

Sunshine Coast Conservation Association

Sunshine Coast Timber Supply Area Timber Supply Review 2

SCCA Submission to:
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Timber Supply Review 2

Sunshine Coast Timber Supply Area (TSA)

The results of Timber Supply Review 2 (TSR2) are not encouraging. The Timber Harvesting Land Base (THLB) of the Sunshine Coast TSA is nearing depletion of “mature” accessible timber. As a result, remaining traditional timber supplies (high volume, high quality old growth) are now so valuable ecologically, that “economic” factors are no longer sufficient to justify the current AAC. However, rare stands of coastal old growth are still being sacrificed for short term-timber supply under policy which permits the drawdown of old seral stands (ecological capital) to less than 3% representation in highly productive Landscape Units.

It is apparent from forest stand ages on the THLB that for the past 50 years the forest industry has been converting approximately 20,000 ha of timber per decade maintaining the AAC, which has been calculated for various iterations of the Sunshine Coast TSA timber harvesting land base (THLB). (*Figure 1*)

Currently, there are enough forest stands between the ages of 80 and 250 years on the THLB to log for 30 years at the former rate of extraction. This assumes no changes in management practices or forest cover constraints. This also assumes that the entire area is merchantable and does not account for the fact that much of the timber is located on poorer site classes and has comparatively lower volumes, which is also the case with the majority of remaining old growth stands (largely on poor CWH vm2 sites). (*Figure 2*)

Approximately 24,000 ha of old growth remain on the THLB. This equals one additional decade of timber at historical rates. TSR2 predicts that old growth could contribute 500,000 cubic meters per year to the AAC for the next three decades. All old growth on the THLB is assumed to be available and assumed to have an average volume greater than 600 m² per hectare for this scenario. However, considerably more area per decade may be required to maintain the short-term AAC on these stands than was previously required. This conclusion is supported by the TSR2 reduction in “minimum cubic meters per hectare” (from 350 m² to 300 m²) and the inclusion of height class 3 stands (formerly “scrub”) in the THLB for TSR2.

The old growth timber supply projections also failed to account for old growth on the THLB said to be required to meet minimal Landscape Unit Planning (LUP) Guide requirements in landscape units which do not currently have enough old growth in the non-contributing forest land base. Even that old growth, protected on the THLB now under LUP, is all scheduled to be harvested beginning approximately 100 years from now. That is predicted to complete the liquidation of the THLB as assumed in the 1990 Sunshine Coast Timber Supply Options Report.

The entire productive, operable natural forest in the Sunshine Coast TSA is assumed to be “converted” to managed second growth stands by that time. TSR2 places great reliance on non-contributing old forest (high elevation/low productivity) stands and currently existing parks to adequately conserve biodiversity and protect other forest resources. The Sunshine Coast Conservation Association (SCCA) contends that this assumption has no basis in ecology as

Figure 1: Sunshine Coast TSA - Timber Harvesting Land Base Area by Age

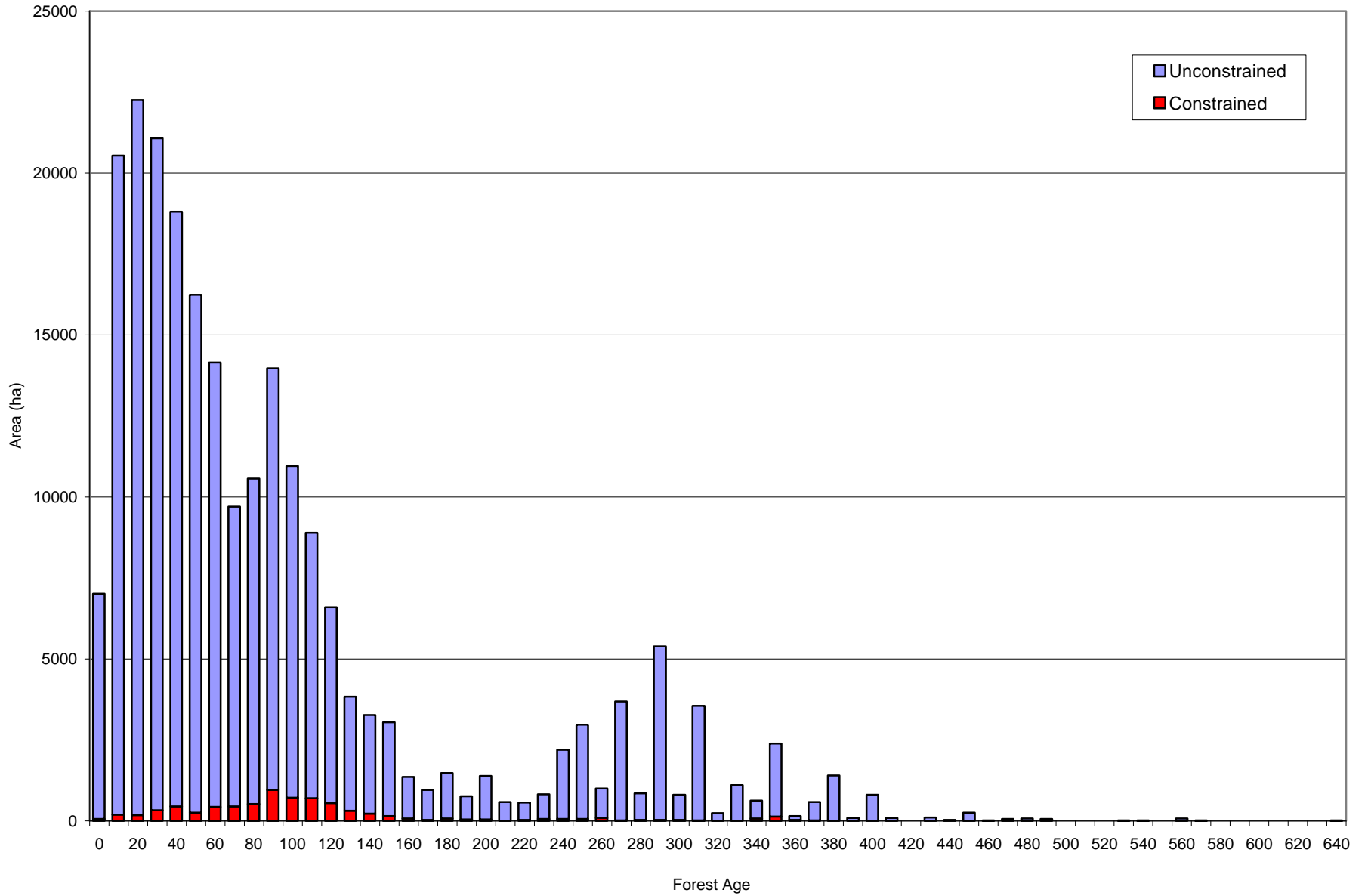
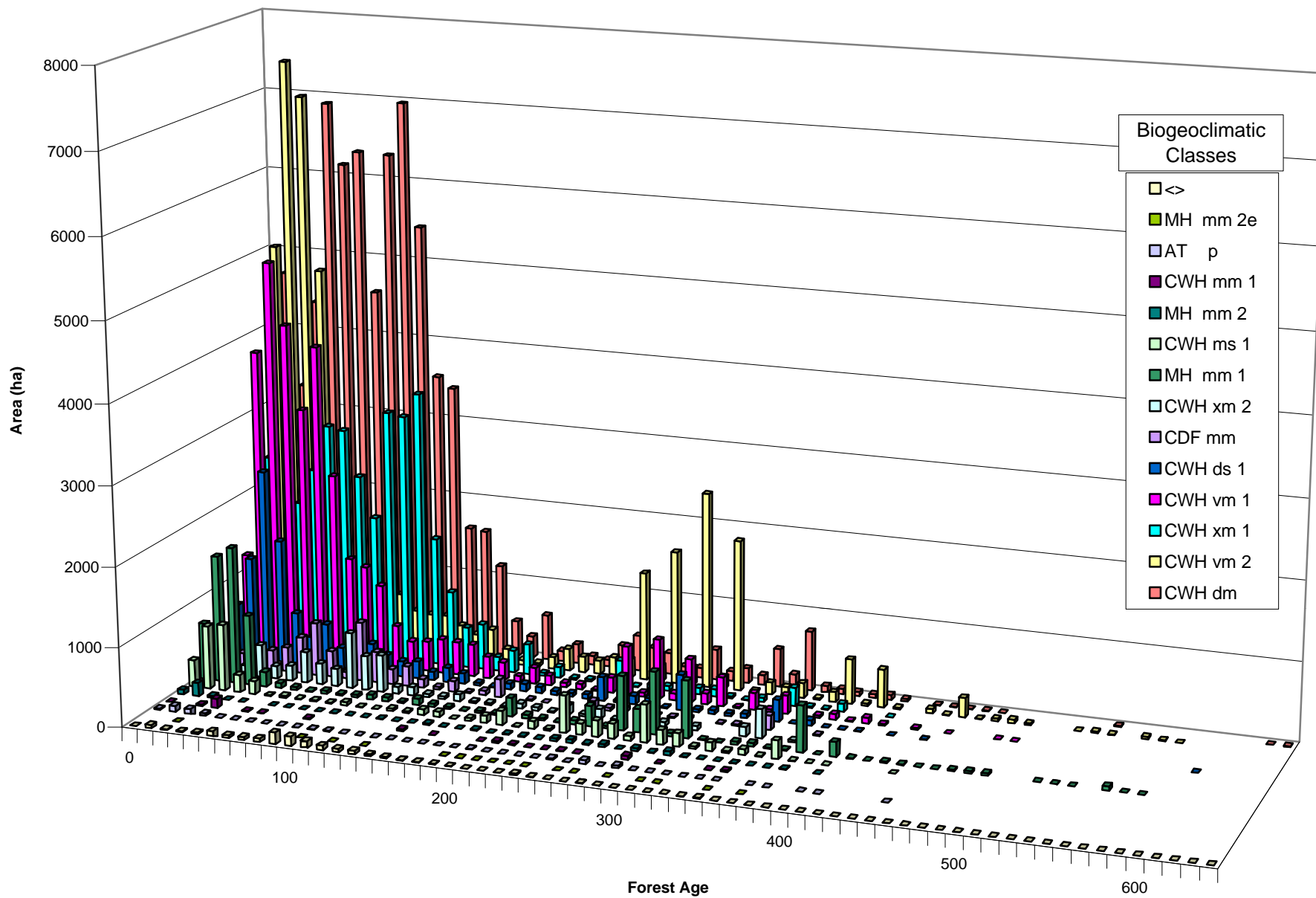


Figure 2: Sunshine Coast TSA - THLB Area by Age and Biogeoclimatic Classification



summarized in the minimum recommendations of the Biodiversity Guidebook (BGB). The SCCA also contends that maintaining the AAC based on that assumption is an anomaly in the LUP process, which will have drastic consequences for biodiversity and attendant forest resources on the Sunshine Coast prior to the next Timber Supply Review.

Background

From 1981 to 1990, during the “sympathetic administration” era, many former constraints on timber supply, in the form of administrative reserves for conservation, recreation, wildlife and community water supply, were simply ignored when the specter of fall-down first became apparent in timber supply forecasts. In 1990 those “emergency” timber supply inclusions were added to the Forest Inventory Program files and no exclusions for those administrative tenures were made to the THLB (Net Land Base).

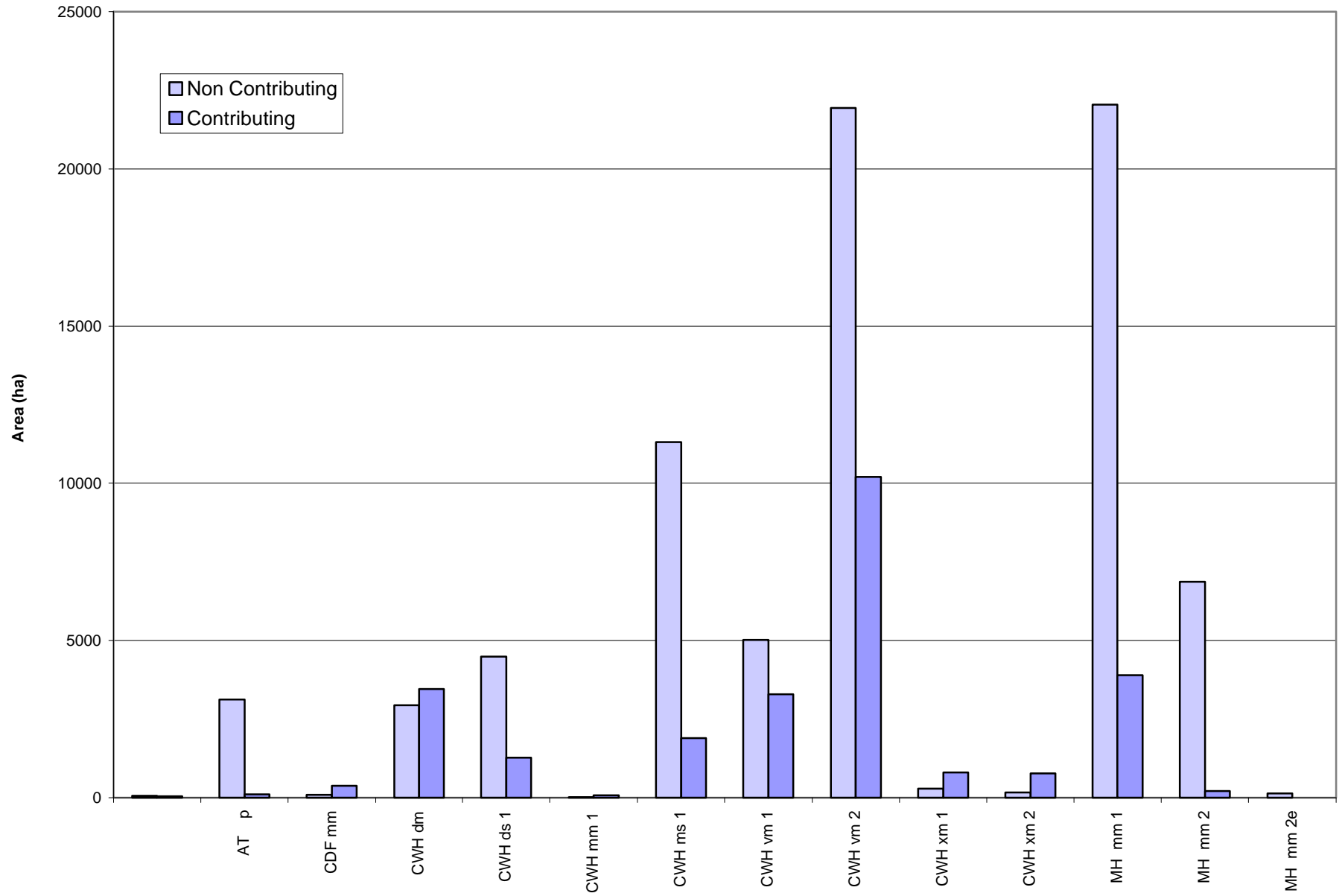
Subsequently, the Fish and Wildlife Habitat Option, analysed in the 1990 Sunshine Coast TSA Options Report, modeled reserves of 34,000 hectares for critical wildlife habitat that had been identified by the Ministry of Environment for “deer, grizzly bear and fish and other flora and fauna dependent on old growth forests”. Management assumptions from the previous AAC determination (1981) were reported to have resulted in “a 32,700 ha decline in critical wildlife habitat”. Protection of scenic landscapes and “providing a balance of seral vegetation stages” across the landscape were noted as additional positive effects of the option. However, the Ministry of Forests did not implement the enhanced wildlife option.

In his July 1996 Rationale for the Sunshine Coast AAC Determination, Chief Forester Pedersen agreed with BC Environment staff that current allocations for wildlife would not entirely meet the requirements “that may now reasonably be expected under the Forest Practices Code”, and that some further specific provision for wildlife habitat would also be required. He had previously noted there were no specific forest cover constraints for bear or deer and no netdowns were applied explicitly for old growth dependent species (such as Marbled Murrelet). Chief Forester Pedersen expressed reliance on the non-contributing forest to provide for “maintenance of old-growth values and landscape level biodiversity” but in fact the old growth retained on the non-contributing land base is predominantly located in the MHmm1 and CWH vm2 subzone variants with very small areas of old remaining in lower elevation BEC zones. (*Figure 3*)

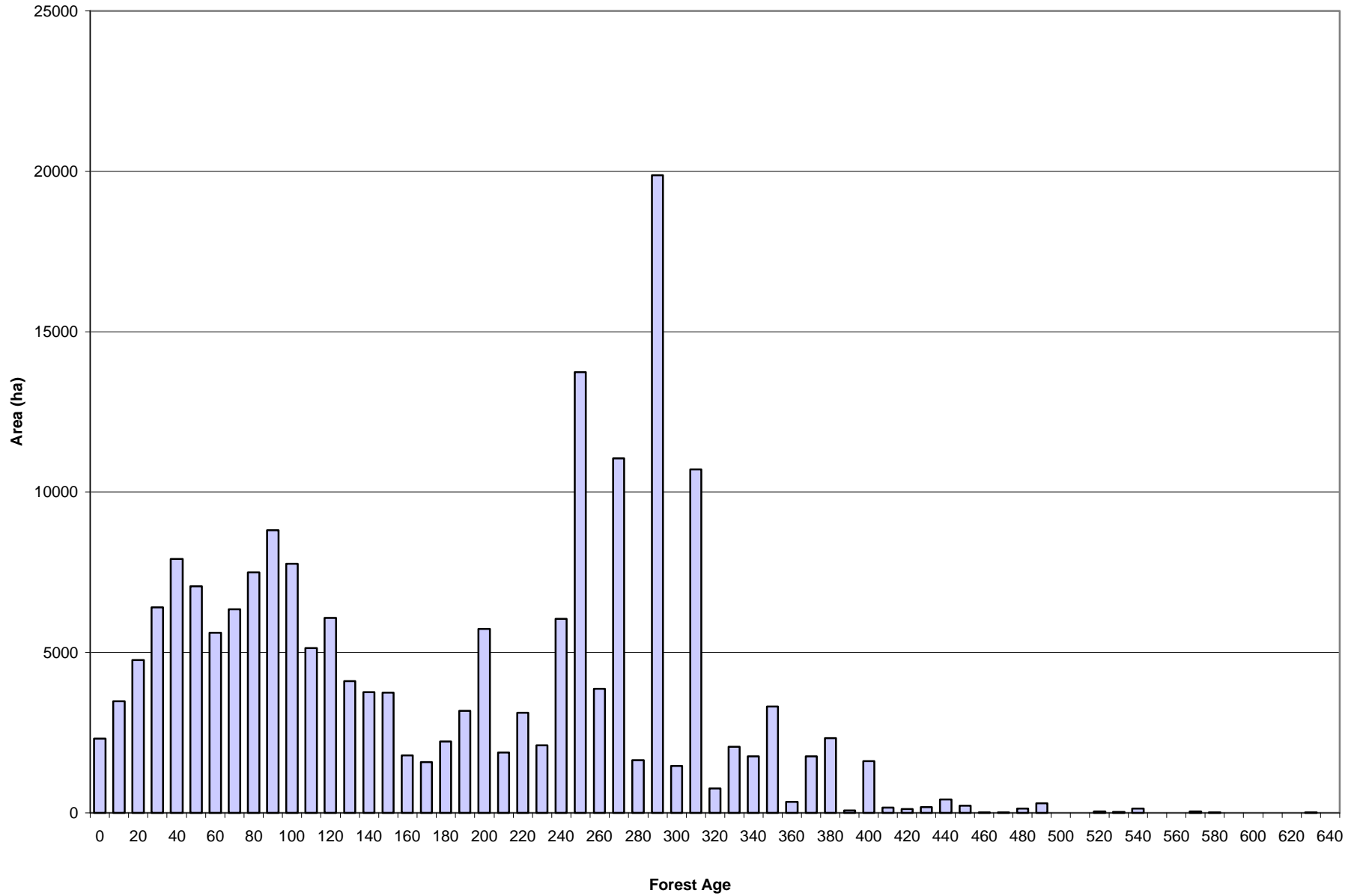
There is also significant area in younger age classes on the non-contributing land base. Disturbance factors relating to these younger stands have not been explained and create uncertainty with regard to accurately predicting future conditions for biodiversity purposes. (*Figure 4*)

Since 1997, planning for the protection and recovery of the provincially threatened, red listed Marbled Murrelet has been underway on the Sunshine Coast. Georgia Basin populations have been identified to be most at risk in BC. Given the specific requirements of this species, it can be assumed that a recovery strategy will have a significant impact on THLB and therefore AAC. Additional forest cover constraints required by this species have not been analyzed in TSR2

**Figure 3: Sunshine Coast TSA - Old Growth
Contributing and Non-Contributing Areas by BEC Label**



**Figure 4: Sunshine Coast TSA
Non-Contributing Productive Forest Area by Age**



although the FPC 12% recommended minimum suitable habitat target has been identified since 1995 and Marbled Murrelet is listed as a priority management species.

Current Management Practices

Current policy requires that wildlife habitat areas be designated in inoperable and/or non-contributing forest. However it is widely reported that virtually none of the Marbled Murrelet requirements can be met in non-contributing forest using the minimum criteria for suitable habitat (height class 3 and greater, > 250 years old, > 200 ha.). Inoperable stands excluded from the THLB are generally located at higher elevations and are highly fragmented, marginal or unproductive forest, providing suboptimal habitat at best.

There are remaining options for designating suitable Wildlife Habitat Areas in the THLB but that has not occurred under Landscape Unit Planning. Critical habitat is being fragmented at an accelerated rate. The Bunster LU, which had 11.1% suitable Marbled Murrelet habitat remaining, has had only 5.2% protected under LUP. The Brittain Small Business Forest Enterprise Program (SBFEP) blocks, in identified critical murrelet nesting habitat, are interesting for a number of reasons. This large timber sale is located in the inoperable, non-contributing portion of the THLB in identified murrelet habitat – a fact that has been well documented for a number of years. This helicopter Timber Sale was offered at a subsidized stumpage rate (\$2.23/m²) well below current rates, which by itself is a fairly clear indication that the plan is not economically viable. Most interesting is that the MOF is the licensee in this case and has the power to reverse its decision about this timber sale but, so far, has chosen to abrogate its duties under the Forest Act and the Forest Practices Code Act, with regard to the realization of wildlife values on provincial forest.

The Brittain Timber Sale accounts for well over one year of the 5 year Forest District SBFEP AAC but is not located on the THLB, highlighting the fact that economically feasible short-term timber supply is extremely limited. This particular Timber Sale also raises the issue of how many other cutblocks, currently maintaining the AAC, are located in non-contributing/ inoperable forest. That ratio would provide a reasonable indication of the capability of TSR to adequately reflect short-term timber supply realities and to reliably predict future forest conditions (since keystone assumptions about biodiversity currently depend on non-contributing stands). The fact that this is a Ministry of Forests Forest Development Plan (FDP) compounds concern.

Uncertainty about short-term timber supply is consistent with the significant reduction in minimum harvestable ages used in TSR2. Since the 1990 TSA Options report the minimum harvestable age has been reduced – from 120 years to “95% of culmination”. The MOF estimation of 95% of culmination has undergone a revision since 1995 with the result that minimum harvest ages have been substantially reduced again. For example, minimum harvest age for Douglas fir on good site has declined from 120 years to 55 years (45.8%) in one decade. By way of comparison, current alder minimum harvestable age is 40 years.

TSR2 indicates that the Sunshine Coast TSA has not allocated or instituted sufficient, suitable forest cover constraints to adequately protect other forest ecosystem resources, uses, and values. Marbled Murrelet management on the Sunshine Coast is illustrative of the lack of protective

measures as well as the obstruction of protective measures, which describes current management practices. These insufficiencies are mirrored in TFL 43 and TFL 39, which also do not have adequate mature forest cover constraints instituted for wildlife. This is putting wildlife populations at risk in the entire Sunshine Coast Forest District.

The assumption that critical wildlife habitat requirements will be met in the inoperable portions of the productive forest area, as suggested in TSR2, is not supported by scientific data. The non-contributing portion of the productive forest land base does not support sufficient areas of old growth in the biogeoclimatic variants that are depleted in the THLB. Protected areas/parks within the SCFD also do not contain old growth stands in any appreciable amount in these depleted biogeoclimatic variants. (*Figures 5 and 6*)

Due to the fire history in the Georgia Lowlands Ecoregion there are a small but significant number of opportunities to begin a recruitment strategy for these diverse but highly impacted ecosystems. The existing options in CDF mm, CWH xm1 and CWH dm are of provincial significance but are being rapidly fragmented on current forest development plans. The Chapman, Sechelt, Cortez and Texada LU have not been adequately protected with appropriate biodiversity emphasis assignments.

The 2/3 old growth drawdown in low biodiversity emphasis landscape units should not be considered in the Sunshine Coast Forest District where protected area in parks is well below the provincial average of 12% and is not well dispersed. The long-term effects of this policy not only presupposes too much about even the next generation in charge but also raises disquieting questions about how they will regard our decision to “borrow” essential ecosystem components in 2001 in order to maintain a timber supply calculation that was known to be unsustainable in 1990 (Sunshine Coast TSA Options Report).

It should also be noted that the Low BEO has been assigned to landscape units in the Forest District with the least non-contributing versus contributing area. That bias is more pronounced on the TSA productive forest land base. This ratio indicates that higher productivity ecosystems are being assigned the lowest biodiversity protection emphasis on the Sunshine Coast. The 66% drawdown combined with the small percentage of non-contributing forest places these landscape units and the unique biodiversity they harbour at extreme risk. This ratio also suggests a consistent bias toward timber supply rather than ecologically based landscape unit BEO assignments. (*Figure 7*)

Failing to account for the habitat needs of the Marbled Murrelet until TSR3 in 2005 will cause the extirpation of the species in the Georgia Depression. The assignment of low BEOs in productive, timber depleted, coastal biogeoclimatic subzones compounds impacts to wildlife in the short term and dramatically increases risk to all other forest resources, including community water supplies, recreation and visual resources. Landscape Unit Planning as modeled by TSR2 will not adequately conserve non-timber resources. Timber supply policy simply overrides FPC Act provisions for non-timber values.

Figure 5: Sunshine Coast TSA - Non-Contributing Area Productive Forest by Age and Biogeoclimatic Classification

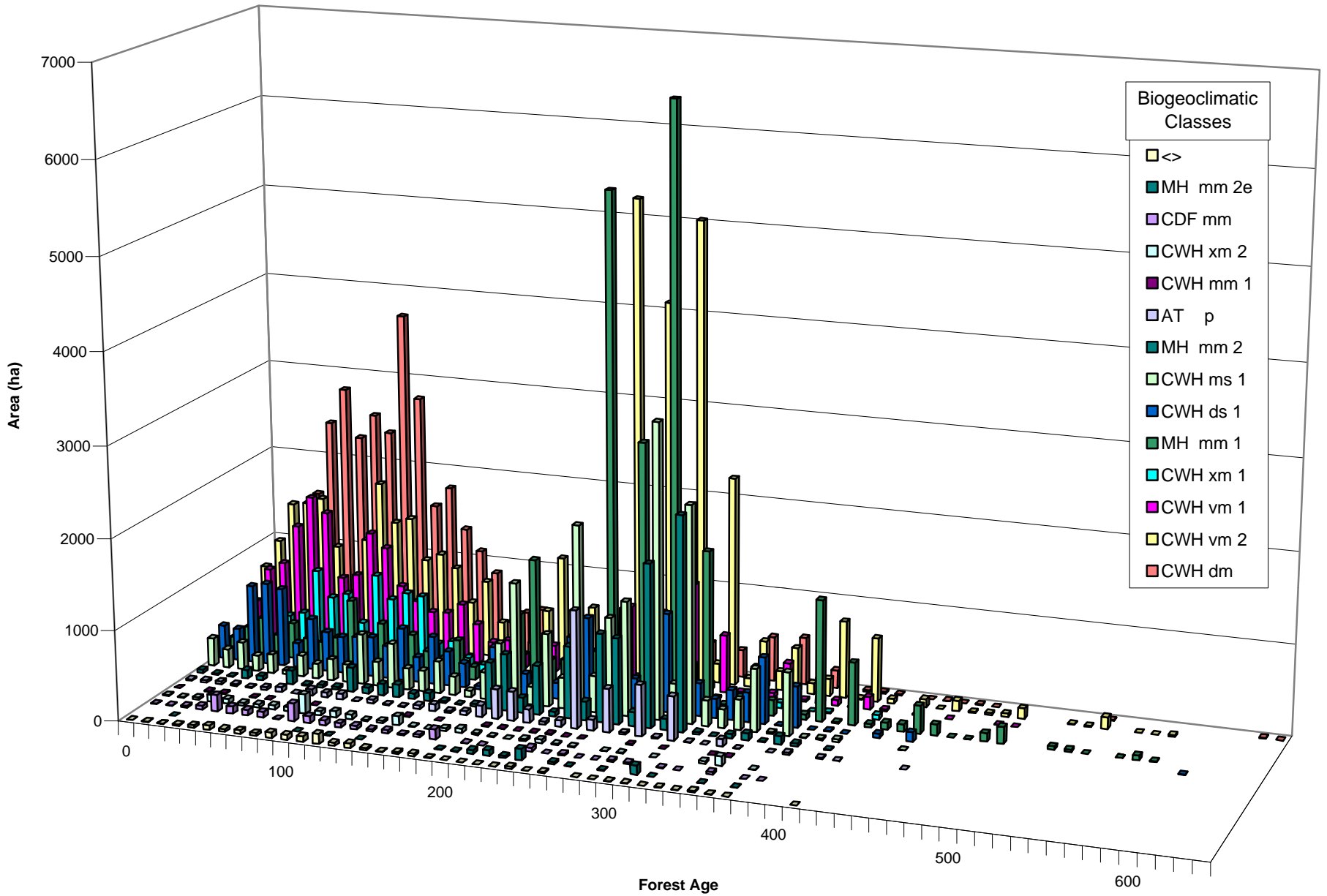


Figure 6: Sunshine Coast Parks - Productive Forest Area by Age and Biogeoclimatic Classification

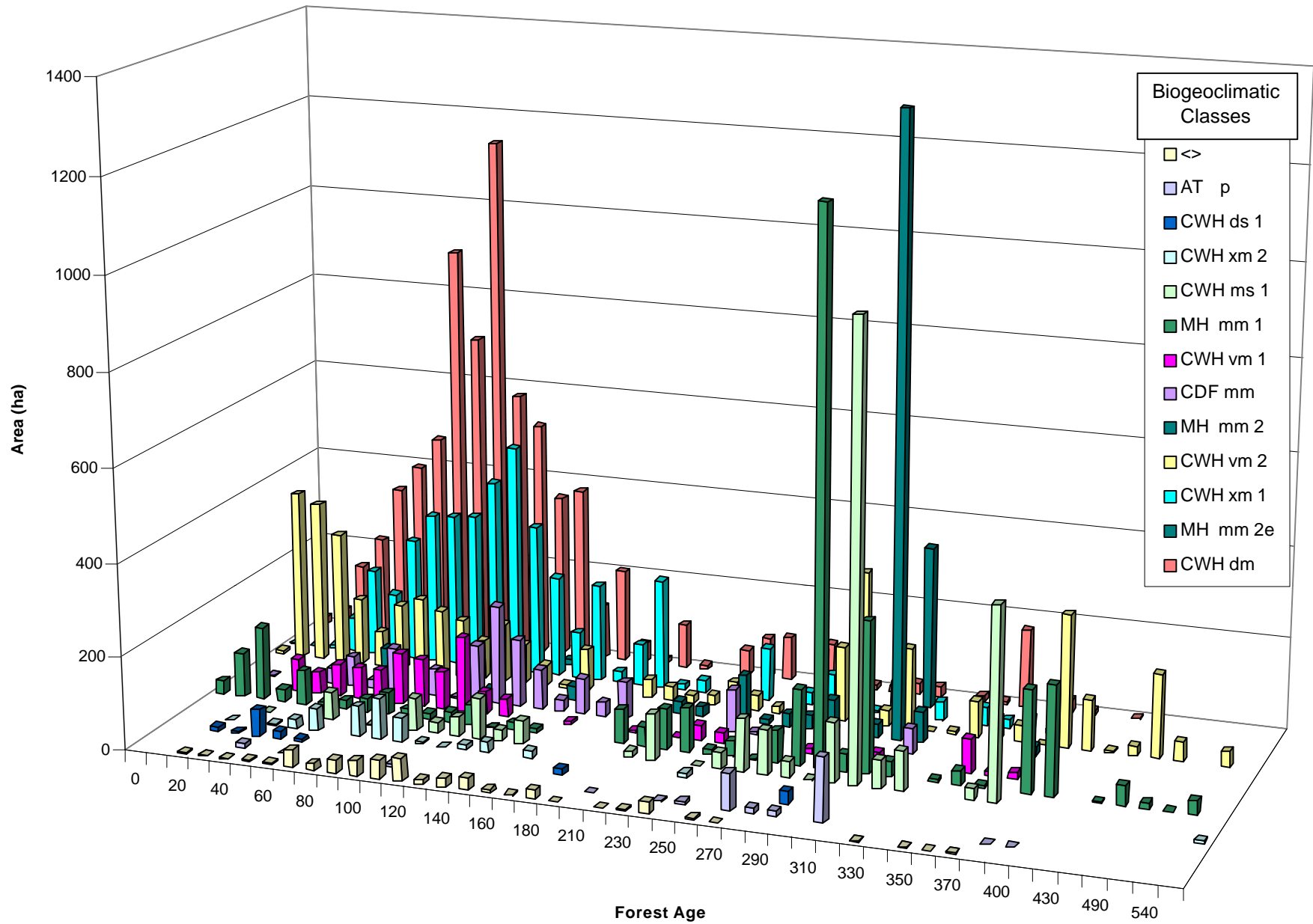
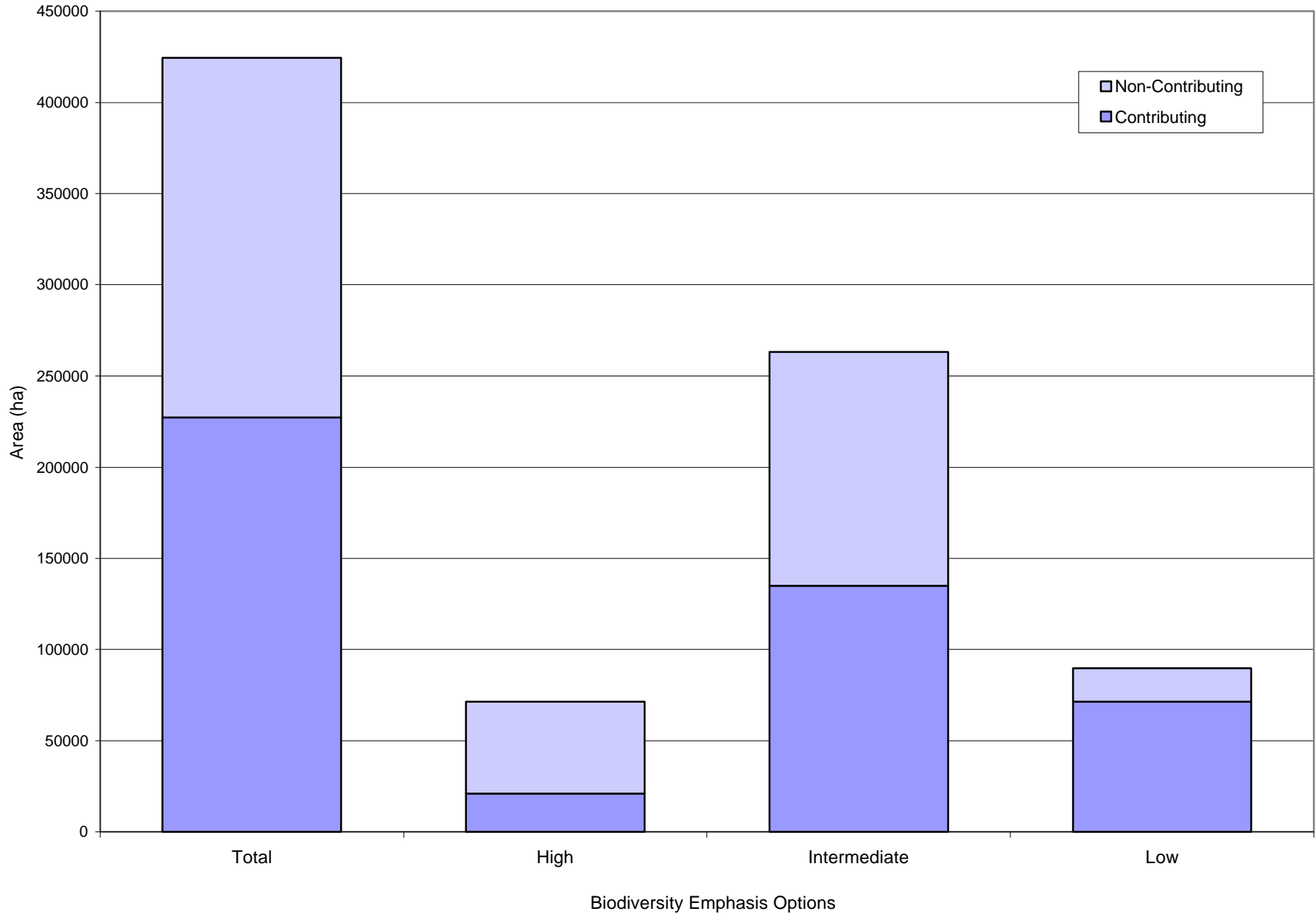


Figure 7: Sunshine Coast TSA - Draft Biodiversity Emphasis Options by Contributing and Non-Contributing Area



TSR 2 Reductions to Productive Forest for Other Forest Resources and Uses

The 3.4% reduction (14,446 ha) to productive forest (452,515 ha) for riparian reserve zones and wildlife tree patches will not be adequate to account for biodiversity and habitat requirements. Most low and mid-elevation riparian areas in the TSA have been logged. A 2% riparian reduction to the THLB for protecting fish habitat was tested in the 1990 TSA Options Report. TSR1 (1995) applied only 0.8% riparian reduction to productive forest. TSR2 has instituted a 2.2 % reduction – 0.2% more than analysed for fish in the 1990 Options Report. Wildlife tree patches, which account for a 1.1% reduction to productive forest, are intended to retain stand structural components and provide snags and coarse woody debris over time. While critical these reductions do not constitute suitable surrogates for wildlife habitat areas except for small, highly specialized species. They primarily serve as dispersal linkages across landscape units between old growth management areas (OGMA), produce future wildlife trees for cavity nesting birds and successive species, and become future dead and down structural elements for successive stands. Little, if any, high quality interior habitat is protected under these TSR2 reductions.

Forest cover requirements for ungulates have only been partially implemented. Goat winter range is listed as a 2849 ha reduction to productive forest. Approximately 70% of this critical habitat is located on unstable soils subject to an area reduction already. Deer winter ranges and forest cover requirements to protect them are no longer mentioned in the Sunshine Coast TSA. This inexplicable oversight must be remedied particularly because the Ministry of Environment identified the stands critical for their survival over a decade ago.

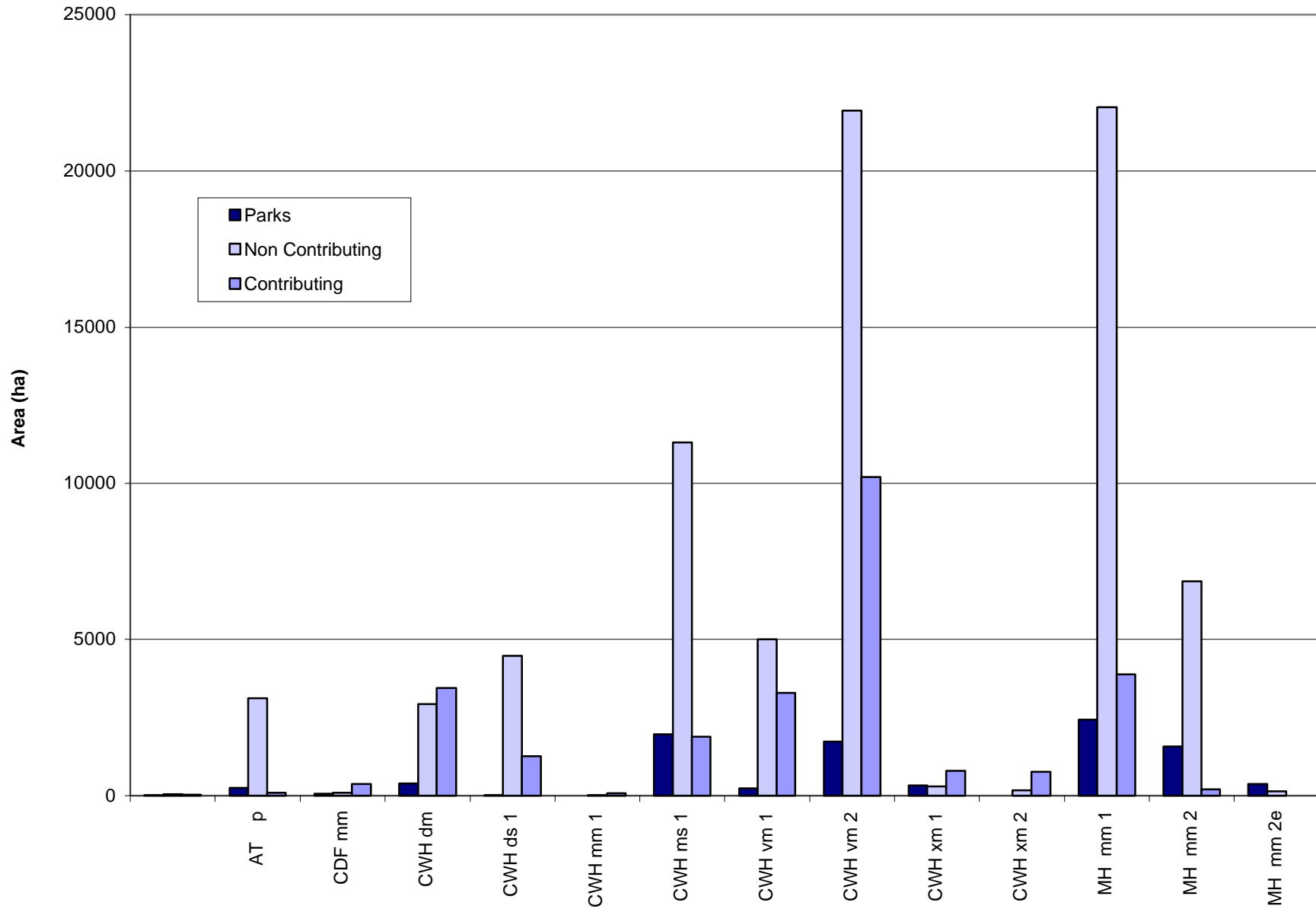
Approximately 24,000 hectares of old growth remains on the Sunshine Coast Timber Supply Area timber harvesting land base. Of the 27,236.8 ha of productive forest protected in parks only 9378.5 ha (or 29%) is old growth forest. Lower productivity, high elevation MH mm1, MH mm2 and CWH vm2 biogeoclimatic subzones variants account for a large percentage of that small amount of protected old growth (5740.1 ha). Coastal low elevation BEC zones are poorly represented (1019.4 ha) by old growth in parks and within the non-contributing productive forest. (*Figure 8*)

TSR 2 indicates that current practices (presumably implemented under the FPC Act since TSR1 in 1995) look very much the same as pre-Code practices. Physical, biological, social and economic factors, other than forest industry related, have had no effect on timber supply equations. The only factors apparently considered as limiting to timber supply are physical accessibility and economic feasibility to industry.

Sunshine Coast TSA Timber Supply

In 1990 all stand types older than 120 years were inventoried at 22.5 dbh, the Coastal utilization standard. Now all stands are inventoried at the Coastal second growth utilization standard of 17.5 dbh or at 12.5 dbh, the Interior second growth measurement. The conversion to second growth inventory standards while increasing volumes on paper will ultimately decrease net value obtained and also prevents an accurate tracking of volumes over time. Current practices indicate

**Figure 8: Sunshine Coast TSA - Old Growth
Contributing, Non-Contributing and Parks by BEC Unit**



a serious shortage of traditionally accessible timber supplies and indicate serious ecological imbalances are being propagated on the land base.

TSR2 is still reporting on the feasibility of the old liquidation assumption – pre-Code forest management practices and theory. TSR2 establishes that both the Protected Area Strategy and implementation of the FPC Act have had no discernable impact on timber supply and have had little effect on increasing protection for the diversity of values inherent in the Sunshine Coast forested land base. The THLB, as defined for 2001 in Table 2 of the Timber Supply Analysis Report, is 543 hectares smaller than the 1995 THLB and reductions to Productive Forest total just 169 hectares more than in 1995 following the Protected Area Strategy and implementation of the FPC Act! (*Figures 9a, 9b*)

Virtually all biodiversity reductions, parks, recreation areas, wildlife habitat areas and old growth management areas are located in “non-contributing” forest, which has been an effective strategy for preventing impacts to timber supply. However, if the intent of these set-a-sides is to protect wildlife in the short-term; to provide a balance of forest uses; and most importantly to retain viable remnants of the mighty coastal ecosystems in conditions of their natural diversity over time, non-contributing as the primary criterion is unworkable and will be an ecological disaster. (*Figures 10a, 10b, 11a, 11b*)

The 1990 Options Report analysis revealed that lowering minimum harvest ages to 80 did not have a positive impact on short-term timber supply (the AAC was still projected to decline by 2000) but did have a positive effect on estimated mid-term timber supply. Further, substantial reductions to minimum harvestable ages have accounted for the huge increase in “available” timber and have resulted in the optimistic TSR2 timber supply forecast.

The reduction in minimum harvest ages, while increasing “available” volumes/area directly conflicts with maintaining a balance of seral stages across the landscape as per the BGB. Although the “oldest first” rule is assumed, Interfor is already having age classes 4 and 5 stands approved in its Sunshine Coast FDPs.

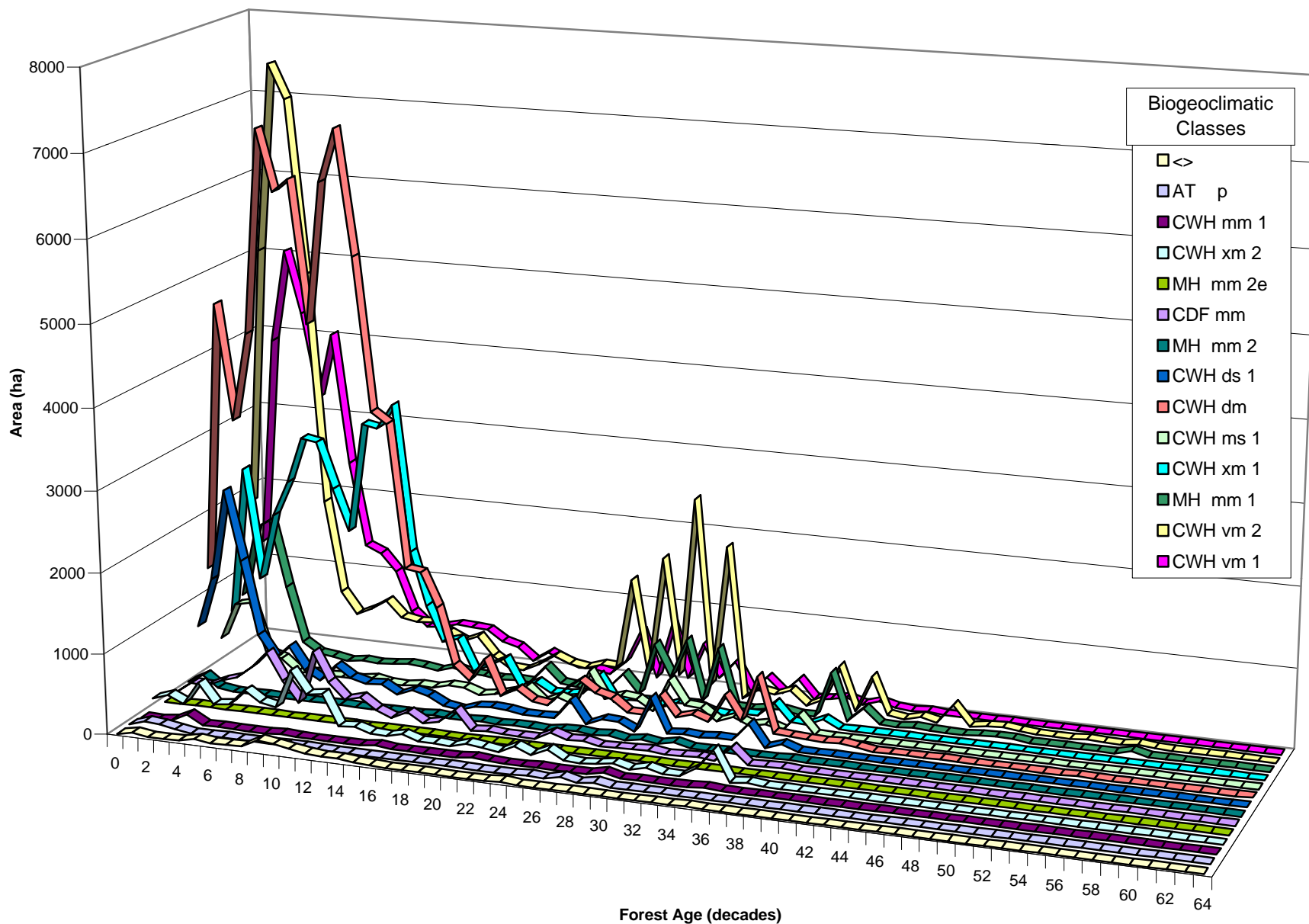
Although the guideposts for what constitutes “mature” timber have been reconfigured, “95% of culmination” is meaningless in terms of ecological maturity. The ramifications of decreasing minimum harvest ages and the Ministry of Forests intention of completing the liquidation of all remaining old and older mature on the THLB emerge as alarming signals.

Social and Economic Factors

The Sechelt Supply Block is inhabited by people who have strong convictions about “their” environment. They are part of a diverse economy and culture and feel threatened by the unilateral actions of the Ministry of Forests with regard to the forests in close proximity to their communities.

Drinking water quality is of primary importance to the community. TSR2 has included the Chapman and Gray Creeks community watershed reserves in timber supply with only one

**Figure 9a: Sunshine Coast TSA - Timber Harvesting Land Base
Area by Age and Biogeoclimatic Classification**



**Figure 9b: Sunshine Coast TSA - Timber Harvesting Land Base
Area by Age and Biogeoclimatic Classification**

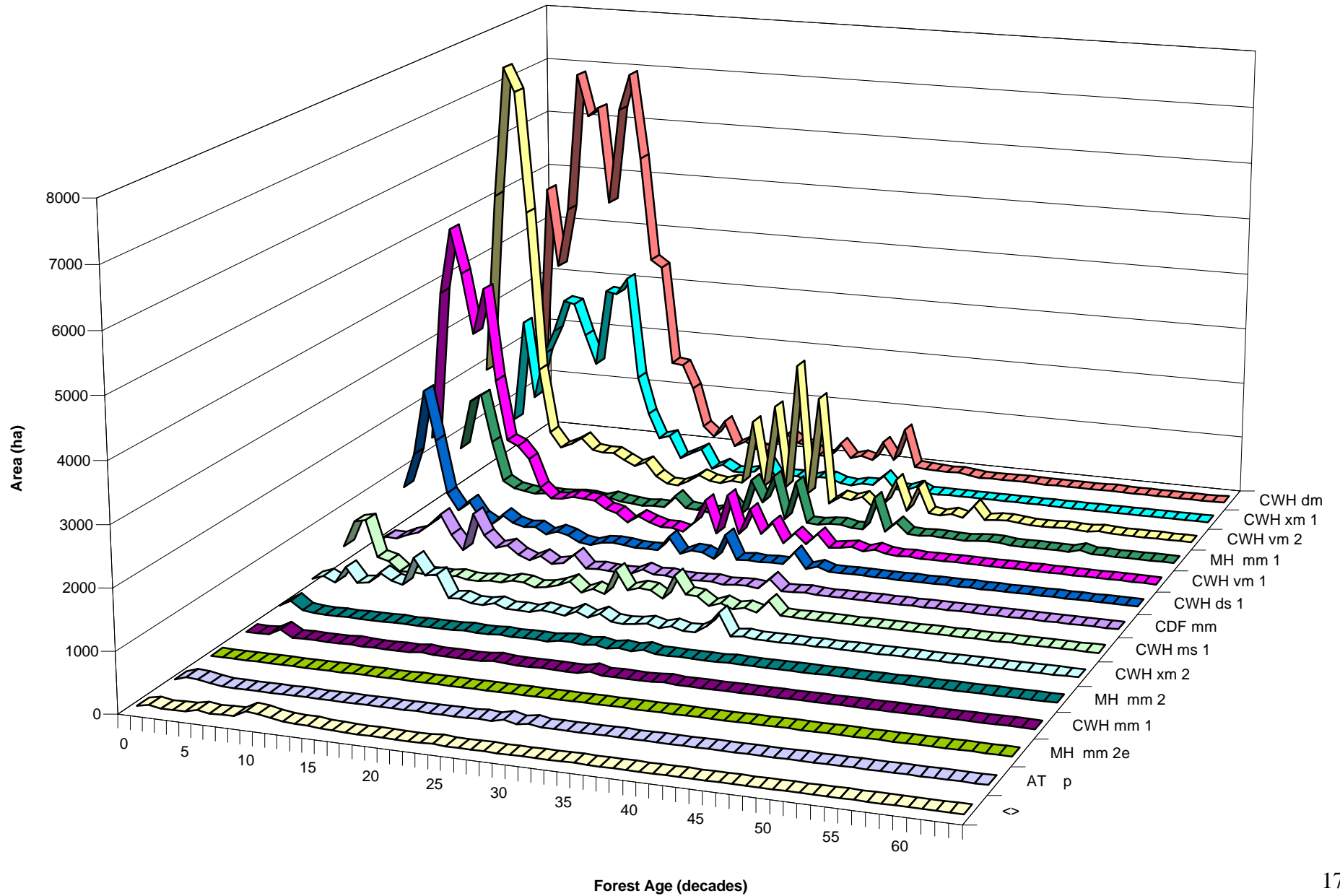


Figure 10a: Sunshine Coast TSA - Non-Contributing Productive Forest Area by Age and Biogeoclimatic Classification

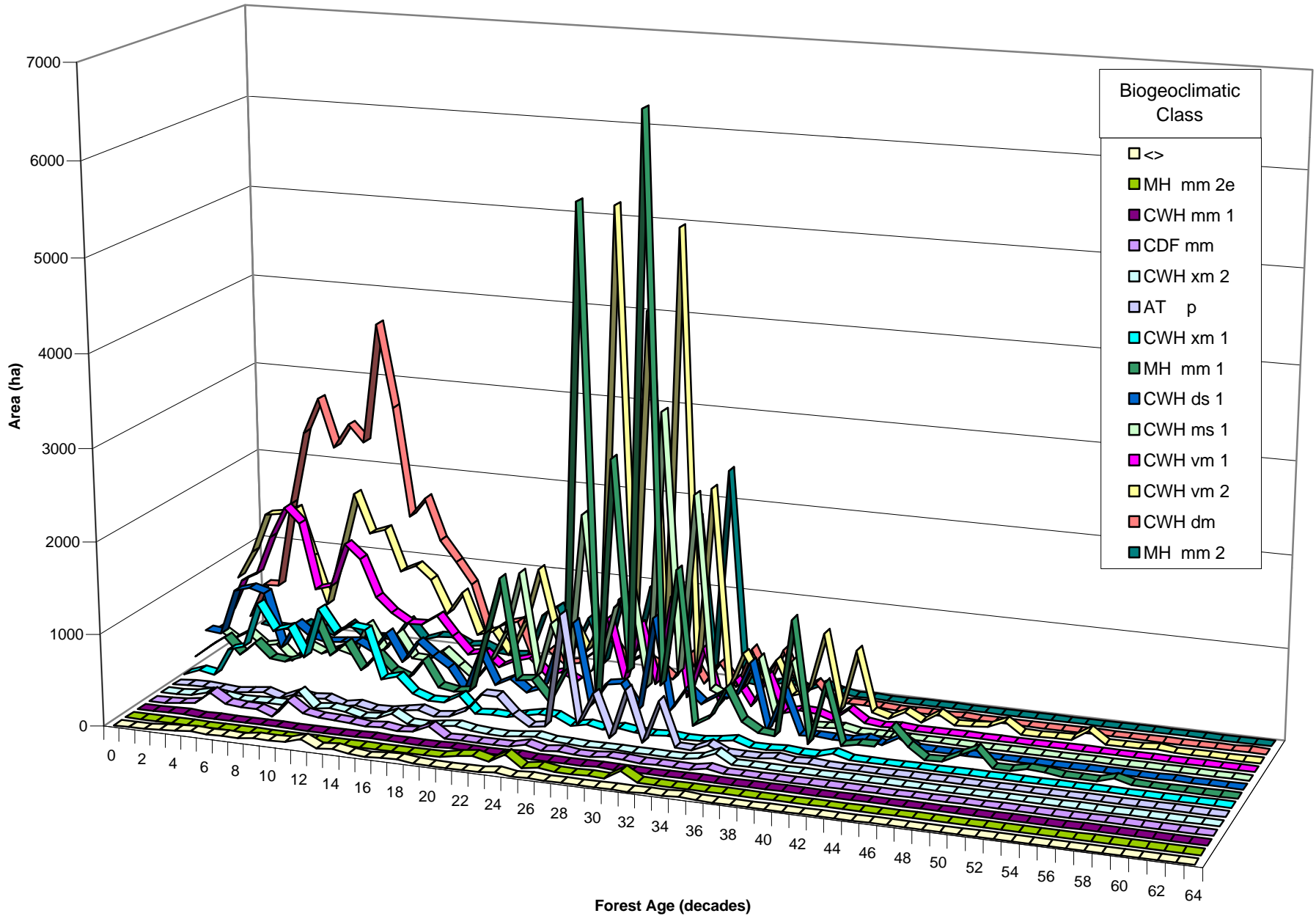


Figure 10b: Sunshine Coast TSA - Non-Contributing Productive Forest Area by Age and Biogeoclimatic Classification

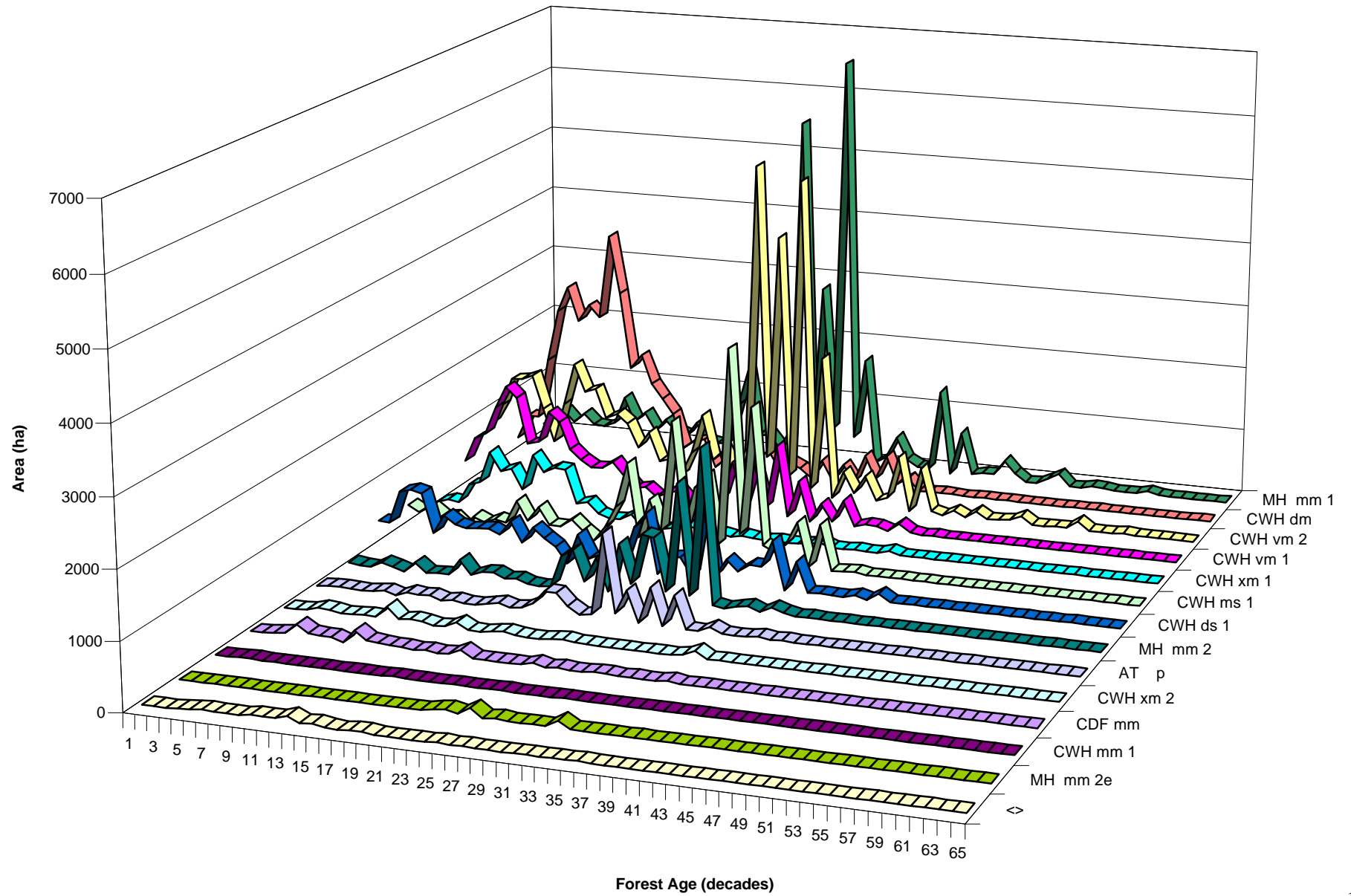
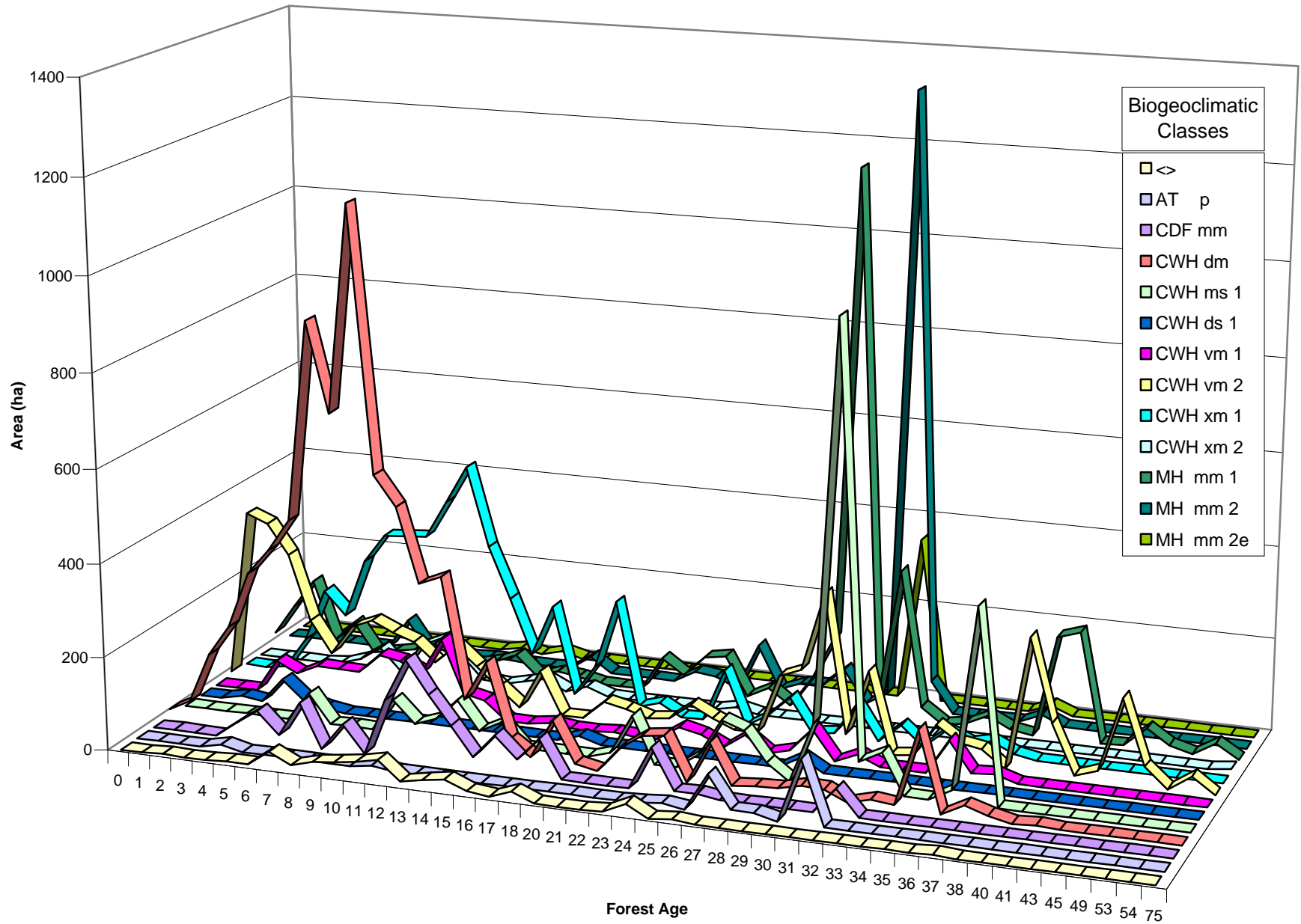
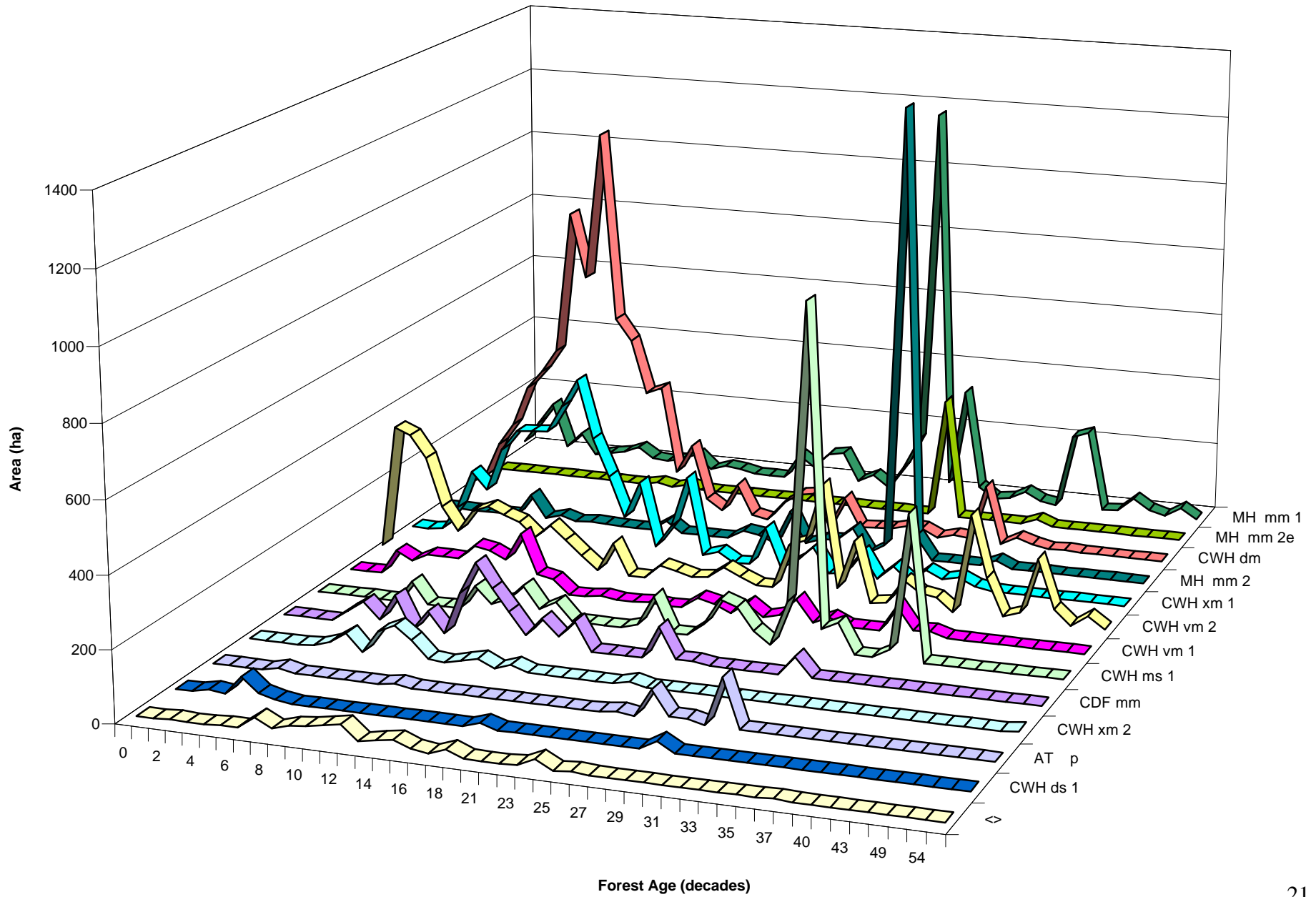


Figure 11a: Sunshine Coast Parks - Productive Forest Area by Age and Biogeoclimatic Classification



**Figure 11b: Sunshine Coast Parks - Productive Forest Area
by Age and Biogeoclimatic Classification**



sentence of discussion about “water resources for human use” being “under pressure from population increases and development in the TSA”. This poorly-timed move is apparently intended to end the ten year stand-off between the Sunshine Coast Regional District (SCRD) and the Ministry of Forests over the damage that has occurred in the community watersheds as a result of logging and road building.

In order to have logging in the two community water sources qualify as current management practices, the District Manager of Forests recently approved the first cutblock in Chapman or Gray Creek since the Sunshine Coast Regional District petitioned the Supreme Court for an injunction to halt logging in 1992. Block 204 was approved within a few months of being proposed for Category A status on Interfor’s 2001 FDP. This is an ill-advised, provocative act given recent events in other community water sources and the recent commitment of the former Minister of Forests to turn control of the community watersheds over to this community.

Excessive value has been placed on the Sunshine Coast TSA as a source of raw logs, to the complete exclusion of all other resources. The current optimistic timber supply forecast has been enabled by policy which has the effect of circumventing FPC Act provisions and the Biodiversity Guidebook’s very conservative (and acknowledged to be minimum) requirements for maintaining ecosystem functioning in the short term. Strenuous objections of the public and community non-government organizations regarding the continued liquidation of community watersheds; wildlife habitat areas; ungulate winter ranges; recreation areas and scenic landscapes are being ignored. TSR2 provides little for Sunshine Coast communities except 247-300 direct jobs, shared with Campbell River, in the “harvesting, administration and silviculture” forestry sectors. The cost – dedication of the entire productive forest land base exclusively for timber supply – is untenably high.

TSR2 sensitivity analyses have not adequately modeled community requirements, values and uses and the analysis report suggests that Sunshine Coast forest ecosystems best and highest use is supplying lower mainland commodity lumber producers and raw log exporters.

The Sunshine Coast TSA TSR2 maximization scenarios reflect Vancouver Forest Region timber supply priorities. Support for the small local milling sector in the form of an adequate local timber supply is largely limited to waste wood and problem types from large licencees and private land clearing. TSR2 has not addressed this issue although it mentions access to a reliable wood supply as an issue for small value added processors.

As of TSR2, BC’s largest multinational forest company now controls the alder harvest awarded to Coast Mountain Hardwoods by way of a partition to the THLB in 1996, its real value having been established by small value-added businesses unable to acquire wood any other way. This source is now also unavailable except from private land.

Alternate economic drivers were not analysed in TSR2 and have been left out of the forest equation. Impacts to already established ecotourism businesses on the Sunshine Coast, which will be caused by the further devaluation of scenic resources, was dismissed with the concept that clearcuts in scenic areas will be well-designed in the future. Community health impacts and costs and the cost of regional water treatment facilities were not considered. Costs to mitigate

for low flows during the drought season for fisheries survival is not a factor. Loss of local recreation opportunities has been similarly discounted, as have all uses except attaining commodity production goals. Community sustainability, health and economic potential issues are viewed as impacts to timber supply rather than as legitimate interests in Crown resources which must be accommodated before timber supplies can be accurately determined. Community access to timber supplies for smaller, local value added industries that could create more economic activity with less expenditure of natural capital also did not figure into TSR2.

Inhabited Landscapes as Components of TSR

The Chapman Landscape Unit supports many uses other than timber supply. The low BEO assignment in the Chapman ignores the significance of the Chapman and Gray Creeks community watersheds to Sunshine Coast communities and the fact that the LU contains three of the small Coastal areas that were designated under the Protected Areas Strategy. These factors alone should have resulted in a higher BEO assignment according to the Regional Landscape Unit Planning process outlined in Higher Level Plans - Policies and Procedures.

The realization of forest resources is place-specific for communities and is therefore spatially defined. The low BEO should only be considered for landscape units where timber supply is the primary consideration. Clearly, this is not the case in the Chapman and Sechelt landscape units where timber supply reductions have the least “social” impact in the Forest District and timber supply restrictions would confer the most benefits. The “problem” of proximity to communities of maturing second growth stands was recognized in the 1990 Options Report and conflicts were correctly predicted.

Considerable progress has been made toward developing a code of practices incorporating basic measures intended to maintain ecosystems that provide the goods and services we ultimately depend on. It is inappropriate that these basic measures still have not been implemented the way they were intended. TSR2 adjustments could temporarily postpone the inevitable but the price cannot be justified.

Evaluation

TSR2 is a flattering interpretation of current conditions on the Sunshine Coast TSA. In fact, current practices, as detailed, amount to little more than gerrymandering using waterbed theory methodology:

- Minimum harvest ages, instead of Allowable Annual Cut, have declined dramatically since 1990.
- Current practice allows the “borrowing” of old growth from biodiversity accounts negotiated and enacted just five years ago.
- Stands with as little as 300 m² /ha (\$8400 average stumpage per ha) at age 150 are now considered merchantable.

- Height class three old growth stands are no longer considered unmerchantable “scrub” and are now included in timber inventory. Since there are 8 height classes, this indicates a radical downward trend in timber supply.
- Visual quality objectives have been systematically devalued and have ceased to have any appreciable effect on maintaining scenic landscapes in coastal areas. Remaining visually constrained Retention areas (7000 ha compared to 26,000 ha in 1995) are almost entirely located in second growth forests and minimalist “visual green-up” standards have replaced the former requirement that the cut block matures before adjacent areas are logged. Preservation VQO has entirely disappeared from the Sunshine Coast visual quality spectrum (Retention looks like it’s next) and all VQOs have been adjusted to maximum allowable disturbance.
- Recreation features have been accounted for with a very small 263 ha reduction to productive forest. The 1990 Options Report predicted a significant increase in recreational usage in the TSA and acknowledged an inability to meet the expected demand for high quality recreation opportunities. The Ministry of Forests has apparently abandoned programs and allocation for the full recreation opportunity spectrum.
- Protection of Ungulate Winter Ranges in the SCFD ceased on October 15, 1998. Since then, these ranges have been effectively riddled by Category A approvals.
- No constraints on disturbance of Marbled Murrelet nesting habitat are recognized.
- Old growth logging is being allowed to proceed today in landscape units with severe old growth deficits and where these deficits have been known since 1997.
- Thirty years of well documented SCRD concern, ten years of intense public rejection of logging plans in Chapman and Gray Creeks and recent devastating events in unprotected community water systems across Canada have not deterred the Ministry of Forests from claiming the community watershed reserves once again for timber supply purposes.

Conclusions

Much has changed in just one decade, but not TSR. *Significant opportunities have been precluded* in the intervening time and new and much bigger challenges now face forest managers, not the least of which is a rapidly growing consensus about the next steps that are necessary. TSR2 provides an excellent snapshot of the old liquidation plan if carried to conclusion but does not provide a good basis for determining timber supply if sustainable forests and sustainable forest communities are the goals.