

Date: February 21, 2007



TO: Board Members – Vancouver Park Board
FROM: General Manager – Parks and Recreation
SUBJECT: Storm Damaged Park and Street Trees - City wide

RECOMMENDATION

- A. THAT the Board adopt the Park and Street Tree Recovery Initiative as outlined in this report;*
- B. THAT the Board approve \$50,000 from the Corporate Sponsorship Fund for the City wide park tree recovery program;*
- C. THAT the Board approve \$50,000 from the Corporate Sponsorship Fund for the VanDusen Botanical Garden recovery program as the Park Board contribution towards an anticipated jointly funded program with the VanDusen Botanical Garden Association.*

POLICY

The Street Tree Management Plan adopted by Council and the Park Board in 1990 established standards for street tree pruning, planting and maintenance.

The Tree Removal and Replacement Policy adopted by the Park Board in 1990, established standards for park tree removal and replacement.

The Board's policy on the approved use of Corporate Sponsorship Funds contains the following criteria:

1. To fund one-time expenditures to a limit of \$50,000 that will support revenue-generating activities and the money repaid into the Corporate Sponsorship account from the increased revenues within a period of three years.
2. To fund initiatives with one-time expenditures to a limit of \$50,000 that will result in improved efficiencies.
3. To fund one-time expenditures over and above the existing funding level in the operating budget which are beneficial to the overall Parks and Recreation system.
4. All expenditures require Board approval.

BACKGROUND

There are currently 130,800 street trees in Vancouver. Virtually all parks have trees, although they have not been fully inventoried.

On November 26 and 27, 2006 heavy snowfall caused breakage and destruction to thousands of street and park trees. On December 15, 2006 winds gusting to 94 kph damaged and destroyed more street and park trees. On January 7, 2007 winds hit 113 kph and two days later, on January 9th they gusted to 98 kph. These combined storms resulted in the destruction of almost 1,000 street trees and damaged another estimated 3,000 street trees. Over 230 mature park trees were also destroyed with hundreds more damaged. VanDusen Botanical Garden also lost approximately 129 trees and many more shrubs, including rare and unusual specimens.

Park Trees

Approximately 350 park trees (other than those in Stanley Park) were destroyed in the storms and there are likely to be more, particularly in the remnant woodlands which have not been fully inventoried. Included in this total is Queen Elizabeth Park which lost 45 trees, some of which were hard to find species from the arboretum.

Neighbourhood park trees are generally planted to replace those that are removed due to death or disease. Limited funding for park replacement tree planting is available in the districts' horticulture maintenance operating budgets. A program to expand the stock of neighbourhood park trees does not currently exist, however new park trees are often added during renovations to existing parks, generally from Park Development Capital budgets. With the limited funding available, it will take approximately three years to replace all park trees lost through storm damage from existing operating budgets.

The storm damage to the park trees occurred during the winter season and the clean-up is being done with existing staff and equipment diverted from regular winter maintenance and will be mostly complete before the spring season begins. Turf and planting bed repair will also be completed by regular park maintenance staff. There was no significant damage reported to neighbourhood park buildings, fences or other park structures from the winter storms.

Most of the destroyed park trees were deciduous and there is little value in the lumber. Some of the wood will be given to hobbyists or carvers on request and the rest will be taken to Spanish Bank to be made available as firewood.

For public safety reasons, Arboriculture staff are performing hazard tree inspections in all neighbourhood parks and golf courses in order to prioritize remedial work. Inspections will take about six weeks.

Street Trees

Approximately 1,000 street trees were destroyed in the storms and an estimated 3,000 were damaged.

Over the past decade, the arboriculture section has removed an average of 1,200 street trees each year, usually trees that are dead or severely diseased. Over the same period an average of 3,700 new trees have been planted annually with approximately 1200 replacement trees funded from the operating budget and 2500 new trees funded from the capital budget and other sources such as local improvements and developers. Until recently there has been sufficient funding in the operating budget to replace most of the trees removed due to death and disease, however, recent budget initiatives have reduced the annual street tree replacements from approximately 1200 trees to 1000 trees.

Removal of the debris and repair of the broken limbs from damaged and destroyed trees will be largely complete by the end of February 2007. The Park Board has received considerable assistance from City of Vancouver Streets Engineering crews who participated in the clean-up of fallen branches. The clean-up work has delayed regular street tree maintenance and it will not be possible to complete regular neighbourhood pruning targets this season. In addition, seasonal tree planting has been delayed as all crews have been diverted to work on storm clean-up. This has resulted in a reduction in the 2006-2007 planting program to about 2,500 street trees, about 1000 trees behind target.

Risk Management Issues

There were many instances of damage to private property resulting from tree or branch failure following the four major snow and wind storms. To date, the Risk and Emergency Management Department has received 47 claims for damage. Most of the damage is relatively minor (e.g. dents to parked vehicles and broken fences). All of the street trees involved were inspected and maintained to policy standards and the claims are being processed by Risk & Emergency Management.

All street trees are subject to scheduled inspections. Given the extent of the damage from the recent storms, street trees are currently being given an additional inspection to ensure that the risk to the public is minimized.

DISCUSSION

Recovery Plan

The essence of this recovery plan is to replace trees which were lost in the recent winter storms. There are three aspects of this program: Street Trees, Park Trees and VanDusen Botanical Garden.

A. Street Trees

It is proposed that the street trees lost to the storms be given priority for re-planting through existing operating and capital budgets. Replacement of the majority of these trees can be accomplished in one year.

The Board's long range street tree plan calls for placing trees on all suitable residential streets. There are a limited number of suitable residential street locations in the City for tree planting. Currently, approximately 4,000 new sites have been identified and once those are planted the capital expansion of the street tree inventory will largely end. The current schedule anticipates that to occur in 2012. However, adding the 1,000 street trees lost to the storms and the deferred planting of 1,000 street trees due to the storm clean-up, will lengthen the planting schedule by approximately 12 months. Staff will endeavour to reduce this impact over the next five years.

B. Park Trees

There is a more limited ability within district horticultural maintenance budgets to implement an effective replacement tree program. In order to boost District efforts, including those in Queen Elizabeth Park, it is proposed to add \$50,000 from the Corporate Sponsorship Fund into these budgets in 2007 to assist in the tree replacement program. Funding is intended to assist in purchasing replacement trees (and related costs), most of which will be provided from the Langley Tree Farm at cost; existing District budgets will provide the cost of labour. With this support, it is anticipated that the park tree replacement program can be completed within one year.

C. VanDusen Botanical Garden

The storm damage at VanDusen Botanical Garden was extensive with a total of 412 trees and 144 shrubs damaged. Some of the 129 trees destroyed were part of the Adopted Trees Program and are cared for by the Garden in long term agreements. Many of the trees are rare species and the estimated replacement cost of destroyed and damaged trees and shrubs is reported to be \$150,000. Cost estimates are based on an average of \$350 per tree and \$100 per shrub. The higher cost is related to the cost of purchasing more mature specialized and very diverse stock from outside suppliers. Existing staff will plant trees as part of their regular duties. The VanDusen Botanical Garden Association has indicated a willingness to assist in the recovery effort with a special storm recovery fundraising campaign. An addition of \$50,000 is recommended for the VanDusen Botanical Garden operating budget from the Corporate Sponsorship Fund, with the

anticipation that this program will stimulate the Association fundraising campaign resulting in a jointly funded recovery plan. It is anticipated that the full repair of the garden in terms of plant collections evaluation, plant replacement and plant pruning and rejuvenation will take three years.

Source of Funding

The recommended allocation from the Corporate Sponsorship Fund is consistent with the fund's objectives. Sufficient funding is available within the fund.

SUMMARY

While it will take decades for new trees to mature to the point where parks and streets regain their former appearance, the proposed contribution from the Corporate Sponsorship Fund will hasten recovery efforts.

Prepared by:

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