



FRIENDS OF ECOLOGICAL RESERVES
BOX 8477, VICTORIA, B.C. V8W 3S1
CANADA

Submission to the Old Growth Strategic Review

January 31, 2020

Prepared for the [Old Growth Strategic Review](#)
on Behalf of the Friends of Ecological Reserves
by FER Board Members Mike Fenger and Jenny Feick, Ph.D.

The Friends of Ecological Reserves (FER) (<http://ecoreserves.bc.ca/>) is a watch dog Environmental Non-government Organization (ENGO) that focuses on British Columbia's ecological reserves. We are grateful for this review and hope the Old Growth Strategic Review panel and the final report reflect our inputs and benefit from what FER has learned in our quest to improve old growth forest protection.

This submission provides some background on ecological reserves (ERs) in B.C. and makes 14 recommendations to improve management of B.C.'s remaining old growth forests. Each of these recommendations follows an assessment of the problem with the current approach and the rationale for the recommendation.

PART 1. Background: Ecological Reserves as a Tool For Old Growth Conservation

As identified in the background material provided online for this strategic review, Ecological (ERs) are a critically important conservation tool (see <https://engage.gov.bc.ca/oldgrowth/old-growth-management-tools/>). Many of the current 148 ERs protect high value terrestrial ecosystems, including old growth forests. ERs serve as natural area research sites from which to learn how best to sustain the biological diversity of "supernatural" British Columbia and are thus an important resource for research institutions, government agencies, and First Nations.

The [Ecological Reserve Act](#) provides for the establishment and administration of ecological reserves. The purpose of this Act is to reserve Crown land for ecological purposes, including the following areas:

- (a) areas suitable for scientific research and educational purposes associated with studies in productivity and other aspects of the natural environment;
- (b) areas that are representative examples of natural ecosystems in British Columbia;
- (c) areas that serve as examples of ecosystems that have been modified by human beings and offer an opportunity to study the recovery of the natural ecosystem from modification;
- (d) areas where rare or endangered native plants and animals in their natural habitat may be preserved; and
- (e) areas that contain unique and rare examples of botanical, zoological or geological phenomena.



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Ecological reserves are established by inclusion to the schedules of the [Protected Areas of British Columbia Act](#) or by order in council under the Act. The [Ecological Reserve Regulations](#) identifies conduct and activities that are not appropriate in an ecological reserve.

PART 2. Augmenting the ER System.

Problem: No ERs have been added to the system since 2009 thus this potential old growth conservation tool is not being effectively utilized.

The present ER system of 148 reserves currently comprises 0.008% of the BC Parks Protected Area System. Approximately 70% of the 148 ERs are forested. Terrestrial ERs currently occupy 112, 543 ha of Crown land in B.C. The last ER to be set aside was Det San ER near Smithers, which was designated in 2009 to protect rare old-growth juniper.

FER has periodically been contacted by local conservation organizations seeking help with their communications with the BC government. These groups know of local areas with high conservation values and would like them assessed and designated as ERs. These candidate areas are at risk because they are outside of the current protected area system and outside of any governmental designations such as Old Growth Management Areas (OGMAs) and Ungulate Winter Ranges (UWRs) that afford a level of protection from forest harvesting or other resource extraction disturbances. Some areas were and still are under imminent threat and destruction of their conservation values as they are included in current harvesting plans. These local groups expressed frustration with their attempts to understand the process for designating areas with significant and often newly discovered biological or geological features as ERs.

The Board of FER saw a province-wide pattern developing and sought from the BC government a systematic criteria-based provincial approach to assess the merits of various candidates for conservation protection. In 2014, FER met with government staff in the Ministries of Forests, Lands, Natural Resource Operations (FLNRO) and BC Parks Branch staff in Ministry of Environment and Climate Change (MECC). The meetings were to help FER understand how at the provincial level government staff could suggest how to help local conservation efforts and how to evaluate candidate areas and decide if they merited designation as ERs.

FER provided to BC government staff a short list of seven examples of the types of areas that were recommended to FER by local community groups as potential ER candidate areas. Three of the candidate areas were old growth forest ecosystems and are described in Table 1. As this is a Strategic Old Growth Review, only old growth forest examples are shown in this report. The other four candidate areas appear in the Spring Summer 2016 FER Newsletter (see <http://ecoreserves.bc.ca/wp-content/uploads/spring-summer-2017-colour-final.pdf>).



Table 1. Old Growth Candidate Ecological Reserves

ER Candidate name	Rationale for conservation	Approximate size	Additional notes
<p>'Roberts Creek Ancient Forest Headwaters' Sunshine Coast</p> <p>Coastal Western Hemlock Zone (CWH) very wet maritime (vm) variant</p>	<p>Unique associations of yellow-cedar (<i>Chamaecyparis nootkatensis</i>, Yc) and western yew (<i>Taxus brevifolia</i>, Tw). One 15 Ha plot count had over 300 ancient yews. A high density of culturally-modified trees (CMTs), absence of fire disturbances and invasive species and the educational and recreational value of an ancient forest stand which is accessible from Sechelt. Forest classified as Ancient i.e it contain trees older than 500 years and on some sites older than 1000 years.</p>	<p>Candidate is a 30 ha area between two existing Wildlife Habitat Areas (WHAs) designated for Marbled Murrelet habitat. If WHAs included with ER candidate the area is approx.. 100ha</p>	<p>FLNRO 2013 Ecologist Report¹.</p> <p>Coast Archaeology 2012. Culturally Modified Tree (CMT) Report.²</p>
<p>'Dakota Bowl Bear Sanctuary' Sunshine Coast (upper elevation stand within the Coastal Western Hemlock Zone vm) variant</p>	<p>Subalpine mix forest stand of Yellow-cedar <i>Chamaecyparis nootkatensis</i>, Silver Fir (<i>Abies Amabilis</i>), and Mountain hemlock (<i>Tsuga mertensiana</i>, Hm) with culturally modified trees, high concentration of black bear dens. The 2nd, 3rd and 4th largest diameter Mh found in this zone, and recorded in BC Big Tree Registry (UBC/FLNRO)</p>	<p>Candidate is 80 ha</p>	<p>Tree age Report 2014³</p> <p>BC Environment Bear specialist 2013. Bear Den site visit⁴.</p>
<p>'Clack Creek Forest Gallery' Sunshine Coast (low elevation CWH dry maritime (dm) variant 01(mesic site on Elphinstone slope)</p>	<p>Largest known patch of the endangered, native plant Snow Bramble (<i>Rubus Nivalis</i>) a blue listed plant species, along with 2 other robust patches. Fire scarred Douglas-fir Veterans, emerging old-growth stand of Western Hemlock. Candidate between two proposed WHA to protect the blue-listed Coastal Tailed and Red-Legged Frog. Improves forest connectivity between adjacent streams.</p>	<p>Candidate is 18ha. If WHAs included with ER candidate approx. 30ha</p>	<p>Strathcona Forestry Consulting Aug 2014. Snow Bramble (<i>Rubus Nivalis</i>) Locations. A site visit to Mt. Elphinstone⁵</p>

¹ Andy MacKinnon, Sari Saunders, and Heather Klassen, September 11, 2013. Report on DK045 RCO Research Ecologists. Submitted to Norm Kempe, BCTS.

² Coast Interior Archeology 2012. Culturally Modified Trees (CMT) Preliminary Field Report. Submitted to Elphinstone Logging Focus (ELF).

³ Snowline Ecological Research 2014. Tree age Report. Submitted to Elphinstone Logging Focus.

⁴ Provincial government bear biologist. 2013. Dakota Bowl Site visit. Report under development in 2013.

⁵ Strathcona Forestry Consulting 2014. Snow Bramble (*Rubus Nivalis*) Locations.



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In 2017, FER met with George Heyman, Minister of Environment and Climate Change Strategy to state the benefits to government of instituting a formal process to assess areas with known high conservation values. The outcome of this October 31, 2017 meeting appears in the Autumn/Winter 2017/18 FER newsletter <http://ecoreserves.bc.ca/wp-content/uploads/autumn-winter-2017-18-colour-final.pdf>. Follow-up meetings were held again with staff.

No new ERs have been added to the BC protected areas system since 2009, including the three candidate areas listed in Table 1 that contain ecologically valuable old growth stands.

The most recent FER newsletter contains an update on one of these candidate areas, the Clack Creek valley. The article reveals how hard the local citizens on the Sunshine Coast have pursued conservation in their backyard and yet how the old growth stands made known to government in 2014 and 2017, remain in the Timber Harvest Land Base. Clack Creek valley still lacks protection through Old Growth Management Area designation and has been offered for harvesting by BC Timber Sales. <http://ecoreserves.bc.ca/wp-content/uploads/autumn-winter-2019-20-colour-final.pdf>.

The Sunshine Coast is one of the few areas in B.C. that did not get the opportunity to use the Land and Resource Management process to increase the protected area system. So, the amount of protection there remains the lowest at 1% compared to the roughly 15% of provincial Crown lands designated as protected areas in other regions of the province.

RECOMMENDATION 1. Complete in the 2020/2021 fiscal year, a decision tree, a formal process with set timeline for decisions on conservation values and a legal protection for forest stands that have high conservation values. This will benefit regional government staff, ENGOs, First Nations and industry so that it is known where and under what conditions conservation values will be given precedence over forest harvesting. Communicate the process to interested stakeholders and First Nations and clearly outline the steps in the process on government websites.

RECOMMENDATION 2. During 2020/2021, while the decision making process is being developed, defer from harvesting or further development any areas currently identified by FER and other partner organizations. A deferral of development for these candidate areas of old growth is absolutely necessary to de-escalate local conflicts. A deferral will signal both to government staff, First Nations, and the public that the BC government is serious about old growth conservation and will not continue to log contentious stands, thus precluding the opportunity for conservation.

RECOMMENDATION 3. Seek input to the development of the decision process on candidate ERs from non-government conservation biologists and First Nations knowledge keepers as well as government staff and ensure the participants conduct themselves professionally and report in an open and transparent manner.



PART 3. Legal and Policy Issues

Problem: B.C.'s current legal and policy constraints give formal precedence to timber's value over all other forest values.

Legal Constraints

The *Government Actions Regulation* (GAR) under the *Forest and Range Practices Act* (FRPA) provides a significant deterrent against old growth forest conservation values on B.C.'s public lands as timber values have been given priority in legislation. Timber is one of 9 recognized values but it has been given more weight legally and thus trumps all other values. Range is a value that is not dependent on old growth forest.

The other nine non-timber values are highly old-growth dependent yet subservient to timber in legislation. All non-timber values are not as easily assigned a monetary value through a market evaluation, something that can be done most easily for timber. It is standard practice currently to place zero monetary value on non-timber resource values unless they have been identified in a higher level plan, have previously been designated for protection, and they are outside the Timber Harvest Land Base (THLB).

The *Forest Practices Code Act* non-timber values sustained by maintaining old growth forest are:

1. Biodiversity
2. Cultural Heritage
3. Fish/Riparian
4. Recreation
5. Visual Quality
6. Water Quality
7. Resource Features
8. Soils
9. Wildlife

Table 2 below contains excerpts from the Government Action Regulation (GAR), Section 2 (see: http://www.bclaws.ca/civix/document/id/loo66/loo66/582_2004#section2)



Table 2. Excerpts from the Government Action Regulation (GAR), Section 2.

(Underlining added to emphasize legal constraints for old growth management in B.C.)

“Limitation on actions

2 (1) In addition to the criteria and procedures to be followed by a minister in making an order under any of sections 5 to 15 in relation to an area specified in the order, the minister must be satisfied that

- (a) the order is consistent with established objectives,
- (b) the order would not unduly reduce the supply of timber from British Columbia's forests, and
- (c) the benefits to the public derived from the order would outweigh any
 - (i) material adverse impact of the order on the delivered wood costs of a holder of an agreement under the *Forest Act* that would be affected by the order, and
 - (ii) undue constraint on the ability of a holder of an agreement under the *Forest Act* or the *Range Act* that would be affected by the order to exercise the holder's rights under the agreement.”

RECOMMENDATION 4. Amend the Government Action Regulation by removing section 2 Limitation on Actions that places priority on timber at the expense of conservation of nine other old growth forest dependent values.

Timber Impact Policy Constraints on Old Growth

The current *Forest and Range Practices Act* has been capped so that all conservation measures collectively would not create a reduction greater than 6% based on the provincial pre-code Allowable Annual Cut (AAC) levels of the 1990s. The allowed 6% had to encompass old forest riparian retention zones, old growth management areas, wildlife tree retention, rate of harvest limitation in watersheds such as Community Watersheds, ungulate winter ranges, etc. The question of whether this 6% is sufficient to sustain non-timber values has not been tested nor reported on. The Forest Range Evaluation Program (FREP) (<https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/integrated-resource-monitoring/forest-range-evaluation-program>) was established to test the adequacy of a 6% constraint, i.e., whether it was being implemented and whether it was effective. FREP has done some excellent monitoring of stand level measures and made advancements in measuring effectiveness of some of the conservation provisions for some values but the overall question of whether a 6% AAC can adequately conserve forest values other than timber has yet to be addressed. After 20+ years, an evaluation of the relative success or failure of this Forest Practices Code constraint is overdue.



Limitations were placed on some of the biodiversity measures envisaged in the 1990s such as landscape unit planning and zoning of Forest Ecosystem Networks (FENs) as it was anticipated they would exceed the 6% cap. Provincial agencies implemented the *Landscape Unit Planning Guide* through the landscape unit planning process, which assigned a biodiversity emphasis option (high, medium or low) in order to limit timber supply impacts. The effectiveness of these emphasis options has also not been tested. Achieving the OGMA retention also relied extensively on older forest stands outside of the Timber Harvest Land Base and which carry far less of the biological capital.

These conservation provisions were “turned off” and not implemented due to the fear of exceeding the 6 % AAC impact limitations. FENs were intended to bridge species across landscapes so they had higher probabilities of finding suitable habitat over time across landscape. They are needed even more urgently today as climate change effects are occurring at faster rate than anticipated. This landscape level retention was best suited for older forested ecosystems with rare stand-initiating events and infrequent stand-initiating events such as on the coast and in the interior wet belts. This approach appears to institutionalize a bias, favouring timber at the expense of the non-timber values that would sustain old growth forests.

RECOMMENDATION 5. Remove the 1990s 6% AAC limit applied to the implementation of the *Forest Practices Code* and inform implementation of old growth retention using criteria that test the current condition of older forests and the vulnerability and sustainability of non-timber values within the context of landscape unit plans.

RECOMMENDATION 6. Review the landscape unit emphasis designations and change retention levels through the use of conservation science to reset OGMA retention into the Timber Harvest Land Base where a conservation assessment deems non-timber values warrant a rebalance towards conservation.

Biased Timber Supply Review Process

There is bias in the Timber Supply Review Process as it does not require reporting on the sustainability of all nine non-timber values. The Timber Supply Review process uses data package and modelling assumptions to periodically forecast AAC and set harvest levels. The AAC determination is supported by a rationale clarifying how and why the rate of harvest was set. This is a sound forest harvest management process. However, to sustain healthy, old growth forest ecosystems, the process must be amended to also require reporting on the vulnerability/sustainability of non-timber values and not treat non timber values simply as timber constraints.

Table 3 below contains Section 8 of the *Forest Act* and the role of the Chief Forester in setting Allowable Annual Cut. (See: http://www.bclaws.ca/civix/document/id/complete/statreg/96157_02)



Table 3: Section 8 of the *Forest Act* and the Role of the Chief Forester in Setting AAC
(Underlining added for emphasis)

- (8) In determining an allowable annual cut under subsection (1) the forester, despite anything to the contrary in an agreement listed in section 12, must consider
- (a) the rate of timber production that may be sustained on the area, taking into account
 - (i) the composition of the forest and its expected rate of growth on the area,
 - (ii) the expected time that it will take the forest to become re-established on the area following denudation,
 - (iii) silviculture treatments to be applied to the area,
 - (iv) the standard of timber utilization and the allowance for decay, waste and breakage expected to be applied with respect to timber harvesting on the area,
 - (v) the constraints on the amount of timber produced from the area that reasonably can be expected by use of the area for purposes other than timber production, and
 - (vi) any other information that, in the chief forester's opinion, relates to the capability of the area to produce timber,
 - (b) the short and long term implications to British Columbia of alternative rates of timber harvesting from the area,
 - (c) [Repealed 2003-31-2.]
 - (d) the economic and social objectives of the government, as expressed by the minister, for the area, for the general region and for British Columbia, and
 - (e) abnormal infestations in and devastations of, and major salvage programs planned for, timber on the area.

It is both possible and within scope of Section 8 for the Chief Forester, while determining the AAC through the data package used for AAC modelling, to also provide modelling and forecasting to report on the sustainability/vulnerability of non-timber values. Section (b) can reasonably be interpreted that the Chief Forester needs to report on the implications of harvest rates on all forest values. The absence of reporting and forecasting on the state of non-timber values and absence of any forecasts except for timber is another institutionalized timber bias inherent in the current Timber Supply Review process. There is within the legislation opportunity for the Chief Forester to include forecasts on the sustainability of the values that are said to constrain timber supply and to seek to understand whether to sustain these values or whether timber should be additionally constrained.



RECOMMENDATION 7. Provide Ministerial direction to BC government staff and contractors or licensees completing Timber Supply Reviews that these periodic reviews require the use of timber data to also complete a credible assessment of the state of all forest values and their vulnerability as a result of various harvest level forecasts, as is consistent with the intent of the *Forest Act*, Section 8b.

PART 3. Climate Change Effects on Old Growth Forests

Problem: the continued accelerating loss of older forest species due to climate change.

In 2008, the Canadian Council of Forest Ministers published a report entitled *Adapting Sustainable Forest Management to Climate Change Preparing for the future.*¹ This Climate Change Task Force was co-chaired by two senior BC government foresters, Jim Snetsinger and Dave Peterson. Among its conclusions were: (underlined emphasis added)

“Any forest that is to be considered as being managed sustainably aims to meet these types of criteria. This is far from the largely timber-focused management approach of the past.” Six criteria were listed: 1) *Biodiversity*, 2) *Ecosystem condition and productivity*, 3) *Soil and water*, 4) *Role in global ecological cycles*, 5) *Economic and social benefits*, and 6) *Society’s responsibility*. The report endorsed the need for vulnerability assessments as part of sustainable forestry. This report concluded that *“Although climate has some positive aspects, such as increased tree growth in some parts of Canada, these benefits are outweighed by the potential negative effects.”* These negative effects include increased insect outbreaks, fire disturbances, drought, changes in snow pack and runoff, and diverse impacts on fish and water supplies and biological diversity etc.

In the 12 years since this advice was provided some vulnerability assessments have been completed. However, these are not yet required to inform government resource extraction decisions of policy. Recommendation 7 addresses how to institutionalize non-timber value assessment and forecast their vulnerabilities together with AAC determinations.

In 2012, BC Parks provided some insights on the role of protected areas in adaptive management in the face of climate change in an article by Stevens and Cardin entitled “Bringing Adaptation to Ground in British Columbia” in the *Journal of Ecosystem Management*, Volume 16. No 1. They adopted the 5 Rs approach developed by the US Forest Service to outline and prompt government policy, which apply to conservation of old growth values.

1. Increase **Resistance**: “Maintain Status Quo or Desired State”: Take action that protects/defends the highest priority ecological values from any impacts or alterations due to climate change.
2. Manage for **Resilience**: “Health Care”: Short-term actions address known change, and long-term plans address anticipated changes. The scale of action varies based on the current health of system or population.



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3. Enable **Response**: “Change Management”: Implement strategies to proactively assist the response of vulnerable, high-value resources to anticipated climate change (e.g., increase the widths and extent of riparian buffers, adapt tree species stocking standards, include assisted migration of genetically/ecologically appropriate trees).
4. **Realign**: “The Auto-Mechanic Approach”: Use restoration, where it is consistent with current and future changes, on systems that are already outside their range of historic natural variability.
5. Establish **Refugia**: “The Registered Retirement Savings Plan (RRSP) Approach”: Protect sites where species persist during periods of changing regional climates (e.g., isolated areas of favourable microclimate).

The Board of FER endorses the 5 R approach and the need to protect/defend the highest priority ecological values, proactively reduce the amount of harvesting and roads in areas where there will be increased drought, use of natural historic variability to restore ecosystems drastically outside their natural range of variability, and the need to seriously protect refugia in areas that have high species diversity, and/or rare and endangered species. Some of these known refugia are old growth forests that contain old-growth obligate species including mountain caribou, black-tailed deer on northern Vancouver Island, Roosevelt elk, pine marten, fisher, wolverine, spotted owl, Northern goshawk, and marbled murrelet. The recommendations in this submission are consistent with the direction and advice provided by Stevens and Cadrin 2012.

In a report in 2010 entitled *A New Climate for Conservation: Nature, Carbon and Climate Change in British Columbia*, Dr. J. Pojar, a former Ministry of Forest’s ecologist, recommended strategically expanding existing core protected areas into a climate conservation network. This would mean increasing the 15% of Crown land currently in protected areas by another 20% to conserve a total of 35% of B.C.’s Crown land. These core conservation areas should be connected to assist nature adapt to climate change and to maximize both biodiversity and carbon sequestration opportunities.

The Board of FER concurs that given the effects of climate change on species and ecosystems, the current 15% of Crown land in protected areas will be insufficient to sustain the current biodiversity in B.C. and that a serious expansion of protected areas is needed if what exists in B.C. now is to persist 10, 20 and 50 years in the future. The Board of FER advocates for the establishment of additional ERs as refugia and their use as benchmarks in studies on how to minimize biological impacts and losses in the coming decades.

In a symposium held in BC in 1993 entitled “***Our Living Legacy***”, Thomas Ledigⁱⁱ noted the widespread loss of forest biodiversity in the US and what he called “*secret extinctions*” through the losses of genetic diversity in forest ecosystems. The extinction of genetic resources will continue to be secret also in B.C. as there is no baseline information on what is in forest ecosystems today. The need to capture baseline information on the diverse ecosystems in B.C. is why provincial ER legislation was approved and the current ER system initiated. It is also why FER advocates for increasing both the area and number of ERs and fostering more research efforts in ERs.

Currently there are 14,063,250 ha of protected area in B.C. of which 112,543 ha or 0.008% are designated as Ecological Reserves. Approximately 70% of the 148 ERs are forested. Existing



terrestrial ERs are managed by BC Parks as part of the parks and protected area system. Since ERs serve as natural area benchmarks they make ideal monitoring and research sites to learn how to adapt to an uncertain future. The size and ecosystem representation in the current 148 ERs is inadequate in the face of unprecedented biological uncertainty wrought by climate change and the current pace of resource extraction.

If British Columbians are to understand how to manage old growth conservation, a target of 1% of forests needs to be designated as ERs. Since there are 57,000,000 ha of forest land, this would mean 570,000 ha of forested ecological reserves or an eight-fold increase in forested ERs above what is protected today. Some representative ERs exist within current protected areas. There are also other candidate ERs, identified in Section 5. ERs could provide a modest insurance policy for British Columbians against old growth biodiversity losses. These natural research areas are exactly where to learn how minimize future biological losses.

RECOMMENDATION 8. Augment the ER system with exemplary examples of the variety of old growth forests that exist in B.C. Set a goal that 1% of the 57 million ha of Crown forest be designated as ERs. This is an 800% increase in the forested areas now in ERs. An expanded ER system is a provincial insurance policy limiting irreparable biological losses, and fostering the knowledge acquisition and adaptation needed due to accelerated climate change effects on all forests.

RECOMMENDATION 9. The BC government must invest in baseline monitoring in all ERs and make periodic re-measurements to understand ecosystem changes, and then develop adaptation strategies based on the monitoring results.

PART 4. Old Growth Management Areas (OGMAs)

Problem: Incomplete Implementation of Old Growth Management Areas (OGMAs).

In a 2013 report by the University of Victoria Law Department,ⁱⁱⁱ it was noted that the “Protection of Old Growth” was a long-term government commitment that had stalled during implementation. At that time, there were 34,844 non-legal OGMAs that encompassed 1,396,707 ha, and 15,512 legal OGMAs that encompassed 1,386,200 ha, i.e. less than half the OGMAs that were to be established to protect biological diversity have been established.

In 2012, the Forest Practices Board noted in a special investigations report *Conserving Old Growth Forests in BC*. Implementation of Old Growth Retention objectives under FRPA,^{iv} there was an uneven implementation of OGMAs and that over a decade had passed and government orders were in some areas still pending. The report concluded that landscape unit plans and government needed to ensure that old forest attributes were available on the landbase.



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RECOMMENDATION 10. Implement the recommendations of the Forest Practices Board 2012 report and develop an OGMA inventory and tracking system and enter all current OGMAs into this system and their condition. Maintain the OGMA registry and provide periodic summaries for Landscape Units.

There is concern about the state of forest inventory. A robust, well maintained forest inventory system is critical for identifying spatial OGMAs. In fact, a current forest inventory provides vital information for all forest decisions such as setting AAC, as well as preparing vulnerability assessments and managing older forests. The 2018 report to government by the British Columbia Forest Inventory Review Panel in 2018^v noted that the funds in B.C. devoted to forest inventory are the lowest of all the Canadian provinces and that the Forest Analysis and Inventory Branch needs to be adequately funded to enable the BC government to move away from crisis management in responding to user needs.

RECOMMENDATION 11. Require improved province-wide forest inventory consistent with the recommendations of the British Columbia Forest Inventory Review Panel. Expedite the updating of forest cover to support forest management decisions including those linked to old growth management and conservation so that decisions made about all forest values are reliably informed.

A link on the Status of Implementation of Old Growth Conservation is the [Old Growth Management Areas-Legal-Current](#) database which was reviewed to see if legally established OGMAs had been completed in the seven to eight years since the FPB 2012 SIR and the 2013 University of Victoria assessments were published. This government website shows large areas of B.C. with no legally established OGMAs. These include areas such as the East and West Kootenay's, Merritt, Prince George, Coastal Mainland, Haida Gwaii, large portions of Western Vancouver Island, Okanagan Valley, Salmon Arm, Fort St John, and the forests north of Bowser Lake.

RECOMMENDATION 12. Require that government report which regions and areas have not completed government orders to establish spatial OGMAs. Seek a commitment from government that there will be completion province-wide of all spatial OGMAs within the 2020/2021 fiscal year and that these be made known on the government website [Old Growth Management Areas-Legal-Current](#).

RECOMMENDATION 13. Require that government complete an assessment in 2020 of non-spatial OGMA orders and provide direction to staff that OGMAs be spatially identified and made legal and shown on the website [Old Growth Management Areas-Legal-Current](#).



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PART 5. Standard Operating Procedures and the Professional Reliance Approach

Problem: Standard Operating Procedures and the Professional Reliance Approach enable logging of old growth even when designated as OGMAs.

The most recent article FER was able to review on old growth management in B.C. was done by US journalist David Moskiwitz in 2020. His article entitled *(Un) Clearcut; In British Columbia, a complex forest management system leaves old growth vulnerable* involved some field work and review of areas in West Kootenays.

The article gives many examples leading a reader to conclude that FLNRO staff are not adequately managing OGMAs in the Kootenays. It is being left to the foresters employed by the forest industry with little or no government oversight. Boundaries of OGMAs are moved so that the best of the trees currently within an OGMA end up in a cut block and poor quality upslope old growth stands are substituted to meet the OGMA retention area requirements. None of the OGMAs in the Kootenays are legally established according to the government website [Old Growth Management Areas-Legal-Current](#). Harvesting of old growth continues despite retention thresholds being exceeded. This excessive continued harvest of old growth was proven by assessments done by environmental organizations (see Table 4). This over harvest when checked by government staff found that the ENGOs had understated the true magnitude of disregard for old growth conservation provisions.

The statements from this report that FER would like to highlight for the Old Growth Strategic Review panel appear in Table 4 below. FER encourages the panel to read in its entirety this most recent article before completing their report to government..



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Table 4: Excerpts from David Moskiwitz's 2020 Article entitled "(Un) Clearcut; In British Columbia, a complex forest management system leaves old growth vulnerable."^{vi}

In 2018, the [West Kootenay EcoSociety](#) (WKES), a small environmental group in the Kootenay Mountains of southeastern BC, filed a formal complaint with the province's Forest Practices Board, the government entity charged with investigating wrongdoing in BC's forestry sector. Based on the EcoSociety's analysis of publicly available data it appeared that the province had permitted more old growth logging in numerous areas in the Kootenay Lake and Arrow Lake portions of the Kootenay mountains than it was allowed by its own already limited conservation strategy for this region. The analysis found that the province's primary method of tracking and conserving old growth forests was riddled with problems, making the system essentially worthless. WKES called for a moratorium on all old growth logging there while the issue was reviewed.

Following the complaint, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development did its own analysis and discovered that the problem was even worse than WKES's initial investigation suggested. It also discovered that there was apparently no legal mechanism in place to compel companies to stop logging old growth. So, it politely asked the timber companies to stop cutting old growth while the matter was being investigated further, or at least report on their plans to cut it. When asked about the success of this request in June of 2019, Tara DeCourcy, the forest ministry's district manager for the Kootenay Boundary region, said that, to the best of her knowledge, it was being honored by companies. But she admitted that the province still did not have a systematic way to monitor logging activity.

Timber companies are making decisions about which areas to log with no real-time oversight from the government.

Under FRPA, the industry is allowed to adjust the boundaries of OGMAs on their own to accommodate their desired logging plans, as long as it offsets stands that will be cut down with protection of forests they identify as having similar or greater ecological value.

These sorts of swaps are commonplace according to both the forest ministry and industry. In most instances, the province is informed about these changes months after the logging operation has ended.

Because the province itself doesn't track old growth logging, it is hard to pin down where else British Columbia is failing to meet its own mandates for old growth retention. But reports from all over the province suggest problems extend well beyond the sites visited in the West Kootenay's)

Government and industry are consistently setting aside the poorest forest, the smallest trees, as old growth protection areas. They consistently select the big trees for keeping available for logging.

In fact, the government has known about these problems with OGMA management system for a while. Back in 2012, a Forest Practices Board investigation had found that the "government's lack of a coordinated and uniform approach for tracking and monitoring old-growth retention is a significant problem. In many management areas ... government does not know the extent of OGMA incursions or if licensees have appropriately replaced harvested areas with other areas having equal or better old-growth attributes." The investigation made a number of recommendations about how to fulfill the provinces' conservation obligations, including developing a better OGMA tracking system, a consistent standard for identifying old growth, and a better strategy to assess the effectiveness of old growth retention. To date, none of these recommendations has been fully implemented.

Despite the fact that the forest on both sides of the road had been logged within the past decade, we are indeed in the middle of an OGMA. Just outside this ostensibly protected area's boundaries, the spray painted marks on the trunks of several towering cedar trees bear witness to the presence of timber cruisers who determine the commercial value of the trees, a precursor to logging.

It appears from this article as well as conclusions made by the Forest Practices Board, that none of the recommendations of the Forest Practices Board 2012 special investigations report have been implemented. There is no tracking of values within OGMAs as was recommended. There is lack of oversight of industry foresters by government and continued harvesting of old growth



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forests despite targets set for landscape level retention. The absence of government oversight and use of “professional reliance” by government on industry foresters is flawed and needs to be changed. It is unrealistic and unfair to expect industry foresters to meet both their employer’s financial goals and provincial aspirations for conservation and retention of old growth in OGMAs. It puts company foresters and consultants hired by companies in a conflict of interest. Based on the results of the past dozen years, using a professional reliance approach to conserve old growth in B.C. in areas where there are non legal OGMAs mapped and also in areas with non mapped OGMAs relying on forest cover summaries does not achieve provincial old growth conservation objectives.

RECOMMENDATION 14. Replace the approach of professional forester reliance linked to decisions on changes in OGMAs and old forest retention during harvest planning and layout with a more effective system involving provincial government and/or independent third party oversight.



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Endnotes

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^v Bourgeois, W., Binkley, C., LeMay, V., Moss, I. and Reynolds N. 2018. *British Columbia Forest Inventory Review Panel Technical Background Report*. Prepared for the Office of the Chief Forester Division, British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development. https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/stewardship/forest-analysis-inventory/brp_technical_document_final.pdf

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