



Old Growth Strategic Review Panel:

Are Old Growth Resources Adequately Managed in the Sunshine Coast Natural Resource District?

Sunshine Coast Conservation Association (SCCA)

January 31, 2020

Introduction

The SCCA is a provincial not-for-profit organization and a federally registered tax-charitable society. Our mission is to pursue protection for ecologically significant lands and waters in the Sunshine Coast Natural Resources District (SCNRD). You can find detailed information about our organization and activities on our website www.thescca.ca.

We are pleased to participate in the Old Growth Review. Our submission will address old growth resource management in the context of Marbled Murrelet conservation. We will examine the effectiveness of Landscape Unit Planning and the history of Timber Supply Reviews and Annual Allowable Cut determinations on old growth inventories. And finally, we have a few comments about old growth management and climate change. Thank you for your attention to our perspectives.

Old Growth management and the Marbled Murrelet (MaMu)

Natural History: The Marbled Murrelet is entirely dependent on ancient forests for its nesting habitat. These birds need trees with large limbs that support mossy platforms. These platforms do not occur in just any old growth; they don't occur on south facing slopes, for example. Murrelets prefer nest sites in relatively open stand structures (or if you prefer an antiquated term; decadent forests) as they are fast but not very maneuverable flyers. Murrelet chicks need nest sites that are quite high in the canopy in order to get enough air speed to fly without crashing into the ground. Most of the remaining inventory of high-class habitat is in either Coastal Western Hemlock very moist-maritime forest, upper variant (CWHvm2) or Mountain Hemlock moist maritime forests (MHmm).

Current and former range: Marbled Murrelets were common everywhere in the inlets of the Southern mainland region only 50 years ago. Large flocks congregated in the Georgia Strait and gulf islands during the winter. Today these flocks are not to be found. Generally speaking, murrelets are uncommon anywhere south of Jervis Inlet but still have significant populations in Jervis itself and also in Toba and Bute Inlets.



Risk status: The federal *Species At Risk Act* (SARA) mandated the establishment of a scientific body to evaluate, on a strictly scientific basis, the level of risk of harm facing any particular species or ecological community. This body is the *Committee on the Status of Endangered Wildlife in Canada* (COSEWIC). It is COSEWIC that has determined that the Marbled Murrelet is a *Threatened* species and that the cause of its precipitous decline is logging of its nesting habitat. The federal government has placed this species on Schedule 1 of SARA. This means that protections (and actions) for species on this list are mandatory. SARA also mandates recovery planning. It is an offense under the *Act* to kill, take or disturb the residence of a Schedule 1 species (unless one has a permit).

Lists: The following is a list of federal and provincial *Acts*, processes, federal/provincial agreements and one international convention that all purport to offer some level of aid to the Marbled Murrelet.

Acts

- Species-At-Risk Act
- Schedule 1 of SARA
- Wildlife Act of BC
- Forest Practices Code Act of BC
- Forest and Range Practices Act of BC (FRPA)

Agreements

- Migratory Birds Convention Act (international agreement)
- The Accord for the Protection of Species at Risk in Canada
- The Canada -British Columbia Agreement on Species At Risk

Processes

- Marbled Murrelet Recovery Plan
- Integrated Wildlife Management Strategy
- Marbled Murrelet Implementation Plan
- Wildlife Habitat Area (WHA) designation process
- Timber Supply Review and AAC determination
- Landscape Unit Plans

Nominating Wildlife Habitat Areas (WHA) in the Southern Mainland Conservation Region

Nominations: In 2013, the SCCA undertook a project to directly nominate areas for WHA status. We did this to benefit the bird and also as an experiment to see how BC's system of SARA compliance actually worked in practice. Our goal was to nominate 50 areas (~4800 hectares) of highly documented Class I, II and III habitat that had no protection or constraint of any kind in place. In other words, the purpose was to make nominations in areas that are extremely important to the species and still potentially at risk from logging and/or other industrial activity.



Nominations were submitted in January, 2014. We received word from the FLNRO senior regional wildlife biologist in January 2015 that he had determined our nominations all met the ‘suitable habitat’ criteria. He also determined that the impact to the Timber Harvesting Land Base (THLB) was marginal (<300 ha). He then forwarded our nominations to all SCNRD licensees for their input. In early 2019 we were informed of the following results and circumstances;

- 3,400 ha designated WHA;
- 1,700 ha of the 3,400 ha were moved to overlap the nearest Old Growth Management Area (OGMA);
- Some of our proposals could not be designated because they had been recently logged or were about to be logged;
- The final tally of newly protected hectares not formerly protected by any other designation is only 1,300 hectares;
- The FRPA Section 7 Order protecting nesting habitat in the Non-Contributing Land Base (NCLB) is now considered to be satisfied;
- Undesignated habitat is left fully exposed to logging development until further notice.

Question: What happened here? The answer is that the major licensees refused to agree to any WHA designation that infringed on current or future logging opportunities. Government appears to have stalled on the task of protecting the critical habitat of this species. Government has said, in two press releases, that it will meet the MaMu Recovery Plan target of an additional 18,000 hectares of new protection for the Marbled Murrelet in the Southern Mainland Conservation region, eventually. This will be done in the context of the Marble Murrelet Implementation Plan process. Government also promised to replace the old *Section 7 Order* with a new and effective order but has missed several deadlines that they set for themselves.

MaMu Implementation Plan: This process is an obligation of the province under the *Canada - British Columbia Agreement on Species At Risk*. British Columbia is committed to achieving the critical habitat retention targets of the federal MaMu Recovery Plan. The goal of the recovery plan is to arrest the decline of murrelet populations. The idea behind the Implementation Plan is to designate WHAs, as much as possible, in the NCLB, where presumably, conflict with forestry can be avoided, and likewise, to avoid designating nesting habitat in the Timber Harvesting Land Base (THLB) if at all possible. This approach is reasonable but it doesn’t work. To explain why this is so, it is necessary to briefly discuss timber supply issues.

Timber Supply Reviews (TSR) and Annual Allowable Cut (AAC): Periodic TSRs provide the province’s Chief Forester with the technical forest inventory data needed to calculate a sustainable AAC. The lands that contribute to the AAC calculation are referred to as the THLB. Forest lands that are outside the THLB are referred to as the Non-Contributing Land Base (NCLB) and are composed of lands that are inoperable (by conventional means), environmentally dangerous, of poor productivity, are too remote to transport logs to market or not suitable for regenerating new forests.



Timber Supply Fall-Down: If resource managers allow logging to exceed sustainable cutting levels, a fall-down in timber supply will eventually occur. The SC Timber Supply Area has a long history of un-sustainably high logging activity as can be seen in the large concentrations of land in immature age classes. It's obvious that forest planning over the last 25 years has recognized that fall-down would occur. The TSR of 1995 was all about how to respond to future supply fall-down problems. Various changes have been made, for example, trees are now being cut down at younger and younger ages. The most disturbing and conflicting aspect of fall-down, from a wildlife conservation perspective, is that the major coastal licensees are getting 30 to 50 percent of their timber supply from the Non-Contributing Land Base. This sets up the conflict between critical wildlife habitat retention and timber supply for major coastal licensees. If government was managing old growth inventories reasonably well, we wouldn't have a habitat verses timber supply conflict in the THLB or the NCLB.

Forest and Range Practices Act (FRPA): FRPA mostly replaces the former *Forest Practices Code Act of BC (FPC)*. While the FPC was prescriptive, FRPA is vague. Almost all environmental values addressed in FRPA are compromised by the phrase "...unless unduly restricting the flow of timber from BC's Crown forests...". FRPA also transfers much of the statutory authority of District Managers to professional foresters in the employ of licensees. This is called "professional reliance". This *Act* is so poorly written that it is impossible to hold any decision maker accountable. Its impossible to imagine that BC's old growth resources could be adequately managed and conserved without a substantial revision of the *Act* to ensure that public resources are managed in a coherent and transparent manner by accountable public officials.

Current situation regarding old growth and implementation of Marbled Murrelet protection:

- Nearly all occurrences MAMU habitat in the SCNRD have been spatially identified using nest records and low elevation helicopter reconnaissance;
- Population sizes in each watershed of the SCNRD have been determined via radar tracking;
- Distribution of populations within THLB and the Non-Contributing Land Base are known;
- Impacts to THLB of potential WHA designations are known and are not very significant;
- A Public consultation was completed (2016) and there was very little on-the-record objection from industry or the public.

In summary: the MaMu Implementation Plan team has everything it needs to bring forward a list of Wildlife Habitat Area (WHA) selections to satisfy BC's obligations under the *Species-At-Risk Act* and the *Migratory Birds Convention Act*. When will government act? In the absence of definitive action in favour of Marbled Murrelet conservation, we cannot conclude that government is adequately managing and conserving old growth resources in British Columbia.



Old Growth management and Landscape Unit Planning (LU)

LU planning introduction: LU Plans were created in the 1990s to provide general biodiversity protection in the managed landscape. An LU Plan creates Old Growth Management Areas (OGMA) in each biogeoclimatic subzone (BEC unit) or subzone variants in each Landscape Unit in the entire province. Landscape Units are assigned a Biodiversity Emphasis Option (BEO); high, medium or low. The percentages of land protected as OGMA vary according to the BEO; the highest percentage of protection go the highest BEO assignments. LU planning recognizes disturbance regimes of the ecosystems in each BEC unit. Low elevation forests generally have naturally occurring more frequent stand destroying events, like forest fires and blow down. High elevation forests experience stand-destroying events very rarely, sometimes not at all for thousands of years. The assumption in LU planning is that higher levels of natural disturbance are compatible with more frequent logging disturbance and vice versa. Therefore, LU planning creates a higher percentage of OGMA in high elevations forest than in low elevation forests. It should be noted that the lower elevation forests of our region are not characterized as high disturbance types either. High disturbance regimes are mostly a feature of the interior and boreal forests.

LU problems: LU Plans typically feature an excellent explanation of why it is necessary to retain old growth. However, there are a number of problems with LU plans that have become apparent. First, the actual percentages of land protected are quite small ranging from 9% in the CWHxm to 30% in the Mountain Hemlock Zone (MH). These percentages are far too small to achieve a reasonable probability that biodiversity will persist over time. As well, it was the assumption in the Biodiversity Guidebook (1995) of the *Forest Practices Code Act* that our region would have ~12% of its land base in Class A Provincial Parks and that Landscape Unit Plans would supplement the parks. We don't have this level of Class A parks.

A second problem is that, in the OGMA selection process, the priority is to avoid impacting timber supply by selecting inoperable stands. This results in a system of OGMA that mostly represent the types of ecosystems that grow on low or poor productivity sites with higher productivity sites largely unrepresented.

We are familiar with a third problem; the rules that guide OGMA selection in LU planning are not always followed. The main rule for OGMA selection is to designate actual old growth. If an old growth inventory has been reduced to less than the retention target, then select the next oldest stand for that BEC unit. We have participated in LU planning by examining draft plans and submitting comment and we have found that the 'next oldest stands' are often not selected (these mistakes need to be corrected). As well there are other rules in Biodiversity Guidebook (Appendix 4) that appear to have been neglected. It is impossible to adequately manage old growth (or any forest value) if timber supply takes complete precedence over all other values.

Another problem was created when government first initiated LU planning. Government decided to reduce the impact of establishing OGMA by allowing the old growth inventory in the dry maritime (CWHdm) and very-dry maritime (CWHxm) components in all the low BEO landscape Units to be reduced to 3%. This is an absurdly low retention level that virtually guarantees a loss of biodiversity over time in all the low elevations of our coastal forests.



Note: It is worth noting that what the adjacent public sees in the interface between industrial forestry and settled areas is more and more environmental fragmentation from clear cut after clear cut after clear cut. In our experience, we are constantly being asked to assist the public in small but intensely emotional conflicts over clear cut logging in the CWHdm and CHWxm BEC units everywhere from Lund down to Port Mellon. We submit that people are entirely correct in believing that biodiversity and various non-timber values are being sacrificed for unsustainable timber supply objectives.

Old Growth and Global Climate Change

Current provincial government policy: In regard to quantification of carbon emissions, BC assumes that industrial forestry is carbon neutral. This assumption rests on the idea that thrifty new forests regenerate on harvested lands and these new forests quickly absorb enough carbon dioxide to offset all the emissions from waste generated in the logging process and all the emissions generated transporting and manufacturing product. This is a highly disputable idea that does not withstand scrutiny in the age of human caused climate change. However, it probably is true that certain types of forests can sequester large amounts of carbon over relatively short periods of time.

Absorbing emissions after logging: How long would it take for newly regenerating forests to reabsorb carbon emissions from logging? In the lower elevation forests of the Sunshine Coast Natural Resource District (CWHdm and CWHxm), which are highly productive, the correct answer could well be 30-50 years depending on site productivity. Given the prevalence of early seral stage forests in this region, CWHdm and CWHxm forests could sequester large amounts of carbon, if we can avoid cutting them down while they are at peak fiber production (carbon uptake).

Mountain Hemlock Zone (MH) forests: MH forests grow in very harsh conditions featuring shallow and often wet soils, cold temperatures, high winds and deep snow loading. Regeneration is abundant in the MH but growth is very slow. The length of time that will be required to realize harvestable second growth stands is well beyond the planning horizon (+200 years). Meanwhile, access and drainage infrastructure must be maintained, monitored, etc. Reality is that logging in the MH is timber mining.

Irreplaceable ancient growth: Most of the forested lands in the MH are ancient old growth that have accumulated some volume over many hundreds of years and have also established a carbon sink that cannot be replaced. These forests have very low-disturbance regimes (NDR-1) that cannot produce harvestable stands within the normal planning horizon. Logging in the MH zone is not supported by a silvicultural rationale. Logging in the adjacent slightly lower elevation very wet maritime subzone (CWHvm) is similarly un-sustainable. In terms of climate change priorities, protecting these high elevation forests and their carbon sinks must be considered as urgent. The unique silvicultural dynamics of the MH have been understood for at least the last 25 years, as former students of Professor Dr. Karl Klinka (late of UBC) will remember. When will public policy catch up with modern forest sciences?



Recommendations

1. Proceed with establishing sufficient MAMU WHAs to meet the targets set by the federal MAMU Recovery Plan (~19,000 hectares) in the South Coast Conservation Unit;
2. Immediately implement the approach set forward by the MAMU Implementation Plan Team, ie, designate in the NCLB first and in the THLB as needed to reach recovery targets;
3. As an interim measure, establish a *Ministerial Order* under *Section 7* of the *Forest and Range Practices Act* protecting all Marbled Murrelet Class I, II and III nesting habitats in the Mountain Hemlock moist maritime and Coastal Western Hemlock very-wet maritime Biogeoclimatic subzones;
4. As a permanent measure, for the purpose of confronting our climate emergency, begin the process of prohibiting all logging in the Mountain Hemlock Zone in order to maintain its large and irreplaceable carbon sink;
5. Give the public an opportunity to experience the magnificence of BC's coastal low elevation mature forests by raising the target percentage for establishing Old Growth Management Areas in the CWH dry maritime and very-dry maritime forests to *Intermediate* Biodiversity Emphasis Option;
6. Require all holders of Crown Land licenses-to-cut to publish 5-year forest development plans, updated annually and available for public review. Let the public see how public resources are being managed.

Daniel Bouman
Director, SCCA