

Quesnel Forest District (QFD) Policy

Management of Mountain Pine Beetle (MPB) and Seral Stage Distribution

January 29, 2003

Introduction

The Quesnel Forest District (QFD) has been subject to an increasing MPB population since 1991, and the beetle has reached epidemic proportions in recent years. Until 2000, the volume of beetle-attacked timber identified through the annual detection flights was less than the district's allowable annual cut (AAC), so management of the beetle through aggressive harvesting and single tree treatments was viewed as a reasonable strategy.

After the 2001 flight it was apparent that MPB populations in the QFD had exceeded the level at which control of the epidemic could be seen as a viable objective, and approximately 80,000 hectares of infested timber was observed. The latest overview (2002) information indicates that an area of approximately 370,000 hectares is infested by the MPB. This translates to a timber volume of approximately 100,000,000 cubic metres. Annual harvesting capacity available to address the infestation is at most 4.5 million cubic metres, so there is roughly 22 times as much timber needing harvest as there is capacity.

The magnitude of the discrepancy between capacity and need necessitated a review of the district's strategic objectives in managing the beetle. The "suppression" strategy which had been in effect for part of the district was no longer viable, and a strategy of "maintain low" was adopted for most of the district. As of 2002, most of the district has been designated as salvage or abandon in the district strategic plan, with the eastern part of the district, including parts of the two tree farm licences (TFL's) managed under a "holding action" strategy. Licensees have been advised of the expectation that harvesting proposals will be in areas with at least 25% beetle attack by stem count as of April 1, 2003.

In December, 2001, the entire QFD was designated as an Emergency management Unit (EMU) under the Bark Beetle Regulation. The district was zoned as a sanitation zone, where the primary management action will be harvesting. There will be little or no single tree treatment.

Seral Stage Distribution

In July, 1996, the Biodiversity Strategy Committee published a Biodiversity Conservation Strategy as a non-integrated component of the Cariboo-Chilcotin Land Use Plan (CCLUP). This strategy included a list of draft landscape units, and an indication of surpluses or deficits of mature and mature + old forest for each landscape unit. The QFD generally showed surplus situations, but some landscape units were in deficit or showed only a small surplus in certain NDT-BEC units. In the intervening years, with approximately 70,000 hectares of harvesting concentrated in Pine types in the central and western portion of the district, the situation has undoubtedly changed. Any seral deficits have been exacerbated by extensive beetle infestations, which may or may not have been harvested.

The latest data available indicates that the following draft landscape units are either in deficit situations in some NDT-BEC units, or only have small surpluses of mature or mature plus old forest: Ahbau, Baker, Clisbako; Jack of Clubs, Narcosli, Pantage, Ramsey, Snaking, Tibbles, Twan, Umiti, Whittier, and Tako (TFL 5).

Consideration of Seral Stage Distribution in Operational Plans and Site Plans

Until 2001, the imperative to harvest beetle attacked timber was given precedence over landscape level biodiversity considerations. This was appropriate in light of the objective of controlling the infestation through harvesting and single tree treatments.

The detection information gathered in 2001 and 2002 has made it clear that the infestation will not be brought under control through harvesting, although harvesting of beetle-infested trees will reduce the rate of spread of the epidemic.

It is appropriate that persons preparing and reviewing forest development plans and amendments, forest stewardship plans, and site plans give greater consideration to how landscape level biodiversity objectives will be achieved. This will be particularly important in the above-noted draft landscape units and in all areas where cut blocks over 60 hectares are being proposed. Plan proponents and reviewers should be familiar with the concepts put forward in the Biodiversity Conservation Strategy Committee document: *An Integrated Mountain Pine Beetle-Biodiversity Conservation Management Strategy*. This document recognizes that beetle-infested forests have some attributes that support landscape and stand level biodiversity objectives, and it provides some advice to persons tasked with developing forest management plans in the beetle zone.

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