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## CITY OF KELOWNA

# MEMORANDUM

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**Date:** October 30, 2006  
**File No.:** 6130-07  
**To:** City Manager  
**From:** Urban Forestry Supervisor  
**Subject:** Pine Beetle Update

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### **RECOMMENDATION**

THAT Council receive for information the October 30, 2006 report from the Urban Forestry Supervisor on the status of pine beetle;

AND THAT the beetle education, control and rehabilitation program continues in 2007, subject to the approval of the 2007 budget.

### **UPDATE**

Since the last update to Council in March, 2006, there have been several new developments with regards to pine beetle infestations in Kelowna:

- The summer of 2006 was another bad year for beetle attack. In addition to western pine beetle (WPB), which attacks only ponderosa pine, significant infestations of mountain pine beetle (MPB) have occurred in the Okanagan.
- MPB attacked areas have been noted so far at Waterfront park, near UBC Okanagan, and at Knox Mountain. MPB will attack almost all types of pines, including exotic species such as Scotch pine. Most attacked trees will not be noticeable for some time yet, and we expect to discover many more infested pines over the winter.
- A contract with "Service Canada" (formerly HRDC) and our fuel modification contractor, Betty van Exan, was initiated in April, 2006 and was recently renewed for another six month term. Service Canada contributed \$400,000, while the City paid about \$50,000 for this project. The program has been very successful in assisting private property owners. In the first six months, the Service Canada-funded "Beetle Coordinator" returned over 460 phone calls, conducted more than 260 site visits to private properties, and crews disposed of approx. 130 tons of infested wood waste originating on private lands.
- In addition to helping private properties, Service Canada crews helped remove and dispose of hundreds of infested trees from City-owned properties. They also helped to wrap trees in Waterfront and Lions Parks with fibreglass screening, an experimental treatment to protect mature trees in these areas.
- A pine beetle taskforce was set up with membership from the City, RDCO, BC Parks, and the BC Ministry of Forests. The intent of the task force was to better communicate and develop joint strategies for dealing with forest health issues in the Central Okanagan. Two meetings have been held to date. Good progress was made on coordinating beetle control efforts and communicating successes and failure.

- A meeting with the Pest Management Regulatory Agency (PMRA) and other Thompson-Okanagan municipal staff will be held on November 6<sup>th</sup>. The purpose is to further communicate and coordinate efforts, and to request the registration of new pest management tools (e.g. new injectable pesticides) by the federal government.
- A research project in 2006 was initiated in cooperation with the University of Northern B.C. to test the potential use of repellents for prevention of attack on high-value trees. Results are still being analysed but generally indicate that treatments worked well in Kelowna, where beetle populations are still low to moderate. However, these treatments did not work very well in the Kamloops area, where there are extreme populations.

## **FUTURE OUTLOOK**

Unfortunately the outlook for 2007 and beyond is very bleak. Although the infestation levels of MPB at the provincial level are now starting to drop as beetles run out of green trees further north, the infestations in the south of the province are still increasing exponentially. According to provincial experts, even if we experience a very severe winter (which is unlikely), the beetle infestation will continue because of the sheer size of the beetle problem.

Kamloops started to experience MPB attack several years ago and are now seeing 90% infestation levels in their forests. It is likely that the same trend will continue in the Okanagan.

The potential losses in Kelowna and the Central Okanagan are quite significant. Forest cover maps indicate that within the City of Kelowna alone, about 15% of the land area (almost 3,000 ha) is pine forest. This does not include the thousands of backyard trees in urban areas, or mixed Douglas-fir and pine stands. Therefore the impending infestation has major consequences for our region, including the potential for:

- Economic impacts (tourism, recreation value of parks and open spaces, effects on property values, and the cost to landowners to remove and dispose of dead trees);
- Hazards created due to dead and dying trees, and increased fire hazard;
- Significant waste management problems resulting from tons of wood waste;
- Air quality problems created by burning of dead or infested wood;
- Ecological and environmental impacts, due to large scale changes in forest composition and structure; and
- Drainage impacts, as dead forests will no longer intercept rain or snow, resulting in increased runoff or landslides on slopes.

The Beetle Task Force feels that at this point the beetle “control and prevention” program will have to start shifting towards a program of salvage, rehabilitation and recovery. There is still hope that we can save some high-value urban trees but we are unlikely to win the war.

Therefore, staff recommend the following program for 2007:

- Continue to educate the public about this impending problem and their options, so they can begin to prepare now, and perhaps take steps to replant and try to save high value trees;
- Create resources for the public to encourage them to replant and rehabilitate infested areas, e.g. by providing information as well as free or subsidized seedlings.
- Continue to lobby the provincial and federal government for assistance. One positive aspect is that the B.C. Ministry of Forests, through the Union of BC Municipalities (UBCM) Wildfire funding, may help to fund the cleanup and reduction of fire hazard on municipal lands in a 25% City of Kelowna / 75% Provincial funding split.

- Continue to lobby the federal government for new pest management tools, for example a new injectable pesticide is very promising but is not yet registered for use in Canada.
- Strive to find innovative uses for infested ponderosa pine. Private industry has been reluctant to utilize this wood in the past.
- Begin a regional process to deal with the wood waste issue. If this is not dealt with proactively, it may become a burden on local landfills and/or become an air quality issue. If logging and disposal costs are too high on private lands, many dead trees may simply be left and create future fire hazards.
- Staff do not recommend creation of a bylaw that compels owners to remove and dispose of infested trees. While these actions may help in the short term, such a bylaw will not stem the tide of beetle immigration into the city. However, dead or hazardous trees should be dealt with through changes to wildfire bylaws or policy.

This program will be very significant, therefore staff have incorporated a new "Beetle Coordinator" position into the 2007 budget requests.




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Urban Forestry Supervisor

c.c.     Director of Recreation, Parks and Cultural Services  
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