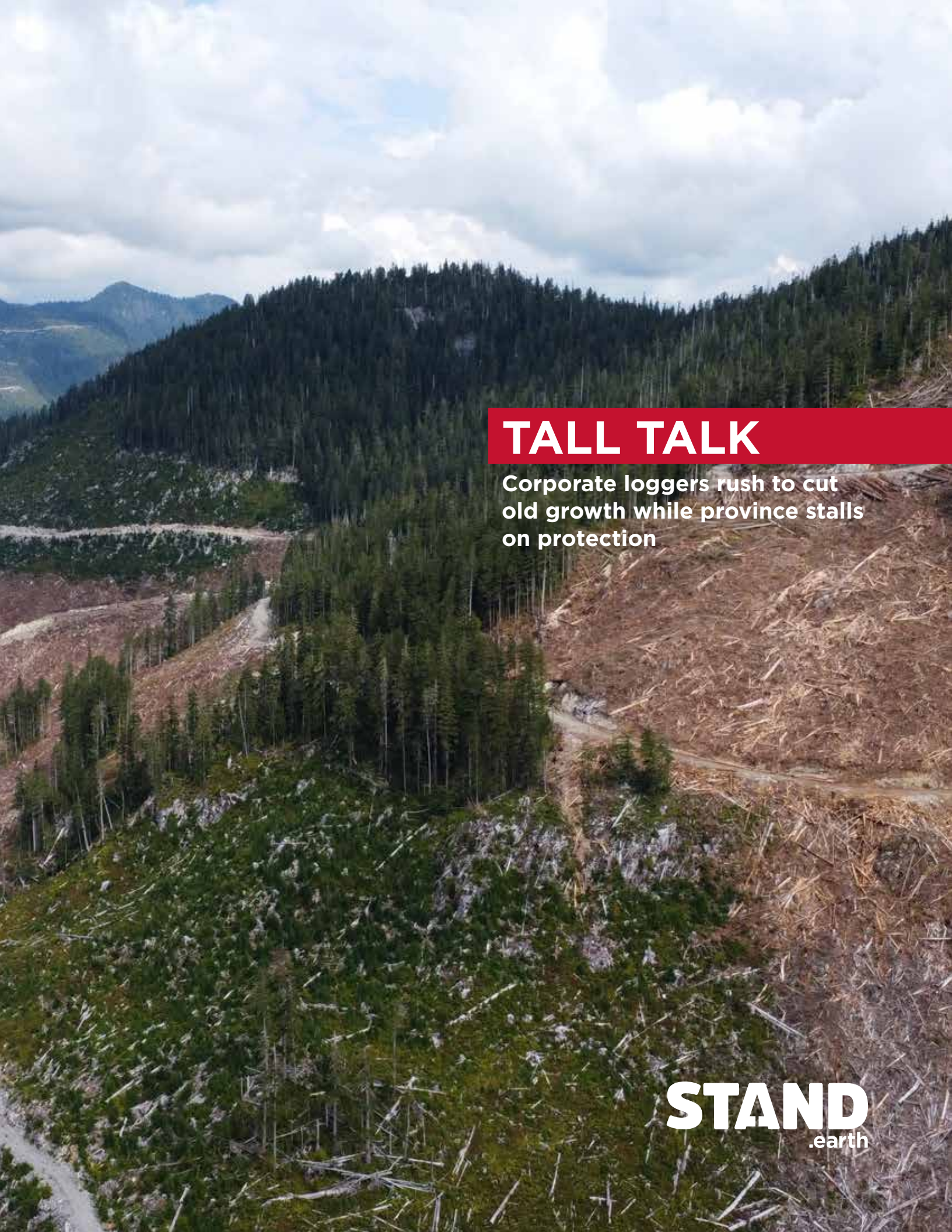

# TALL TALK

**Corporate loggers rush to cut old growth while province stalls on protection**

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**Cover Photo** - Two candidate old growth deferrals were logged by Western Forest Products near Muchalat Lake on Vancouver Island. Photo from August 2022. Credit: Alex Tsui, Wilderness Committee.
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**The province has largely failed to stop the logging**

# EXECUTIVE SUMMARY

In November 2021, British Columbia finally released detailed maps showing 2.6 million hectares of old growth forests across the province that needed to be immediately set aside from logging, through a process known as deferrals. Keeping these rare big-treed, ancient, and remnant old growth forests standing was meant to be an urgent first step – initially given a timeline of 6 months from the release of the Old Growth Strategic Review in April 2020 – while the province undergoes a paradigm-shift in forest management, from a model that puts timber value above all else to one that fully upholds Indigenous Title and Rights and centres ecological integrity.

A temporary ban on logging in the most rare, at-risk old growth forests was meant to be the most urgent and straightforward of 14 recommendations on old growth that the British Columbia government promised to implement in 2020. Two years into a three year timeline for all of those recommendations, not a single one of the 14 recommendations has been fulfilled and old growth continues to be destroyed at alarming rates.

**In fact, in the 10 months since deferral maps were released the province has largely failed to stop the logging of the most at-risk deferrals: those that overlap with active and pending forest harvesting permits.**

As the satellite imagery analysis in this report shows, the result is now playing out on the landscape across British Columbia, as private corporations continue to build new logging roads into old growth and clearcut proposed old growth deferral areas, while provincial officials assure their constituents that corporations are acting in good faith.

As this report shows, the evidence of the scale and severity of ongoing logging in proposed deferral areas means that, at best, provincial officials are completely unaware of what's happening and trusting the word of corporations who profit from cutting down these forests. At worst, the province is engaging in a disinformation campaign to convince constituents that it is fulfilling its promises to protect old growth forests while actually avoiding meaningful action to curtail the industry.

In response to the ongoing threat to old growth forests, Stand.earth Research Group (SRG) has conducted a new spatial analysis and found that over 55,000 hectares of proposed old growth deferrals face imminent risk of logging, and satellite imagery analysis reveals that some deferrals have already been logged or are in the process of being clearcut. Private logging companies – notably, **Canfor, West Fraser, Sinclar Group, Interfor, Weyerhaeuser, and Western Forest Products – represent the majority of the threat**. Pipelines also rank high on the list. TransCanada, with its Prince Rupert Gas Transmission Line and Coastal Gaslink Project clearing tracks of old growth forests on their routes across the province, is fourth on the list when it comes to immediate risk to proposed old growth deferral areas.

Through this research, we can draw several key conclusions:

· **A significant amount of proposed old growth deferrals have already been destroyed,** including to make way for pipelines, while many others are in the process of being clearcut or are likely to be logged in upcoming weeks and months

· **There is no evidence to support the claim that logging in the most rare and at-risk old growth forests has slowed** over the last 10 months since B.C. announced its intention to defer logging in prioritised old growth; in fact, the onus is on the province to disprove that high-grading – targeting these rare old growth stands before they can be protected – is occurring

· **A small group of private forestry and oil and gas corporations comprise the majority of the extreme risk to old growth** forests that have been prioritised for immediate logging deferrals

· **The old growth forest represented in active and pending logging permits may be some of the rarest unprotected old growth left in B.C.**, including the most productive stands growing in nutrient-rich valley bottoms. Already extremely rare, these areas continue to be hit hard by the industry because of their economic value.

· **Logging these forests exacerbates B.C.'s vulnerabilities to extreme impacts from climate change.** Even worse, the clearance for fossil fuel infrastructure is a two-fold problem because the climate protections afforded by old growth are removed and the resulting infrastructure is a major source of new carbon emissions.

Meanwhile, government officials have publicly declared that logging deferrals have been implemented in at least 1.7 million hectares of old growth, but this announcement was made without any accompanying maps or details to indicate if these deferrals include any of the ones that overlap with planned logging or are even within the Timber Harvesting Land Base (THLB).[2] Temporary protections from logging are only meaningful if they actually stop logging in areas that are immediately at risk, and this report shows that some of the most threatened old growth is still on the chopping block.

Old growth forests are globally rare, intrinsically valuable, and iconic. They support communities in many ways, including ecosystem health and services like clean air and drinking water, wildlife habitat, invaluable carbon storage and mitigation from the worst impacts of climate change. Old growth is vitally important to First Nations' Title and Rights holders, who have managed and cultivated these forests since time immemorial. The vast majority of residents in British Columbia agree that old growth forests have immense value and should exist in perpetuity.[3] If government officials do not take immediate action to correct course and stop logging in these vital ecosystems, they are not just breaking a campaign promise, they will be signing off on the demise of the natural forests that are vital to us and to future generations.




# INTRODUCTION

**Without a major change in forest policy, B.C. is likely to log much of the remaining unprotected tallest, biggest, and most ancient old growth forests in our lifetime** – and in some of the hardest hit regions, these forests have already been destroyed or will be in just a handful of years. The impacts of the climate crisis puts forests at even higher risk, and makes recovery that much more difficult. This loss would not only hurt the environment, it would be catastrophic for communities and forestry jobs too. To dampen the loss and turn fortunes around, in 2020 the Old Growth Strategic Review called for the deferral of development in old forests where ecosystems are at very high and near-term risk of irreversible biodiversity loss, at least until a new strategy is implemented.[4]

But even with this measured approach to preserve remaining old growth, the government is allowing logging permits in candidate old growth deferrals to proceed. As a result, old growth that should be part of the long-term strategy for ecosystem and economic health is being lost.

By minister's order under the Forest Act, logging permits can be rescinded or prevented from being issued, but the provincial government prefers a 'good faith' approach, relying on companies to voluntarily pause harvests rather than enforce a meaningful deferral of logging. As this report shows, the province's faith in the forest industry is misguided and mis-aligned with their commitment to the recommendations made in the Old Growth Strategic Review.

## Deferrals explained

The concept of deferrals is to temporarily suspend (typically for a period of 2 years to 4 years or more) harvest of the most at-risk, rare, and representative old growth forests, to allow for new approaches that shift from managing old growth for timber to maintaining old growth forest types and biodiversity across the province over the long term.[5] Deferrals are not equivalent to protection. They are designed to staunch the rapid loss of old growth happening under current management so as to better plan for long-term management, in collaboration between First Nations and the province, while centering ecosystem health. Meaningful deferrals occur in forests that would otherwise be harvested, which is why this study chose to focus on candidate deferrals that are partially or completely within active and pending cutting permits. If there is a complete commitment to the recommendations of the strategic review, then the industry should not be logging in these areas.

However, even these short reprieves from logging old growth forests were met with acrimony from the industry. For example, Canfor's CEO objected to the process and implored us all to unite and 'work together' on a different approach. But behind that rhetoric is a forest company holding the most area of old growth deferrals in logging permits – more than all First Nations companies combined.[6] Meanwhile, West Fraser's CEO said, "I fully support identifying and protecting ancient trees and remnant forests," but was careful not to mention prioritised big-treed old growth– the old growth forest type that West Fraser has cleared exclusively since the government's announcement.[7] Finally, Katrine Conroy, Minister of Forests for the B.C. provincial government, says, "The last thing I would want to do is do this quickly and not have it done properly," but this research shows that the government is failing to do either a timely process or a proper job.[8]

## Forests at risk, forests lost

In a spatial analysis conducted by the Stand.earth Research Group (SRG), we found that over 55,000 hectares of candidate old growth deferrals announced by the B.C. government on November 2nd 2021 were at extreme risk of being logged – 87% by private corporations.[9] These deferrals overlap with active and pending cutting permits issued to the forestry and oil and gas sectors. In a preliminary survey of a sample of these candidate deferrals using satellite imagery, SRG identified over 100 deferrals that were totally or partially logged.

The study found that 1,600 hectares of candidate old growth deferrals in just four sample areas have already been logged by the forest industry between March 2021 and March 2022, 43% of which was harvested after the government's November announcement. The majority (94%) was classified as 'prioritised big-treed old growth forest,' which is targeted by the industry for its high value timber, and highlighted in government processes as the most important to defer. The corporations behind these forest losses continue to log old growth before it can be protected, with satellite imagery showing new clearcuts and roads into these irreplaceable forests every day.

**The corporations behind these forest losses continue to log old growth before it can be protected, with satellite imagery showing new clearcuts and roads into these irreplaceable forests every day.**

## Distortion and disinformation

Across the province, there are about 11.1 million hectares of forests designated as 'old growth' remaining in the province, down from the 25 million ha estimated to have existed historically.[10] At least 10 million ha of old growth has been logged already in the province, and the logging industry targeted the big-treed, productive forests in valley bottoms first because they have the highest economic value. Thus, of the 11.1 million ha left, less productive old growth is more prevalent, while big-treed old growth – while already naturally rare – is vastly diminished in many B.C. forest types. Existing provincial policy also skews protection towards less productive old growth in order to limit the impacts of conservation on the forest industry, further exaggerating this trend. It is therefore key to a meaningful deferrals process that active and pending cutting permits overlapping deferrals be suspended, since the old growth in these cutblocks likely over-represents the big, old forests that are most at risk and are in need of deferrals in order to exist for long-term planning and engagement with First Nations. However, the message from the government has been that they are succeeding in the deferrals process, but what they aren't saying is what kind of old growth they have deferred and what they have left to the good faith of the industry.

Likewise, the industry would like the public to believe that 3.5 million hectares of old growth are already protected, but this is also a distortion of the facts.[11] In reality, much of this area would be outside the timber harvesting land base (THLB), and the old growth in the THLB that is protected is concentrated on less productive forests, high alpine areas, and steep slopes – old growth that has less economic value for the industry. The big-treed valley bottoms, or what is left of them, and the accessible old growth in easy terrain are still in the timber basket.

The risk of all this tall talk is that forest companies and the government can claim to set aside old growth, when actually they are "reserving" the unproductive, high elevation, steep slope forests that are not suitable for harvesting anyway, and log the biggest, tallest trees with impunity. This is a direct result of current B.C. forest management policy. By not identifying the quality of old growth under protection versus what is available for logging, the industry is distorting their role in this process to create the illusion that everything is under control, when in fact the big, old forests that are front-of-mind to the public in this process are still being lost.

## The last of the 'green gold'

The province earned over $1.8 billion CAD in stumpage revenue in 2021, which is way above average for the last 15 years and was fueled in part by the high price of timber brought on by pandemic-era demand.[12] However, the higher stumpage revenue was earned on just 58.2 million m2 of timber. By comparison, in 2018 70.7 million m2 was harvested, but stumpage was $1.2 billion CAD (see Figure 1). The key to the government collecting 50% more money on 20% fewer trees is in the quality of the trees cut. As overall logging rates declined 22% between 2018 and 2021, the logging rate of grade 1 and grade 2 timbers declined only 13%, while the proportion of stumpage revenue from high value timber (grades 1 and 2) increased (see Figure 2). In the interior, high quality timber made up over 80% of stumpage revenue and 45% of harvested timber in 2021.

While not all high quality timber comes from old growth forests, getting high quality timber is a key motivation for companies to target old growth. Targeting old growth forests has enabled corporations to earn record profits, while also continuing mills closures and curtailments. The combined loss of old growth forests and milling jobs is a devastating trend for forest communities.

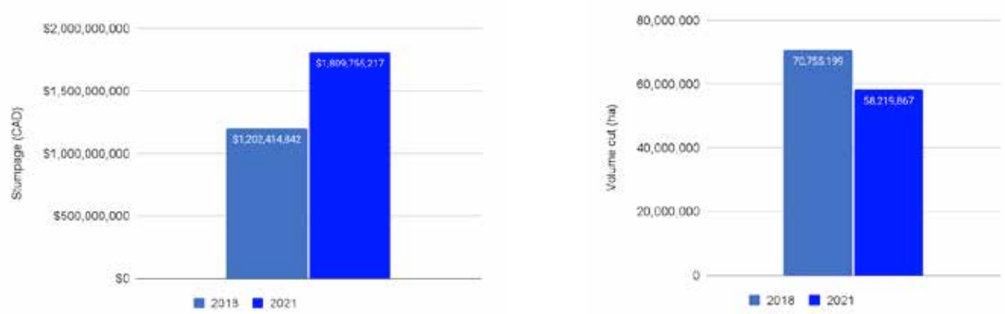



**Figure 1. Stumpage revenue (CAD) and volume cut (ha) between 2018 and 2021. 2018 revenue was lower than 2021, but the total volume harvested was higher.**

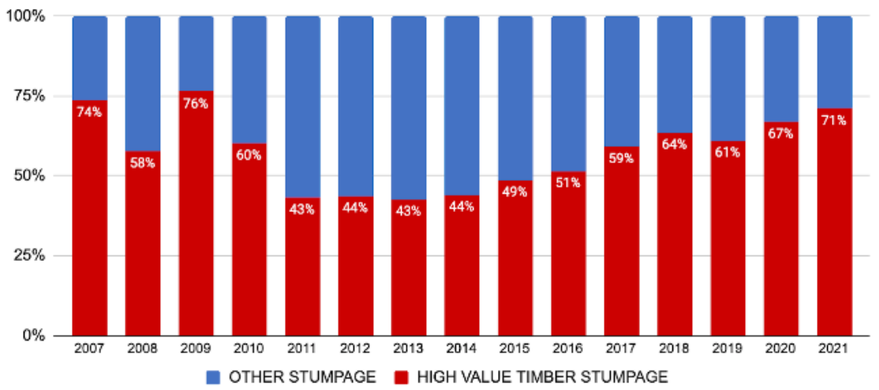



**Figure 2. The proportion of stumpage revenues earned by the provincial government that come from high value timber (grades 1 & 2) versus other timber. The average over the period is 60%.[13] The graph shows the relative revenue from logging forests with high value timber, including old growth, compared to other timber harvesting.**

## Upholding First Nations' Title and Rights

As part of the 2020 Old Growth Strategic Review, the first recommendation to government was to fully involve Indigenous leaders and organisations in the implementation of new old growth forest policies.[14] In the same suite of recommendations, the review panel identified that deferrals would need to be put in place as quickly as possible (they recommended a 6-month timeline) in order to avoid irreversible biodiversity loss in high risk ecosystems while longer term work unfolded. Following this, Indigenous and environmental organisations have repeatedly called for the province to provide adequate funding to ensure Nations have clear options in pursuing deferrals and other land use planning processes.[15] The province has fallen short on all counts, instead pursuing a process that is somehow hasty but also too short, is under-funded for engagement and that has been criticised as pitting Nations against one another based on strength of claim.[16] The result is that the government potentially undermines First Nations' inherent and unceded Title and Rights while enabling private logging corporations to maintain control over forests on Indigenous lands.

In an earlier analysis, Stand.earth Research Group found that Canfor alone holds more risk to proposed old growth deferral areas than all 127 First Nations' companies currently holding tenure combined. This disparity is important to note as the province's emphasis on seeking consent from First Nations for temporary deferrals, while still not seeking First Nations consent for logging, may make the whole process more regressive for First Nations – especially those that face economic barriers. In a June 2022 resolution, the Union of B.C. Indian Chiefs (UBCIC) notes, "the current divisive picture of old growth logging has been, and continues to be, exacerbated by the B.C. government fostering an economic dependence on logging for First Nations through limited revenue-sharing, joint ventures, employment, and tenures in contentious areas where First Nations face limited alternate economic opportunities as a result of years of colonialism and racism. It is a Title and Rights violation for First Nations to have to choose between logging remaining old growth forests and having adequate funds to support their communities."[17]

Some First Nations have declined candidate deferrals in their traditional territories. Where this has occurred, it is unclear whether the provincial government has ensured a process for replacing the rejected deferrals in order to meet minimum biodiversity thresholds. This ongoing lack of transparency additionally risks First Nations being held publicly accountable for the decisions of the province and private corporations. While some of the old growth deferrals in active and pending cutblocks may be under consultation during this engagement process, it is not clear what candidate deferrals have been rejected, or if the government has a process in place for replacing them.

Dispossessing Indigenous peoples of their lands in order to generate wealth through extractive industries is a part of both British Columbia's ongoing history and of the forestry sector in this province. Restoring control of stolen lands to rightful First Nations' Title holders is essential, both for old growth forests and our collective future. Allowing the most at-risk old growth forests to be permanently destroyed in the meantime, under a system that disproportionately benefits the provincial government and private corporations, does not adhere to the principles of UNDRIP or the pathway set out in the OSGR.

**It is a Title and Rights violation for First Nations to have to choose between logging remaining old growth forests and having adequate funds to support their communities.**



## The rate of cut in the age of climate change

Old growth forests are not a renewable resource. In the carbon-rich, big-treed rainforest ecosystems, research indicates that it would take many hundreds of years of growth for these forests to recover a majority of the carbon stored prior to harvest, if it is even possible.[18] Once these forests are converted to managed "forests" and harvested on a far shorter cycle, they are never given the opportunity to recover the original stored carbon, never mind the biodiversity and functions associated with old growth. The unpredictable trajectory of the climate crisis further impacts the recovery of natural systems. The result is that the current benefits of old growth forests are, in practice, irrecoverable both in terms of storing carbon and in providing other ecosystem services such as soil and water retention and fire resilience.[19] Even if we protect second growth forests, there is a significant risk that is that the forests we cut down today will not grow back the way we know them – changing climate conditions can shift how forests grow and make some tree species maladapted. For example, in some drier areas of the province, no forests may re-establish once today's mature forests are cut, due to drought. Inherent in this is the risk that we will lose more than we think if we do not stop and properly protect old growth forests, plan for their resilience and recruitment and account for their value to B.C. communities for more than just timber. Simply put, given the climate crisis, maintaining old growth has become an economic as well as environmental imperative, with ecosystem services from old growth playing an increasing role in safety and security for B.C. communities.[20]

**Given the climate crisis, maintaining old growth has become an economic as well as environmental imperative, with ecosystem services from old growth playing an increasing role in safety and security for B.C. communities.**

Unfortunately, short-sighted perspectives are driving company decisions to continue harvesting. If the government is serious about deferrals, it should urgently implement the process it committed to in the 2020 Old Growth Strategic Review: all active and pending logging permits in candidate deferrals should be suspended while First Nations and the province negotiate new practices that fully uphold Indigenous Title and Rights, and implement permanent land use changes – including old growth protection and recruitment.

# METHODOLOGY
## Overlap Analysis

By overlapping forest tenure cutblocks with priority deferral areas in GIS, SRG was able to identify candidate old growth areas that are under threat by the forest industry, the oil and gas industry (including pipelines), and other industries.[21]

Forest tenure cutblocks were considered in the map when they were not retired and when they had planned harvest dates between January 2020 and December 2030. This captured some other types of tenure such as recreational forest use, which were filtered out, but allowed for consideration of all active and pending permits across different industries. Some areas, notably those under B.C. government control via B.C. Timber Sales (BCTS), are already deferred and were removed from the map. However, the government needs to confirm the BCTS areas that were deferred by releasing a map to indicate how much, where, and what kind of old growth this includes. They also need to maintain an updated inventory of these deferrals and any changes to deferral status, including any areas where deferrals are removed and if they were replaced with other suitable forest areas.

**This study focuses on the areas that are immediately under threat of being lost in the coming months or have already been destroyed.**


The overlap analysis resulted in polygons of candidate old growth deferrals that are at high risk of partial or total clearance as defined by their presence in active and pending logging permits. By summarising the count and area (in hectares) of all polygons in a 15 km$^2$ hexagon grid overlaid on the map of the province, SRG was able to visually depict the threat using a heat map showing the totals per hexagon to indicate the level of risk of old growth deferral loss in each hexagon. This map is available here: **https://publications.stand.earth/old-growth.**

The risk level indicated in this map differs from the one that was created in the previous research.[22] While that risk was based on what forest companies could potentially harvest across all their tenures, this is a more immediate and extreme risk because it covers areas where logging is already approved. While the first risk is an accurate assessment of old growth risk across the province over the short to medium term, this study focuses on the areas that are immediately under threat of being lost in the coming months or have already been destroyed. One important caveat is that by being based on cutting permits only, the immediate risk is skewed by the lack of complete coverage in the cutting permits data of harvesting in tree farm licences (TFLs). TFLs are more common on the coast than in the interior, leading to the threat to old growth on the coast being underrepresented in the map. Therefore, the results of this study were compared to the previous study to identify possible underrepresentation of threat by company, for companies on the coast and companies with more TFLs.



## Satellite Imagery Study

Using daily and monthly satellite imagery from Planet Labs, SRG identified deferral areas that had experienced forest removal by logging. This includes road building as well as partial and total clear cuts. The timing of the forest harvest was identified from the daily and monthly satellite imagery. Deferrals that were found to have harvesting in them were marked with their coordinates, along with the deferral and cutblock information indicating the company, cutblock, deferral ID, region and other information. Where deferrals were totally or partially logged, the area cleared was estimated from the size of the overlap between the deferral area and the logging permit and checked against satellite imagery.

If the cleared area was smaller or larger than the overlap, measurements were taken using the ArcGIS measure tool and Planet Labs measure tool and compared.
The study selected sample areas in four BC Natural Resource Regions: Omineca, Cariboo, West Coast, and Kootenay-Boundary (see Table 1). These areas were selected because they contain a high degree of overlap between candidate deferral areas and approved cut blocks compared to other regions. Within each region, an area was chosen that had active or pending (not retired) forest harvest permits. Each of these sub-areas is broadly +/- 15,000 km$^2$. About 2.5% of the total area of candidate deferrals was sampled, or about 1500 ha out of 59,200 ha.

| REGION | AREA OF STUDY |
|---|---|
| **Omineca** | North of Prince George between Fraser Lake and the Hart Ranges |
| **Cariboo** | Between Quesnel and 100 Mile House |
| **West Coast** | Northern Vancouver Island and the mainland coast from Campbell River to Cape Scott |
| **Kootenay- Boundary** | Between Mica Creek and Nakusp |

**Table 1.** Regions and areas of study

# RESULTS

The spatial analysis identified an estimated 55,200 ha of overlap between old growth deferrals and forms of forest removal.[23] The majority (48,100 ha) overlapped with forestry, reiterating that major industrial forest companies are the biggest immediate threat to old growth deferrals (see Table 2). Given that this analysis focused only on cutting permits, while our previous analysis included risk across all company tenure, we found some differences in the rankings between this and our previous report. Most of the variation is explained by the lack of representation of some coastal cutblocks in the cutting permit data.

The analysis also revealed the extent to which the oil and gas sector threatens old growth, with these sectors threatening an estimated 4,200 ha of old growth deferrals in active and pending logging permits. **The old growth deferral losses from oil and gas are not being considered in the deferrals process, suggesting that the government lacks a comprehensive approach and cumulative impact assessment for old growth forest management.**

| RISK RANKING | COMPANY | SECTOR | OLD GROWTH AREA AT RISK (ha) | AREA (ha) CONFIRMED LOG IN SAMPLE STUDY |
|---|---|---|---|---|
| 1 | **CANFOR** | FORESTRY | 8,940 | 186 |
| 2 | **WEST FRASER** | FORESTRY | 7,600 | 435 |
| 3 | **SINCLAR GROUP** | FORESTRY | 3,960 | 196 |
| 4 | **TRANSCANADA** | ENERGY | 3,560 | - |
| 5 | **INTERFOR** | FORESTRY | 2,120 | 52 |
| 6 | **WEYERHAEUSER** | FORESTRY | 1,630 | - |
| 7 | **WESTERN FOREST** | FORESTRY | 1,220 | 286 |
| 8 | **GORMAN GROUP** | FORESTRY | 790 | - |
| 9 | **DUNKLEY LUMBER** | FORESTRY | 780 | - |
| 10 | **ASPEN PLANERS** | FORESTRY | 770 | - |

**Table 2.** The top ten worst companies, their sector, and the area of old growth deferrals in their logging permits across the province.



**Forest Companies**

**Canfor** is the number one threat to old growth deferrals in active and pending logging permits based on the spatial analysis. An estimated total of 8,940 ha are at extreme risk of being lost, and satellite imagery in the study suggests that at least 186 ha in the study area in the Omineca Region is already gone – 77% of which was cleared after deferrals were announced. Canfor was also the biggest risk in the previous study, indicating that by cutting permits and across all tenures, Canfor is the major threat. Figures 1 and 2 show the before and after of Canfor logging near the Caddis Lakes in the Omineca Region.

**Figure 1.** A priority big-treed deferral area (outlined in green) north of Caddis Lakes in Omineca Region on Nov. 8, 2021, before it was harvested by Canfor. Satellite imagery from Planet Labs PBC.

**Figure 2.** The same deferral on Aug. 25, 2022. The smaller area in red has been logged by Canfor while Canfor has built new logging roads into the larger area, signally that logging is imminent.

**West Fraser** is the second biggest threat to old growth deferrals in active and pending logging permits, with est. 7,600 ha at extreme risk of being logged. Satellite imagery shows that an estimated 435 ha has already been lost in just the study areas in the Omineca and Cariboo Regions – 91% of which was cleared after deferrals were announced. West Fraser was also the second biggest threat in our previous study. Figures 3 & 4 show an example of West Fraser logging old growth in the Cariboo in December 2021. The exact shape of the cutblock permit (in grey in the image in Figure 3) is seen in this 'after' photo, illustrating that West Fraser made not effort to avoid prioritised big-treed old growth here, even after the province's Nov. 2, 2021 announcement.

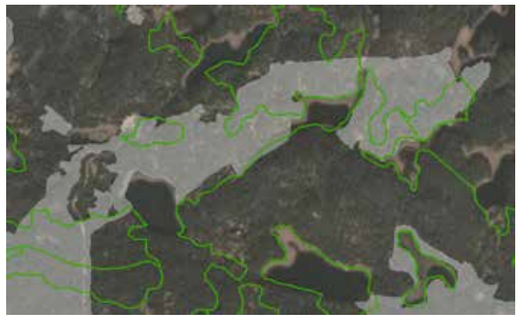


**Figure 3.** Overlap of candidate deferral areas (green outline) and cutblock permits (grey) near Canim Lakes, Cariboo Region, on Oct. 6th, 2021, showing that the old growth forest is intact

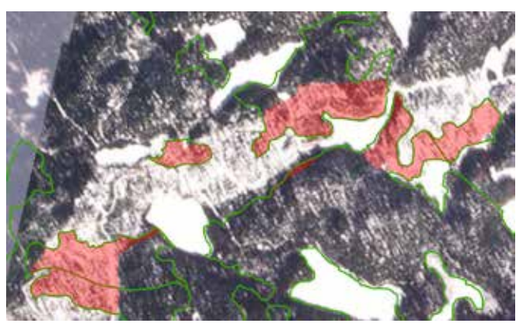
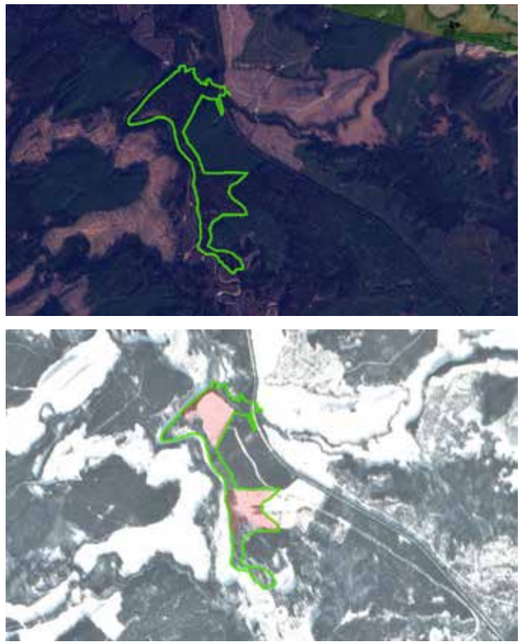


**Figure 4.** Candidate deferral areas (green outline) and deferral areas harvested (red) on March 20th, 2022. The area was logged by West Fraser in December 2021.

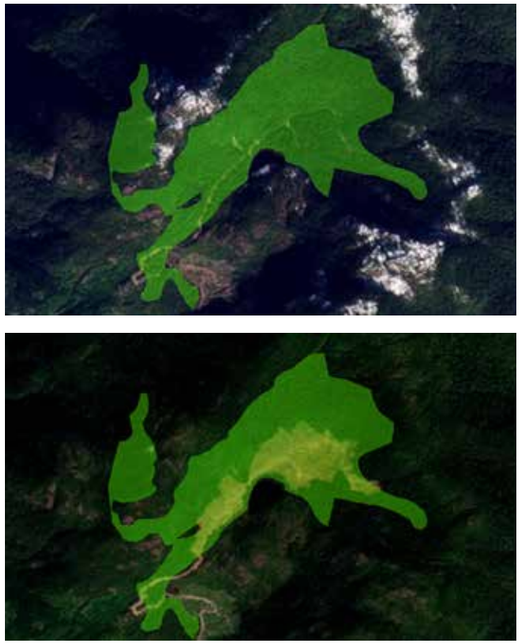
**Sinclar Group** is the third biggest threat to old growth deferrals in active and pending logging permits, with est. 3,960 ha at extreme risk of being logged. Satellite imagery shows that an estimated 196 ha has already been lost in just the Omineca Region study areas – 17% of which was cleared after deferrals were announced. Sinclair Group was the sixth biggest threat in our previous study. Figures 5 and 6 show Lakeland Mills Ltd. (a subsidiary of Sinclar Group) logging prioritised big-treed old growth on the Salmon River outside of Prince George in December 2021. That area was an intact old growth forest when the province announced the deferrals process on Nov. 2, 2021. Four months later, the 63 ha proposed deferral was over 50% gone.



**Figures 5 and 6.** Before and after images of a deferral area on the Salmon River in the Omineca Region, taken on November 1, 2021 and February 1, 2022 respectively. The green outline in both images is the candidate old growth deferral (63 ha) The red highlighted areas in the 'after' image is the deferral area that was logged by Sinclar Group (33 ha lost).

**Interfor Corporation** is the fifth biggest threat to old growth deferrals in active and pending logging permits, with est. 2,120 ha at extreme risk of being logged. Interfor was the fifth biggest threat in the previous study as well. Satellite imagery suggests that Interfor has logged at least 52 ha of old growth deferrals in the West Coast Region, 51% in June 2022 alone. Figures 7 and 8 illustrates Interfor's logging coastal old growth deferrals, where a 26 ha clearcut near the Kaunwich River on Vancouver Island was felled in July 2022 in the middle of a 116 ha deferral of prioritised big-treed old growth.

**Weyerhaeuser** is the sixth biggest threat to old growth deferrals in active and pending logging permits, with est. 1,630 ha at extreme risk of being logged. Weyerhaeuser was the seventh biggest threat in the previous study.



**Figures 7 and 8.** Before and after images of deferral areas above the Kaunwich River on Vancouver Island. The green areas are candidate old growth deferrals (116 ha). The 'before' image is from March 9, 2022 and shows the hanging valley intact, but with a forestry road into the area. The 'after' image from July 30, 2022 shows the 26 ha clearcut made by Interfor.



**Between April and July 2022, satellite images on the northeast coast of Vancouver Island revealed new forestry roads into three candidate deferrals with a combined area of 135 ha, suggesting that Western Forest Products is continuing to log candidate deferrals.**

**Western Forest Products (WFP)** is the seventh biggest threat to old growth deferrals in active and pending logging permits, with est. 1,220 ha at extreme risk of being logged. Satellite imagery shows that an estimated 286 ha has already been lost in just the West Coast Region study area – 32% of which was cleared after deferrals were announced. Between April and July 2022, satellite images on the northeast coast of Vancouver Island revealed new forestry roads into three candidate deferrals with a combined area of 135 ha, suggesting that the company is continuing to log candidate deferrals. WFP was the third biggest threat in our previous study, suggesting that in this risk analysis, they are underrepresented. This may be because they hold almost all of their old growth on the coast, and in TFLs. Figures 9 & 10 show old growth deferrals proposed in an area above the Kaouk River on Vancouver Island. In July 2022 the 104 ha proposed deferral was intact, but by August logging was underway with a 6 ha cut through the deferral.

**Figure 9.** The 'before' image taken on July 17, 2022 shows proposed old growth deferrals intact (outlined in green). The large deferral area is 103 ha.w

**Figure 10.** The 'after image taken on Aug 17, 2022 shows the partial clearing of old growth deferral areas in red (6 ha). The deferral areas are outlined in green.

**Gorman Group** is the 8th biggest threat to old growth deferrals in active and pending logging permits, with est. 790 ha at extreme risk of being logged. This is the same ranking that they had in our previous risk report.

**Dunkley Lumber** is the 9th biggest threat to old growth deferrals in active and pending logging permits, with est. 780 ha at extreme risk of being logged. They were not in the top ten in the last report and they do not have coastal operations. It is possible that while Dunkley Lumber does not have as much old growth in their tenure as other companies, more of the old growth they do have is in cutting permits comparatively.

**Canfor and West Fraser are the biggest threats to B.C. old growth, both in the immediate future and over the longer term.**

**Aspen Planers** is the 10th biggest threat to old growth deferrals in active and pending logging permits, with est. 770 ha at extreme risk of being logged. They were also tenth in the previous report.

Top ten companies from the previous report that are missing from this one include Louisiana- Pacific (430 ha at risk) and Tolko (300 ha at risk), who were eighteenth and twenty-fourth respectively. The differences between the reports illustrate two important points. First, cutting permits are not a complete picture of forest harvesting, and under-represent forest harvesting in tree farm licences (TFLs). This is especially notable on the coast. Second, looking at cutting permits gives us a picture of the immediate and extreme risk to old growth, while modelling old growth harvest across all of a company's tenures gives us a longer-term picture of the risk. The two risk assessments share very similar results, which brings confidence to the conclusion that Canfor and West Fraser are the biggest threats to B.C. old growth, both in the immediate future and over the longer term.

**In total, corporate forest companies (excluding BCTS and First Nations permit holders) have an estimated 40,000 ha of old growth deferrals in active and pending logging permits. This 72% of the total area of old growth deferrals under extreme threat (see Figure 11).**

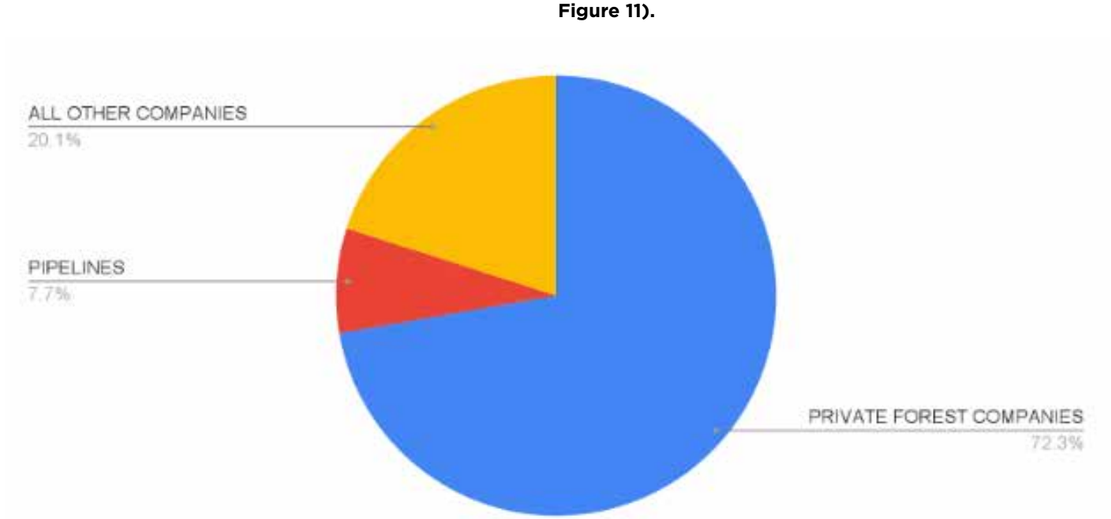



**Figure 11.** Private forest companies make up the majority of the extreme risk to old growth deferrals in cutting permits, while pipelines (also privately owned) make up another 8%. All other permit holders are a 20% minority.



## Pipelines

Throughout the old growth review process, there has been little mention of the old growth destruction caused by oil and gas projects, but the impact of oil and gas on forests is well documented and affects First Nations Rights and Title.[24] Pipeline projects cut long corridors through the forest that, while narrow, span hundreds of kilometres.

**TransCanada Pipelines (TC Energy)** is the fourth biggest threat to old growth deferrals in active and pending logging permits, with est. 3,560 ha at extreme risk of being logged. Satellite imagery suggests that most of the pipeline routes were cleared before November 2021 for the construction of the Prince Rupert Gas Transmission Line and the Coastal Gaslink Project (see Figure 12). The Prince Rupert Gas Transmission Line runs through an est. 2400 ha of candidate deferrals on its 900 km route to the defunct Pacific Northwest LNG Terminal - literally a road to nowhere that has taken a toll on old growth. Coastal Gas Link likewise has gone through an estimated 1160 ha of old growth deferrals on its 670 km route to the coast, **with an estimated 450 ha of proposed deferrals logged or at risk in a 75 km stretch of Wet'suwet'en territory alone.**

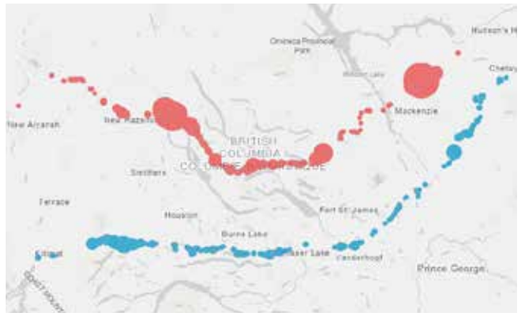



**Figure 12.** Old growth deferrals overlapping with active and pending cutting permits held by TC Energy in Northern B.C. To make the pattern visible at scale, each deferral is identified by a circle that is scaled to the size of the deferral from 1 - 130 ha = 6 - 50 pixels. Coastal Gas Link is the blue route and the Prince Rupert Gas Transmission Line is the red route. Satellite imagery sampled along each route showed that the routes were cleared through all overlapping old growth deferrals.

**An estimated 450 ha of proposed deferrals have been logged or are at risk from Coastal Gas Link in a 75 km stretch of Wet'suwet'en territory alone.**

**Figure 13.** Deferral area (in green outline) on the Morice River in Wet'suwet'en Territory on the Coastal Gas Link pipeline route on Nov. 16, 2020. Satellite imagery from Planet Labs PBC.

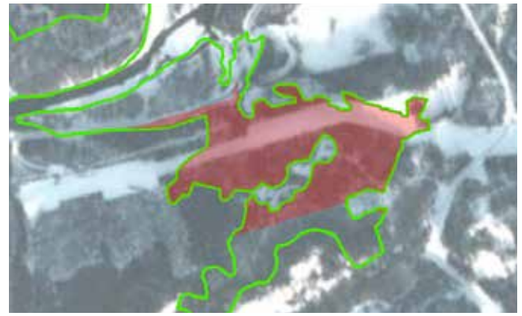


**Figure 14.** The same deferral area (outlined in green) as in Fig. 13 after the Coastal Gas Link pipeline route was logged for construction. The red indicates the area that could be cleared under the harvesting permit. Photo taken on Jan. 20, 2021. Satellite imagery from Planet Labs PBC.

**Enbridge,** owner of the Pacific Trail Pipeline, is also a permit holder, with an est. 270 ha at extreme risk of being logged (see Figure 13). Satellite imagery of the Pacific Trail Pipeline's 470 km route across Northern B.C. shows that the route has been cleared through all of the deferrals that it crosses. Enbridge bought the pipeline from Chevron in January 2022.[25] The pipeline runs through Wet'suwet'en territory, where est. 90 ha of old growth identified for deferral is at risk or has been logged.

**Figure 15.** Old growth deferrals at risk along the Pacific Trail Pipeline as it runs through Wet'suwet'en Territory. 90 ha in total is at risk.

**Trans Mountain Pipeline** is also in the list, with an est. 160 ha at extreme risk of being logged. Satellite imagery suggests that most, if not all of the old growth along the pipeline route was cleared prior to the November 2021 government announcement. Figures 14 and 15 illustrate the logging along the pipeline route as it follows the Coquihalla Highway over the Summit.

**In total, energy companies, including oil and gas companies and pipelines, have an estimated 4,200 ha of old growth deferrals in active and pending cutting permits (8% of total area under extreme risk).**

**Western Forest Products have built forestry roads into old growth deferrals in 24 areas on Northern Vancouver Island between May and June 2022**

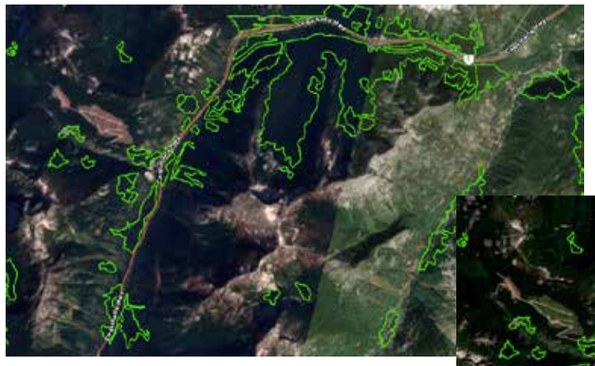


**Figure 16.** Image from Oct 2, 2020 before the TransMountain Pipeline route was logged. Satellite imagery from Planet Labs PBC.

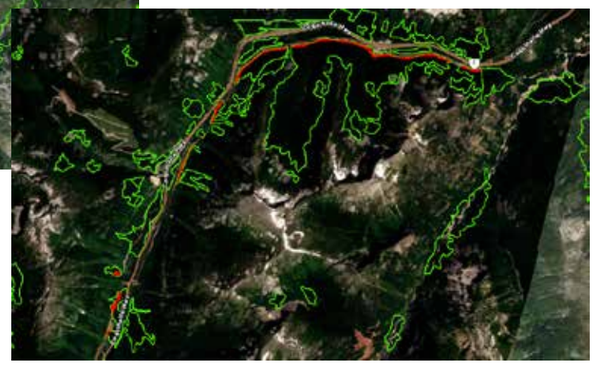


**Figure 17.** Image from August 29, 2021 showing the route of the pipeline through old growth deferrals (in red). Satellite imagery from Planet Labs PBC.



## Estimating old growth deferral loss

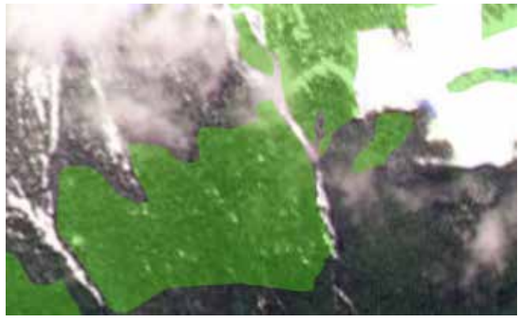
Considering forest companies only, an estimated 48,000 ha of candidate deferrals overlap with active and pending cutting permits, and these are still being cleared despite the ongoing engagement with First Nations.[26] The province admitted in May of this year that 7,200 ha of deferrals were already logged between the Nov. 2, 2021 announcement and April 2022, and this study has found a number of examples of areas that were logged in the months running up to the announcement as well (see Table 3). Given the area covered in the sample study is roughly 60,000 km2 (15,000 km2 x 4 areas), the loss of an estimated 1,600 ha of old growth over this area may indicate that between 15,000 - 20,000 ha of these rare and threatened forests have been logged in the past year province-wide.[27] This is a very broad estimate and the research to explore this is ongoing. However, considering that 55% of the logging in the study occurred after November 2021 and the province has already confirmed 7,200 ha lost between November and April, it is within reason to consider that a total loss would be in the range of 15,000 - 20,000 ha when considering logging that happened before the announcement.

Notably, satellite imagery has shown that candidate deferrals continue to be logged up to the present day, with satellite imagery detecting new forestry roads into old growth throughout the spring and summer. One example is Western Forest Products, who have built forestry roads into old growth deferrals in 24 areas on Northern Vancouver Island between May and June 2022 (see Figures 14 and 15).

In addition, given the skewed inclusion of the best and most productive old growth in the timber harvesting land base (as opposed to steep slopes and mountain top forests that are not as productive or desirable for forestry and are more represented in current old growth protected areas), we could hypothesise that the most grandiose of the big-treed old growth left is concentrated in the hands of the forest industry, with the rest already in parks like Cathedral Grove. However, if proven, the 15,000 - 20,000 ha estimated as already lost may represent a sizable amount of the extremely productive old growth estimated to be left in the province. Exploring this question is also part of ongoing investigations.

| AFTER ANNOUNCEMENT? | AREA (ha) | % |
|---|---|---|
| **Yes** | 970 | 55% |
| **No** | 810 | 45% |
| **Total** | 1,600 | 100% |

**Table 3.** Tally of old growth logging confirmed by satellite data, based on whether or not the logging occurred after the Province announced the deferrals.



**Figures 18 and 19.** Before and after satellite imagery of new roads that Western Forest Products has built into prioritised big-treed old growth deferrals (in green) on Kokummi Mountain on Vancouver Island between March and July 2022. The 'before' image was taken on April 16, 2022 and the 'after' image was taken June 26, 2022.

# CONCLUSIONS

The Old Growth Technical Review Panel (TAP) mapped a total 2.6 million hectares of old growth forest across British Columbia as priority candidates for immediate logging deferrals, but have been consistently clear that deferrals are only meaningful when they actually stop proposed logging.

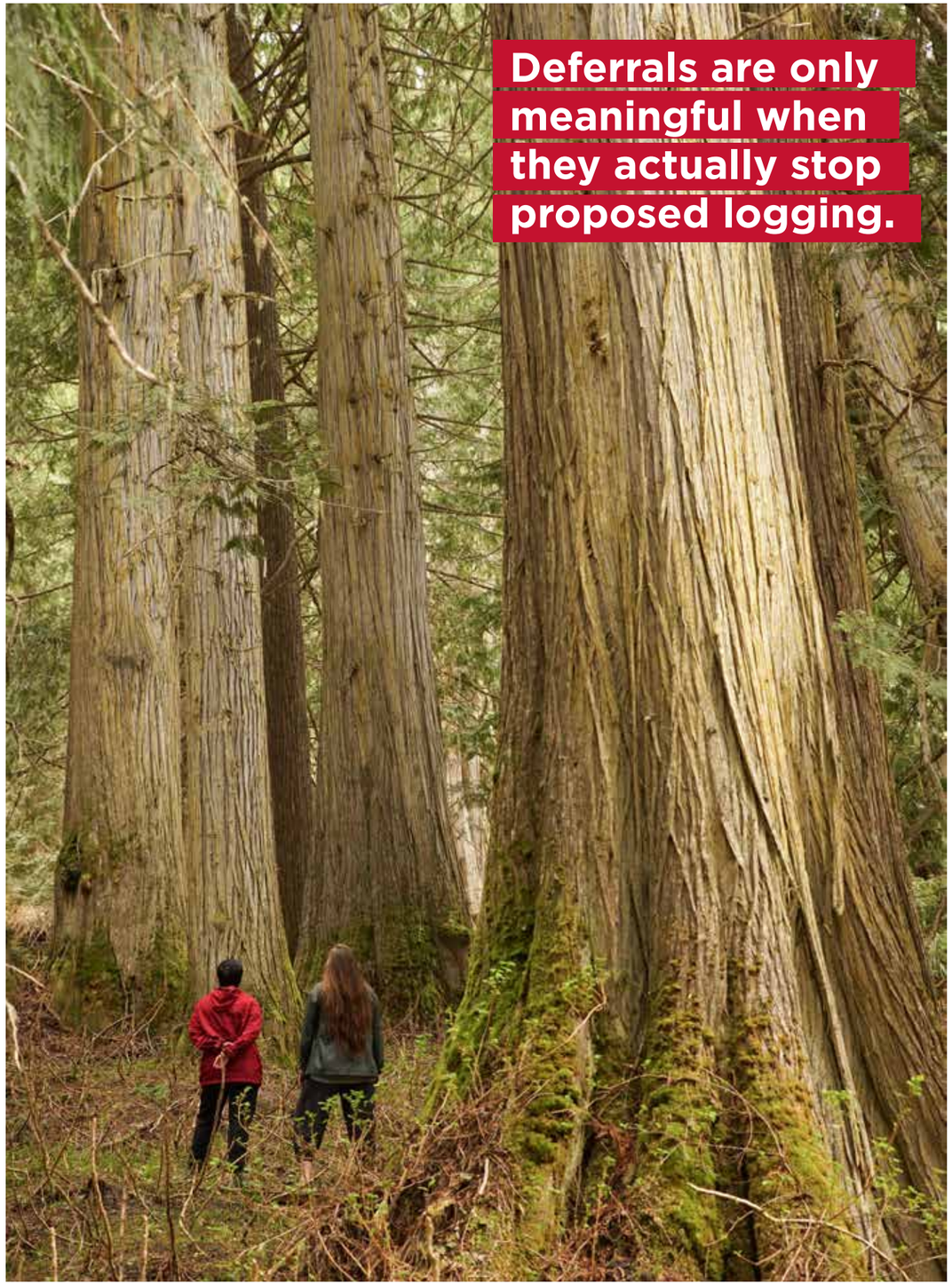
These experts expected about 50,000 hectares of the total 2.6 million to overlap with planned and permitted logging, and the findings of Stand.earth Research Group's analysis support that figure, with over 55,000 hectares at extreme risk of being logged in the short term when other industries such as oil and gas are included.

If we are measuring the success of British Columbia's old growth commitments based on the actual gains on the ground, the overall impact on forests and their ecological health, it is undeniable that we are in a worse position than we were two years ago, when B.C. promised to implement all 14 recommendations from the Old Growth Strategic Review. There is less old growth, especially in the big-treed forests, and more areas where biodiversity is jeopardised by the fragmentation and insufficient retention of old growth forests. Furthermore, the heat, fires, and floods of the past year have starkly illustrated the increased risk to our communities and environments from the climate crisis, and how much we need to have resilient ecosystems to help us weather the increasing frequency and intensity of these disasters.

However, there are immediate steps that the province can take that will have positive impacts for old growth forests and ecological integrity, while also restoring the trust of civil society in this government's promises. The government of British Columbia must:

- **Immediately stop all harvest in remaining old growth deferral areas, including by using the Forest Act to stop ongoing logging and forestry road building;**
- **Urgently provide funding to all First Nations as part of the deferrals process, and also to support Nations in identifying additional forests on their territories that they may choose to set aside from logging;**
- **Pursue additional, timely logging deferrals that set aside mature forests in areas where there is no longer enough old growth to meet minimum thresholds for ecological integrity (recruitment);**
- **Conduct new analysis and mapping in areas where deferrals have been logged or otherwise removed from candidacy, with the purpose of identifying additional areas for immediate deferrals in order to meet ecological thresholds and fulfil B.C.'s old growth commitments; and**
- **End the disinformation campaign aimed at misleading British Columbia residents about the state of old growth forests and renew commitments to improve monitoring and transparency, with clear timelines that align with the Old Growth Strategic Review.**

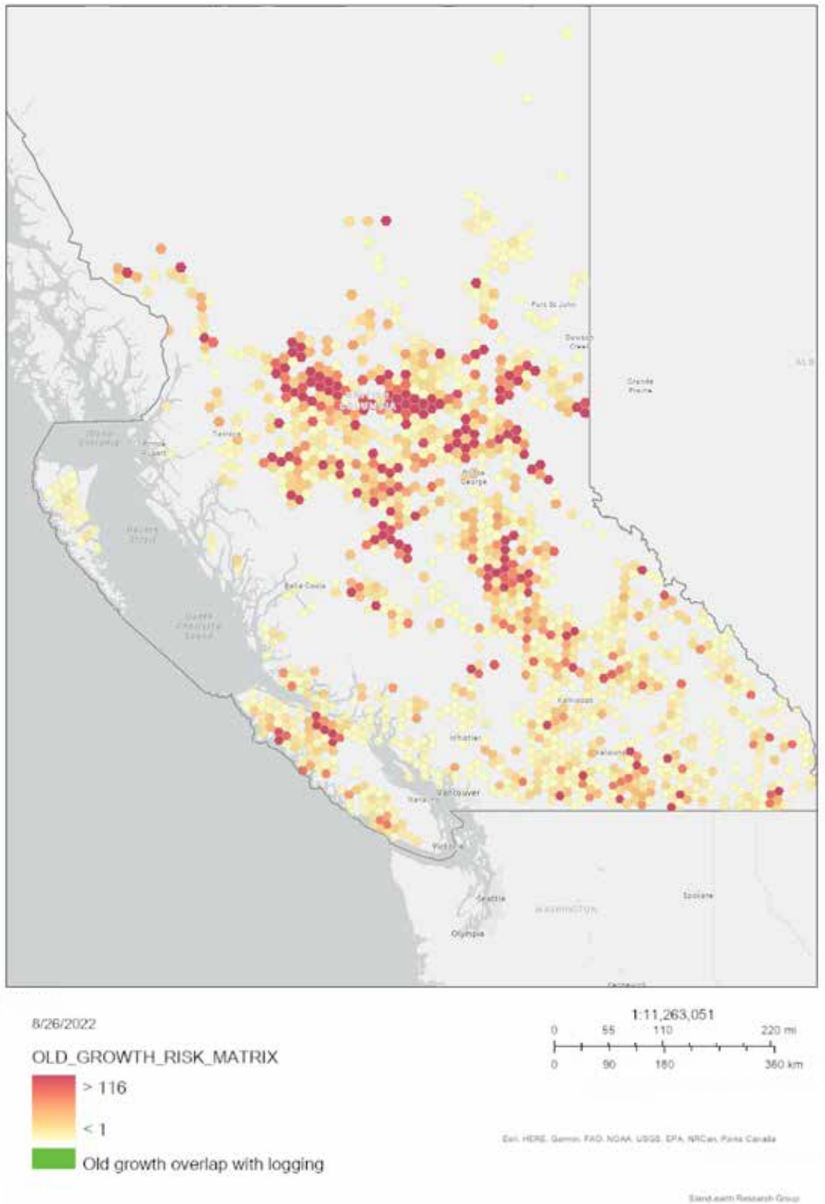
While there has been a lot of **tall talk,** it is clear from this analysis that the province's efforts are falling short of meaningful change. If provincial decision-makers are serious about their old growth promises, then they have to act now, while the majority of these forests are still standing.



# APPENDIX 1-

## PROVINCIAL MAP OF OLD GROWTH AT EXTREME RISK

This map shows the pattern of risk across B.C. for proposed old growth deferrals that overlap with active and pending logging permits. The heat map shows increasing risk in red, with milder risk in yellow. To view the map interactively and see the underlying forest areas at risk close up, please visit: https://publications.stand.earth/old-growth.



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10. Note that in 'Priority Deferrals: An Ecological Approach' the Technical Advisory Panel (TAP) adjusted their previous estimate of 13.2 million ha down to 11.1 million ha to account for new ecological inventory and losses from wildfire, insects, and logging. Old Growth Technical Advisory Panel. Background and Technical Appendices. October 2021. **https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/stewardship/old-growth-forests/og_tap_background_and_technical_appendices.pdf**
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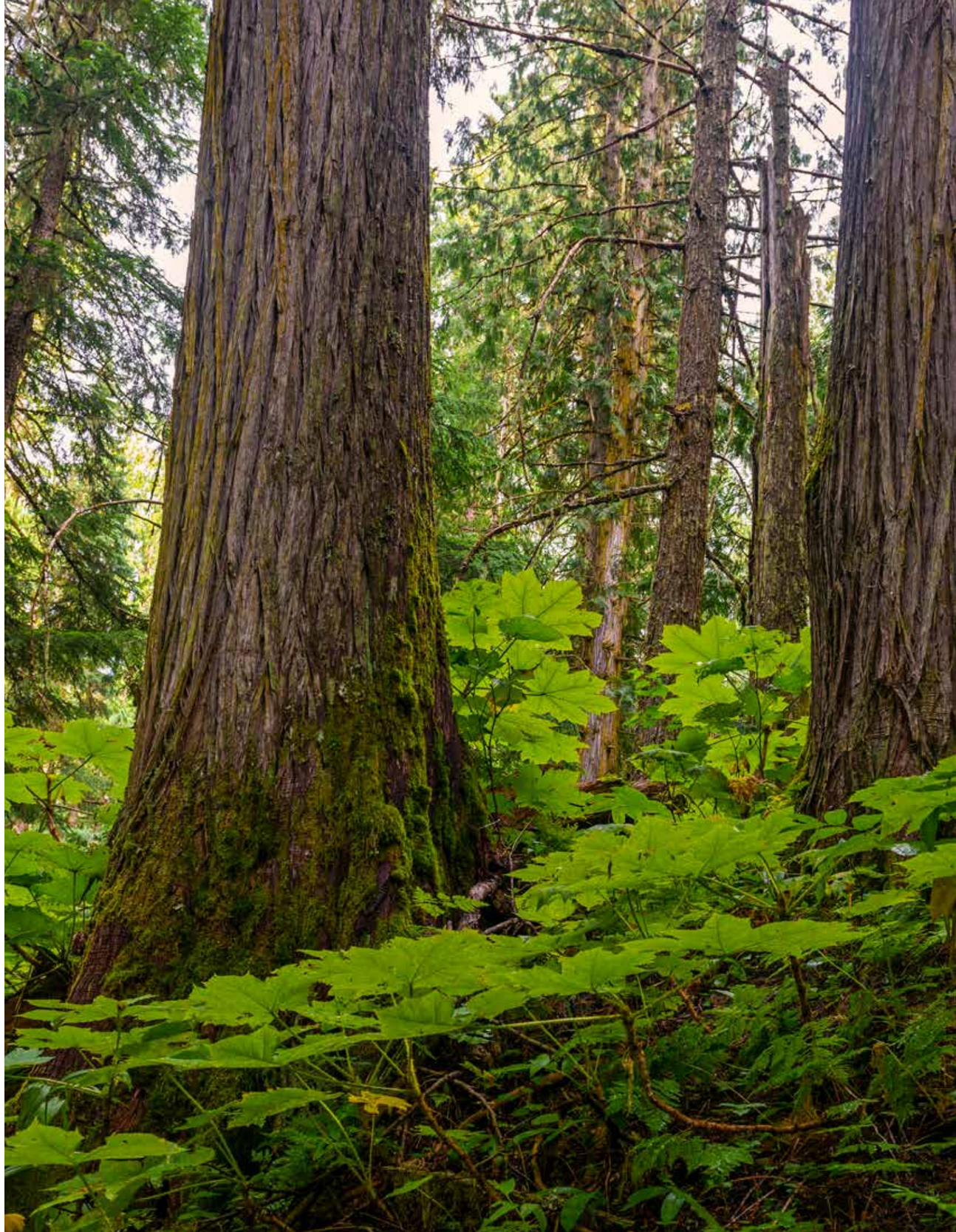
**27.** Note: Calculated based on 13.9 km2/ 60,000 km$^2$ and extrapolated to the province (944,735 km$^2$)



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