hectares (19, 819 hectares being productive forests) has been identified for stewardship. More than 13,450 hectares of productive forest (68%) are 250 years or older today. The remaining 6,360 hectares of the Ḿaƛasap Network are part of a long-term recruitment strategy.

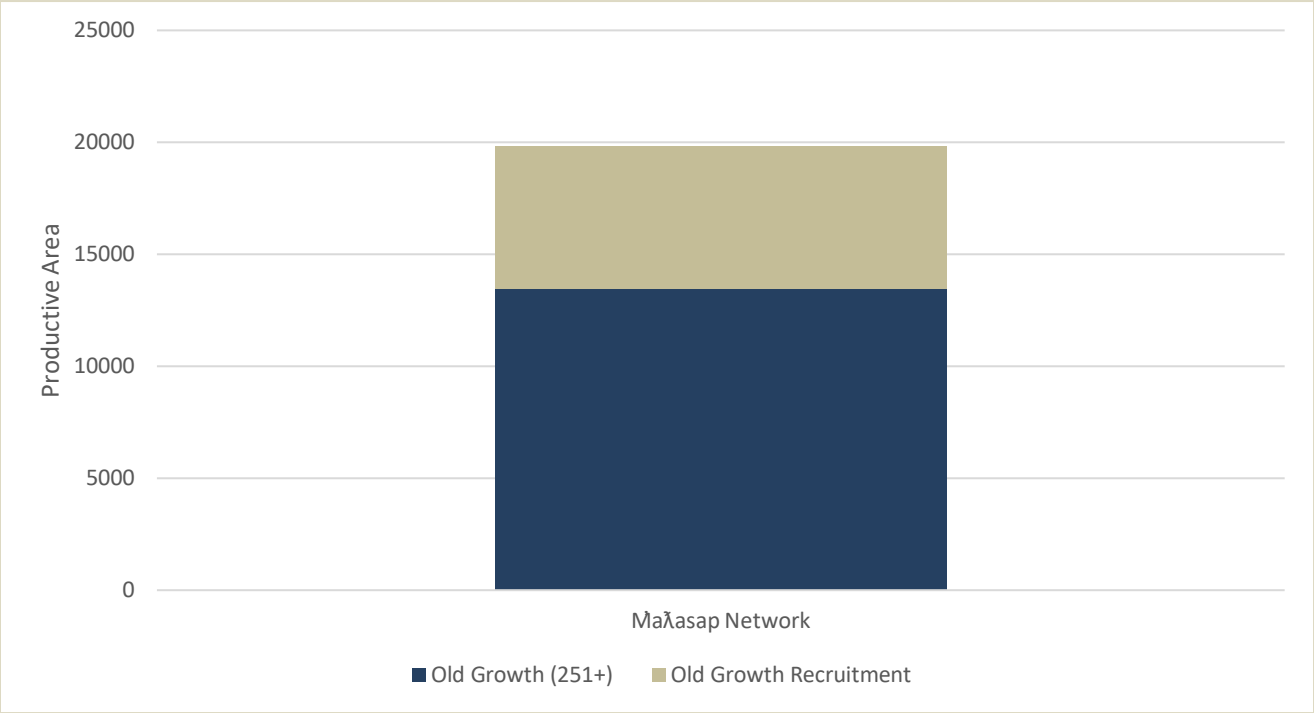


Figure 7: Proportion of 250+ year-old for forests in the Ḿaƛasap Network

Age Class	In Ḿaƛasap Network Area (Ha)	In Ḿaƛasap Network Area %	Total Area (Ha)	Total Area %	Ḿaƛasap Network Area/ Total Area
1-40	871	4%	27,037	35%	3%
41-80	4,103	21%	22,728	30%	18%
81-120	586	3%	1,843	2%	32%
121-250	807	4%	1,365	2%	59%
251+	13,453	68%	24,024	31%	56%
Total	19,819	100%	76,998	100%	26%

Table 1: Age Class Summary of productive forests within the Ḥahuuƚi and the Ḿaƛasap Network

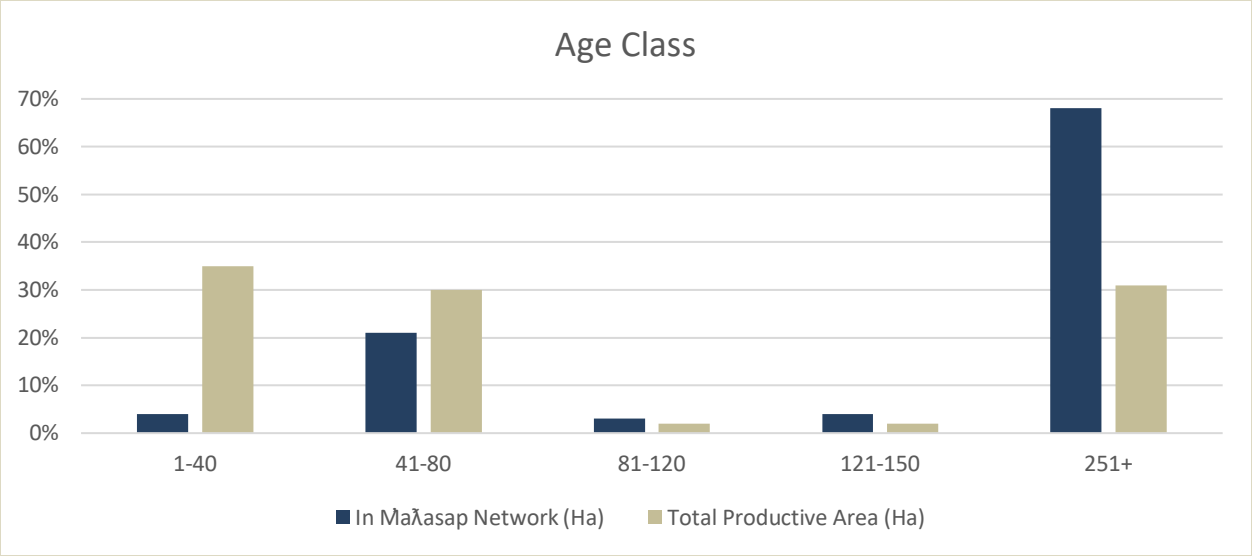


Figure 8: Age Class Summary for the Ḥahuuṯi and the Ḿaʔasap Network

While recognizing that the HIRMP was developed focused on all values, a comparison to the Technical Advisory Panel (TAP) polygons is provided. TAP identified a total of 8,727 hectares of polygons. The draft Ḿaʔasap Network includes more than double the forests mapped by TAP polygons over time (19,819-8,277=11,092 hectares).

TAP Mapped Polygons	Area (Ha)	Ḿaʔasap Network	Area (Ha)	Notes
Total	8,727	Old Growth (251+)	13,453	66% of the TAP polygons are in the Ḿaʔasap Network
		Old Growth Recruitment	6,366	
		Total	19,819	

Table 2: TAP total area comparison to Ḿaʔasap Network area with identified old growth

Conclusion and Next Steps

The Huu-ay-aht-led HIRMP has taken a holistic approach to manage for the full range of values within the Ḥahuuƚi. This includes taking an integrated approach to ecosystem health and biodiversity that recognizes the many interconnected elements including old forests. Detailed and spatially explicit modelling is now being used to forecast these interconnected elements through time to ensure all values are being appropriately conserved, maintained, or enhanced.

This process has been led by the Huu-ay-aht First Nations and in partnership with Tsawak-qin/Western Forest Products and Mosaic Forest Management and further enhances the reconciliation process with Tenure Holders within the Ḥahuuƚi. It is in keeping with the self-determination as a Treaty Nation as well as provincial direction on the implementation of the *Declaration on the Rights of Indigenous Peoples Act*.

This interim report provides a summary of work completed to date on ecosystem health and biodiversity including old forests. The important next step is to complete spatially explicit modelling to analyze and evaluate the integration of all stewardship approaches including those outlined in this report. All information provided in this report is provided on an interim basis and no decision have been made by the parties at this time. Opportunities such as carbon crediting projects are being explored as part of the next steps and will be a part of the decision-making process. The final HIRMP is expected to be completed in the fall of 2023.

Joint Statement on Proposed Old Growth Deferrals

Huu-ay-aht First Nations

November 2, 2021

OUR LANDS, OUR FUTURE, OUR DECISION

Earlier today, the Ministry of Forests, Lands, Natural Resource Operations announced the proposed old growth deferrals based on the advice and recommendations of the independent

Old Growth Technical Advisory Panel established by the B.C. Government in June 2021.Huu-ay-aht First Nations has been briefed on the plan, including proposed old growth deferrals on the ḥahuułi of the Huu-ay-aht Hawiih (Huu-ay-aht Traditional Territory).

We were advised that the BC government will not implement any further deferrals within our ḥahuułi without our prior agreement arrived at through government-to-government engagement.

Our two-year integrated resource management planning (IRMP) process is now underway within our ḥahuułi. While we will be reviewing and considering the analysis and recommendations of the Technical Advisory Panel (TAP), it will be our IRMP processes that guide any future forest, resource, and land-use decisions by our Nation, including any further deferrals.

As a Modern Treaty Nation, Huu-ay-aht will decide what is best for our people. Our citizens have a constitutionally protected right to manage and benefit from our lands, waters, and resources throughout our ḥahuułi. As the original stewards of our lands, we take our responsibility to decide what is best for the land and for present and future generations very seriously. Accordingly, we will take time to carefully review the proposed deferrals, but more importantly conduct our own Huu-ay-aht analysis. We will then advise the B.C. government of our decisions.

Our analysis will be conducted as part of our Hišuk ma c̓awak Integrated Resource Planning (HIRMP) process, which is already underway. We will draw on the teachings of our Ancestors, the wisdom of our Elders, the input of our Citizens, the contributions of our valued partners, and the best forestry, fishery, and integrated resource management advice as we see it. We describe this as Indigenous-based forest and resource management (IBM). Our HIRMP team includes Bruce Blackwell and Chris Niziolomski. We will be reaching out to other experts for additional scientific advice as necessary and appropriate. The HIRMP and our response to the proposed deferrals will be a made-in Huu-ay-aht, by Huu-ay-aht, and for Huu-ay-aht decision.

To assist in our decision making, Tayii Ḥaẇ ił ƛiišin (Head Hereditary Chief Derek Peters) and Elected Chief Councillor Robert J. Dennis, Sr. will host the Anacla Old Growth Summit on November 23 on old growth management and process for Huu-ay-aht's Hišuk ma c̓awak Integrated Resource Management Plan. The purpose of the summit is to hear from forestry professionals regarding discrepancies in the scientific data related to old growth (the "science gap"), to tour the Huu-ay-aht ḥahuułi and to discuss Huu-ay-aht's approach to old growth management and the Integrated Resource Management Plan process.

Environmental leader Tzeporah Berman, resource journalist Stewart Muir, forest professionals Al Gorley, Garry Merkel, Rachel Holt, and Cam Brown, and Indigenous leaders, have been invited to the Summit along with forest professionals working with Huu-ay-aht, including Bruce Blackwell, Chris Niziolomski, and Stan Coleman and Shannon Janzen, chair of C̓awak ʔqin Forestry.

Rest assured that we will manage the lands and resources the way our ancestors did – guided

by our Sacred Principles of ʔiisaak (utmost respect), ʔuuʔałuk (taking care of), and hišuk ma c̓awak (everything is one). We will act in accordance with our laws and our values, and we expect everyone to respect our laws and decisions on our ḥahuułi.
We will take the time we need to get it right. That said, we expect to be in a position to decide by January 15, 2022, if there will be any further old growth deferrals over the next two years in our ḥahuułi.

Tayii Ḥaẇiɬ ƛiišin

Head Hereditary Chief Derek Peters

Huu-ay-aht First Nations

Robert J. Dennis Sr.

Elected Chief Councillor

Huu-ay-aht First Nation

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