



To: Parks, Recreation and Cultural Services
Committee

From: Dave Semple
Director of Parks Operations


Re: **Problem Boulevard Trees**

Date: September 14, 2004

File:

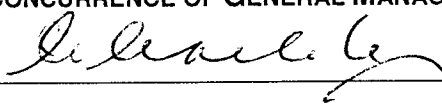
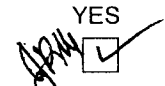
Staff Recommendation:

1. That Council approve Option 3 as outlined in the report;
2. That Council approve the changes in the Urban Forestry Management Strategy Tree removal and replacement policies as outlined in this report;
3. That a priority list for the replacement of problem trees be established.



Dave Semple
Director of Parks Operations
(3350)

Att. 2

FOR ORIGINATING DIVISION USE ONLY					
ROUTED TO:		CONCURRENCE		CONCURRENCE OF GENERAL MANAGER	
Engineering	Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>	
Parks, Design, Construction & Programs..	Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>	
Policy Planning	Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>	
Transportation.....	Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>	
Finance.....	Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>	
REVIEWED BY TAG		YES	N/A	REVIEWED BY CAO	
		 <input checked="" type="checkbox"/>	<input type="checkbox"/>	YES	N/A
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Staff Report

Origin

The Urban Forestry Management Strategy, adopted by Council in 2001, made recommendations for implementation of tree conservation, urban forest enhancement and community stewardship.

The strategy did not deal with removal of certain type of problem trees that had been planted in the past on city property. Requests and petitions from the community for the removal and replacement of certain boulevard trees are outside the approved strategy. Staff have difficulty responding to requests that are outside this policy direction.

This report deals with resolving “problem boulevard trees” in our neighbourhoods and recommends a solution to removing and replacing problem trees within Richmond neighbourhoods.

Analysis

Richmond’s Urban Forest Management Strategy Vision states *“Richmond’s urban forest will be retained and maintained to enhance the quality of life and ecological integrity of the City”*.

The City has been quite successful in planting trees since the Urban Forest Management Strategy was adopted and the selection of the “correct species” for these locations have kept problems to a minimum.

However, the poor species selection prior to the strategy being adopted and the unforeseen problems developing as the trees matured, makes maintenance difficult or impossible on trees planted 20 years ago. The standard practice is to maintain boulevard trees and not remove or replace them. There are approximately 1,000 problem trees identified in the Boulevard Tree Inventory (Attachment 2) that the City needs to take a different approach to such as removal of the trees in a systematic way and replace with better suited species.

Maintenance challenges the City is currently facing:

1. The City receives anywhere from 1,000 to 1,400 tree complaints per year. Five tree species are responsible for at least half the problems.
2. The City has developed pruning programs to keep large trees in small spaces. The programs are inefficient, laborious and costly, and over time this type of pruning will lead to other problems. These programs would not be necessary if the correct tree had been chosen for planting in the first place.
3. Maintenance cost for problem trees is approximately \$100,000.
4. There is no cure for some chronic conditions that the trees have. This frustrates both homeowners and staff.

5. Pesticide solutions are no longer appropriate in an urban setting as environmental practices are expensive and have proven not as effective. Choosing disease resistant trees is a basic principle of our Integrated Pest Management Strategy.

Possible solutions and ramifications are summed up in the following table:

	Option	Description	Ramifications
1	Do Nothing	Discontinue pruning, pest management and tree maintenance programs. Tell residents to live within the nuisance problems.	More complaints, petitions to Council, frustration from the community leading to acts of vandalism. Problems would become more serious. Maintenance savings would be reassigned.
2	Same level of service	Continue pruning, pest management and tree maintenance programs.	Problems are not resolved. Costs will increase as trees grow. As pesticide use declines, costs will also increase.
3	Gradual replacement over a long period of time	Establish a replacement program to replace problematic trees with the correct size and disease resistant tree on an annual basis.	The scope of this would be limited by budget. All problematic trees would be replaced over time resulting in substantial cost savings to the City. Maintenance savings could be reassigned. Homeowners' concerns would be resolved.
4	Remove all problem trees and replace them	Replace all 1,000 problem trees with the correct size and disease resistant trees.	This operation at \$1,000 per tree would cost approx. \$1,000,000. No more problems. Homeowners' concerns would be resolved. Maintenance savings could be reassigned. Neighbourhoods would be drastically changed for a while until the trees matured.
5	Remove all problem trees and do not replace them	Systematic removal of all problem boulevard trees and do not replace with new stock.	Over a series of years, staff would remove problem trees throughout neighbourhoods in Richmond as funds are available. No city replacement or adjacent property owner replacement at their cost with approved species. Neighbourhoods would change from being heavily treed to no trees or inconsistent plantings.

In analysing the options, option No. 3, the gradual replacement of problem trees over a long period of time, is the most reasonable and practical of the solutions and will garner support from residents impacted.

To achieve this we must expand the Tree Removal and Replacement Policies as outlined in Attachment 1. This will then allow for nuisance trees to be considered within the overall tree strategy.

Developing a priority system and removing nuisance trees will enable the City to resolve a number of issues that we are faced with when dealing with problem boulevard trees in the neighbourhoods.

To enable this approach, staff recommend that the policies for tree removal (Attachment 1 Section 3.2 Tree Removal and Replacement Policies) be expanded to include the policy statement:

“Tree roots, pests and diseases that are nuisances may be considered as criteria for tree removal if the problems caused cannot be rectified by a management measure.”

and that the paragraph stating that these causes will not be considered as criteria, be deleted.

Financial Impact

There is no financial impact at this time. Tree removal and replacement could occur within the existing budget supplemented with the community to joint sponsor this program.

Many residents are prepared to share costs with the City just to get rid of “their” problem tree and replace it with a disease resistant tree. This could be a standard rate or a percentage of the final cost. Residents will also be asked to care for the new boulevard tree further reducing managing costs for the City.

Conclusion

The increasing challenges of urban forest maintenance are reflected in the amount of responses and complaints received from residents. Tight budgets and environmental initiatives will continue to make high maintenance or unmanageable trees a liability that the City alone cannot afford.

By making adjustment now to the Urban Forest Management Program, along with encouraging residents to participate in the solutions, the interests of the community and the residents will be achieved.



Gordon Barstow
Manager, Parks Operations
(1210)

Excerpt from City of Richmond's Urban Forest Management Strategy (REDMS 419044):

3.2 Tree Removal and Replacement Policies

3.2.1 Tree Removal Criteria

If it is found that a tree cannot be pruned to remedy a specific condition or situation and not maintain its natural form or health, the City, upon approval of the General Manager Parks, Recreation and Cultural Services Division, or designate, may approve removal of the tree under the following specific conditions:

1. The tree is hazardous (see Hazardous Tree Policy 3.3 for details);
2. There will be an unavoidable grade change that will significantly affect the health of the tree;
3. The tree's health and general condition are poor; and
4. The tree or part of the tree's trunk, branches or roots are unavoidably affecting public or private utility services, including water, paving, gas, telephone, telecommunications, electricity, sanitary and storm drainage and transportation services.

The General Manager Parks, Recreation and Cultural Services, or designate, will use the International Society of Arboriculture (ISA) tree appraisal method to determine the value of the tree, if necessary. That amount will be taken into consideration by the City of Richmond in cases where trees on public land or under the jurisdiction of the City of Richmond are removed without the General Manager Parks, Recreation and Cultural Services, or designate's, consent.

Roots, pests and diseases will not be considered as legitimate criteria for tree removal unless there is imminent danger or the situation is causing the tree significant and terminal decline that can not be rectified by management measures.

Rationale

Following Goal 1 – Tree Conservation and Policy 3.1, Tree Retention, trees should be retained where possible. The General Manager Parks, Recreation and Cultural Services, or designate will consider the criteria outlined in this policy to ensure that each tree is evaluated carefully before tree removal is permitted. In cases where a tree on public property or under Richmond's jurisdiction is removed without the General Manager Parks, Recreation and Cultural Services, or designate's, permission a fine will be levied based on the International Society of Arboriculture appraisal method. This is intended to deter such action in the future.

Where removal of a tree on public property is undertaken by the City, at the request of the applicant, all costs incurred as a result of that work will be borne by the applicant.

Implementation

Tree Removal Criteria

1. Designate a staff person as the City Arborist. This person, working under the aegis of the General Manager Parks, Recreation and Cultural Services, or designate, would evaluate applications and coordinate programs between departments, public utilities, business owners and residents;
2. Adopt International Society of Arboriculture standards to evaluate the value of and danger of trees;
3. Establish an Arborist's report format to confirm the condition of the tree to be removed, removal criteria suggested, and recommended course of action; and
4. Update the Fees and Charges Bylaw.

3.2.2 Tree Replacement Requirements

When trees are considered for removal a tree appraisal, based on the International Society of Arboriculture system, will be completed. A minimum 2:1 tree replacement ratio (2 trees replaced for every tree removed) will be required, at the cost of the applicant, where applicable. The replacement trees should be planted in accordance with planting programs and, where applicable, established standards. In those instances where the General Manager Parks, Recreation and Cultural Services, or designate, deems it inappropriate to replant in the same location as the tree that was removed, a cash- in- lieu contribution equal to the planted cost of a minimum two trees will be required.

Rationale

This policy promotes Goal 1 – Tree Conservation, as it helps ensure that there is no “net loss” in the urban forest if and/or when trees must be removed. The replacement ratio ensures that, even if one of the trees dies or has reduced growth, that the replacements will eventually replace the biomass (quantity of tree) that existed in the original tree. Tree replacement also mirrors, in some respects, the healthy natural life cycle of a forest where there is constant growth, decline and death and then growth once again. The health, diversity and longevity of the sustainable urban forest depends on this replacement cycle in a similar manner, where dead or dying trees are replaced by healthier trees.

Implementation

Tree Replacement Requirements

1. Coordinate tree replacement requirements through the tree removal process outlined in 3.2.1. under the supervision of the General Manager Parks, Recreation and Cultural Services, or designate;
2. Initiate a tree replacement program for trees that are not expected to live longer than 10 years and are already showing signs of decline; and
3. Develop guidelines to minimize longer term costs of tree removal due to improper planting or plant selection. (This may include specifying structural soils, root barriers and developing construction details.)

Boulevard Tree Species that are the biggest concern of Richmond residents.

Common Name	Botanical Name	Potential Height	Number of Trees	Problem
Linden Tree	<i>Tilia cordata</i>	50-75 ft.	265	<ul style="list-style-type: none"> • Aphids cause dripping honeydew that attracts wasps and creates a sticky black mess on sidewalks, cars and landscapes. • Chemical control and ladybug releases are only partially successful.
London Plane Tree	<i>Platanus acerifolia</i>	over 100 ft.	304	<ul style="list-style-type: none"> • Fast growing large trees in small places. • Pollen triggers allergic reaction for some residents. • Anthracnose fungus causes premature leafdrop in mid summer. • Extensive pruning program is done on a 3-4 year rotation.
European Ash	<i>Fraxinus excelsior</i>	30-50 ft.	336	<ul style="list-style-type: none"> • Anthracnose fungus causes premature leafdrop in mid summer. • There is poor recovery from fungus attacks. Trees look half dead with no hope of recovery.
Tulip Tree	<i>Liriodendron tulipifera</i>	75-100 ft.	72	<ul style="list-style-type: none"> • Aphids cause dripping honeydew that attracts wasps and creates a sticky mess on sidewalks, cars and landscapes. • Chemical control and ladybugs is only partially successful.
Lombardi Poplar Tree	<i>Populus nigra italica</i>	over 100 ft.	19	<ul style="list-style-type: none"> • Fast growing large trees in small places. • Older trees (after 35 years) will drop large stems that snap off and come down with considerable force. • Height reduction (topping) is a common strategy but the resulting suckering if not removed is more hazardous than the original tree top.