
CITY OF KELOWNA

MEMORANDUM

Date: March 11, 2008

File No.: 6130-07

To: City Manager

From: Ian Wilson, Urban Forestry Supervisor

Subject: Pine Beetle and Forest Health Update

RECOMMENDATION:

THAT Council receive for information the March 11, 2008 report from the Urban Forestry Supervisor on the status of pine beetle in Kelowna.

BACKGROUND:

British Columbia is currently experiencing the largest recorded mountain pine beetle (MPB) outbreak in history, with 13 million hectares of attack mapped as of 2007 (BC Ministry of Forests). The northern and central interior has already been devastated, but the infestation is continuing to expand in the southern interior region. The main body of the infestation appears to be moving into the Okanagan area, and increasing levels of attack have been seen in Kelowna over the last two years.

A recent analysis of Kelowna's urban forest found that ponderosa pine comprises approximately 24% of Kelowna's total tree canopy, or about 600,000 trees. According to Provincial and Federal government estimates, about 80% of these trees are expected to be lost by the year 2013.

Cooler summer weather in 2007 helped to delay the MPB flight and reduce the severity of attack. Over the winter, however, Parks crews identified more than 500 infested trees on city property that have now been removed, at a dozen sites throughout Kelowna. The largest concentrations of attack were found at Dilworth Mountain, Knox Mountain and Mission Ridge parks. Heavy infestations have also been reported on some private properties in the Mission and along Kelowna's lakeshore. Infested trees do not generally turn red until the following spring after attack, and it is likely that more dead or dying trees will be evident by June of this year.

In addition to MPB, the Okanagan has experienced problems with a related pest, the Western Pine Beetle (WPB). Unlike the MPB which attack most species of pine, the WPB only attacks ponderosa pine and seems to be less of a threat overall. WPB populations appear to be decreasing in some areas, while MPB attack has been on the rise.

The City's Pine Beetle Hotline (469-8457) was heavily utilized, with an estimated 700 phone calls in 2007. The pine beetle information page on the city website has also received almost 10,000 visits since tracking of site visits began in November 2006.



Many residents are still interested in how they might prevent attack on their trees. Unfortunately, few options exist and none are guaranteed. Some methods such as "fibreglass screening" are showing promise but are still being tested. Given that high rates of tree mortality are expected, we are advising the public that it would be wise to consider replanting trees now.

FUNDING INITIATIVES:

Through a partnership with "Service Canada" (formerly HRDC) and a local fuel modification contractor, the city received approximately \$400,000 in funding in 2007, to assist with pine beetle control, fuel modification, and disposal of infested wood from private properties. Private property owners were required to cut their own trees and haul them to the property line, where the Service Canada crew could chip and haul away the wood debris. The time spent at any single property was limited to a maximum of two days, to ensure that all properties had access to the program.

Due to a change in the program last year, the funding must now flow directly through a non-profit, therefore city staff have been in negotiations with local non-profit groups as well as Service Canada to renew the program for 2008. It is hoped that an announcement can be made soon regarding the continuation of the program.

Funding is also being received from the Province of British Columbia, through the Union of BC Municipalities. Through this program, the UBCM will reimburse up to 75% of costs for projects on municipal land that involve removal of beetle kill trees and fire hazard mitigation. In the most recent application (August, 2007), \$188,000 was approved for work on city land.

The Federal government also initiated a similar funding program in late 2007. Recently, the city received \$54,000 for the removal of beetle infested and hazardous trees in parks. The federal funding can also be used as leverage, to receive additional provincial money. The Parks Division is planning to apply for more federal and provincial assistance, in 2008.

FUTURE PLANS AND CHALLENGES:

As the pine beetle outbreak progresses, it will be necessary to increase tree removal and logging activities on public lands, in order to remove hazards. Rehabilitation activities are currently underway in affected areas, and will need to be expanded accordingly, including seeding of native grasses and tree planting. Native seedlings (9,500) have been ordered for planting in spring of 2009, and more plants will be ordered as required.

Trees that are killed in very steep or inaccessible areas will present unique waste disposal challenges. Ground-based logging methods, such as the use of skidders, can cause excessive site or soil degradation on steeper sites, while helicopter logging is prohibitively expensive. The most economical method of dealing with these areas is generally "pile and burn". This technique has been avoided due to air quality concerns, but it may be necessary to seek Council's approval to re-visit this option in certain circumstances.

To date, Parks has been able to find some limited markets or uses for infested ponderosa pine, and some of the infested materials have also been ground up for use in the City compost program. The RDCO Parks department recently purchased an "air curtain burner" and has also offered the use of this equipment which could be rented or leased for city projects, as necessary. Disposal options for private wood waste, including chipping, composting and burning are under review by City and RDCO staff.

In other parts of the Kamloops Forest Region, additional forest pests have also been on the rise, such as Douglas-fir tussock moth and spruce budworm. These insects are generally less damaging than MPB, but staff will also be monitoring their status in the Kelowna area, together with the Ministry of Forests.

INTERNAL CIRCULATION TO:

Bylaw Services; City Clerks Office

CONSIDERATIONS THAT WERE NOT APPLICABLE TO THIS REPORT:

LEGAL/STATUTORY AUTHORITY:

LEGAL/STATUTORY PROCEDURAL REQUIREMENTS:

EXISTING POLICY:

FINANCIAL/BUDGETARY CONSIDERATIONS:

PERSONNEL IMPLICATIONS:

TECHNICAL REQUIREMENTS:

EXTERNAL AGENCY/PUBLIC COMMENTS:

COMMUNICATIONS CONSIDERATIONS:

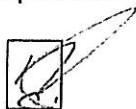
ALTERNATE RECOMMENDATION:

Submitted by:



Ian Wilson, Urban Forestry Supervisor

Approved for Inclusion:



Cc: David Graham, Director of Recreation, Parks and Cultural Services
Joe Creron, Parks Manager
Mark Watt, Environment and Solid Waste Manager
Rene Blanleil, Fire Chief