

**Report to Committee of the Whole
November 10, 2014**



**Waterloo Region
District School Board**

Inspired Learners – Tomorrow's Leaders

SUBJECT: Tree Management

ORIGINATOR: This report was prepared by Marilyn Allen, Executive Superintendent of Business and Financial Services and Treasurer, Ian Gaudet, Controller of Facility Services and Ron Dallan, Manager of Capital Projects, in consultation with Executive Committee.

PURPOSE/STRATEGIC PLAN:

The purpose of this report is to provide information to trustees about tree management in the Waterloo Region District School Board.

BACKGROUND:

In response to work undertaken by the Environmental Advisory Committee of the Waterloo Region District School Board, a Shade Policy Working Committee was formed in 2011. They reviewed relevant research on the topic and available information which resulted in a Report to Board.

On January 23, 2012, the Board passed the following recommendations with respect to the provision of shade and the planting of trees:

That the Waterloo Region District School Board continue programs associated with greening and the provision of shade; and

That the Waterloo Region District School Board encourage schools and school councils to examine their site and identify needs to be forwarded to Facility Services for budget prioritization; and

That the Waterloo Region District School Board adopt the draft shade policy as presented as Appendix F to this report; (attached as Appendix A to this report).

Since that time, administrative staff have continued to ensure that trees are planted according to Tree Planting Guidelines originally established in December 2011 (see Appendix B).

During the intervening period of time, there have been some instances where people in the local school community have objected to tree removal actions on the part of the Board. Most notably this occurs when constructing an addition to schools as trees are situated where the addition is planned.

As a result, the following motion has been proposed by Trustee Watson for the Board's consideration and deliberation:

That the Waterloo Region District School Board Sun Safety and Shading Policy 2011, be amended to include a communication strategy that would inform and allow input from school communities as well as surrounding neighbours before trees were removed from school property.

STATUS:

This report seeks to provide additional information to trustees to consider as part of the motion's impact and the practicalities of the actions proposed.

A strategic approach to tree management is not limited to an individual's perception of the installation, planting or removal of a tree. There are many other considerations when projects are being planned and actions being implemented.

There are two major times when Board staff will remove trees.

1. Tree Management

Part of the reality of a living resource is that the tree inventory needs to be managed over the life cycle of the tree. Trees have a life span and will often eventually need to be removed particularly when they are on sites which are frequented by students. Some are impacted by disease and pests (e.g., emerald ash borer). Some become overgrown and require thinning. Some simply die due to their age and become a danger. Ice, wind and storms also impact tree life. There are issues with student safety and Crime Prevention Through Environmental Design (CPTED) that need to be considered.

A plan needs to be contemplated to ensure that trees are cyclically replaced and others are carefully placed to ensure that over the longer time frame, the objectives for play and shade areas are achieved. There is high public and school interest in the benefits of trees and vegetation. Staff are keen to honour the spirit of school greening, preservation and growth of the tree canopy.

Critical to any tree management program, removal of end of life cycle or diseased trees is important for safety reasons. A particular tree may be causing other undesirable consequences (e.g., pollen and allergies). A tree may not appear to be damaged to a casual onlooker but it would pose a safety concern to those in the immediate vicinity.

An example of the ineffectiveness of a tree management program could be failure to address a safety issue which poses the potential for an accident.

For example, on June 25, 2014, in the Lambton Kent District School Board on the last day of school for the year (and the last day for the school) a tree fell on the D. A. Gordon playground shortly after the school was dismissed. The bell rang at 3:25 pm and at 3:45 pm half of a tree crashed onto a basketball standard in the playground. Luckily no one was injured but the potential was there to do serious harm to students.

The removal of trees is potentially a serious issue and poses a safety risk. School boards are responsible for the safety of their students. Ensuring that diseased or end of life cycle trees are removed is the responsibility of the school board. Professional expertise is required to assess the tree condition which is not dependent on community consultation.

2. School Construction

There are times when decisions need to be made to remove trees when construction takes place. This can often appear more negative to a community if the school site has a well-developed canopy. This is regrettable but often no other options exist. Many of our sites are not large and it is difficult to place added accommodation space on the site without impacting existing trees. There are many constraints already impacting our freedom to locate the new construction due to municipal and other legislated requirements.

Public input objecting to the loss of trees could seriously negatively impact a construction project that is intended to improve interior school spaces such as libraries, classrooms and gymnasiums to the point where the actual project could be significantly delayed or even abandoned. We actively work with design professionals to maximize all aspects of the site. When tree removal is unavoidable, we have demonstrated our commitment to replacement.

Through our Project Coordinators, we work with school administrators to advise them of the progress and implications of the work. Site drawings are provided to schools for sharing with their community. We are attempting to increase our communication to the adjacent community who may not have a direct connection with the school so they are informed of our projects. This is the venue to appropriately examine all the factors associated with school construction including tree removal and even more importantly the additional greening of the site.

We continue to be a leader in the province in terms of our shade policy and have a sound framework with guidelines to support the addition of trees on our sites in place while balancing the many competing design and construction demands. Our priority remains providing an optimal learning environment for students. The provision of shade is part of this.

Addressing the removal of trees is one issue in a very complex operation. Consulting on all aspects of the operation is critical to ensure that we are providing optimal learning spaces. To isolate one or any component does not optimize the total potential of the initiative.

Information about our tree program illustrates an active and proactive approach. Data as of the end of September 2014 shows the following plan.

Construction Projects

Construction Type	School	Removal	Addition	Increase
Addition	Breslau	8	10	+2
Parking Lot	Forest Heights CI	2	24	+22
Addition	Mackenzie King	4	10	+6
Addition	Manchester	15	31	+16
Addition	N.A. MacEachern	5	10	+5
New	New Riverside	0	50	+50
New	New Groh	0	50	+50
New	New Vista Hills	0	50	+50
Addition	Sandhills	10	20	+10
Addition	Tait	20	40	+20
New	Westmount	4	51	+47
	Major Tree Projects	68	346	278
	Other	7	20	
		<u>75</u>	<u>366</u>	
New	Chicopee Hills	100	25	
		<u>175</u>	<u>391</u>	

This chart illustrates that on our construction projects, 75 trees need to be removed and that they will be replaced by 366. This is a ratio of 4.9 to 1.

The only exception is the new Chicopee Hills P. S. where a treed area needs to be cleared to actually build the school. In contrast, the recently completed Jean Steckle P. S. had no trees on the site and significant numbers have been added.

In other tree management activity, there are plans to remove 8 trees from 2 schools and add 124 trees at 15 different schools. The 8 trees to be removed have been impacted by the emerald ash borer. Conversely, 114 trees have been added through school yard greening projects.

During the winter, staff removed 25 trees that posed safety concerns due to excessive ice storm damage in December 2013.

COMMUNICATIONS:

The tree plan for school construction projects will continue to be part of the engagement process at each site. At this time, there will be an opportunity to provide feedback to the design team and consultants on the total project.

FINANCIAL IMPLICATIONS:

Existing budgets, school fundraising and community grants continue to support the addition of trees at our school sites.

RECOMMENDATION:

No recommendation. For information only.

 **Director of Education**



SUN SAFETY AND SHADING

Legal References:

Related References: *Policy 2000 Environmental Values*

Effective Date: January 2012

Revisions:

Reviewed:

1. Preamble

- 1.1 It is the policy of the Waterloo Region District School Board to promote public health through the development of a culture of sun safety through education, communication and action.

2. Sun Safety

- 2.1 The Board recognizes that exposure to ultraviolet radiation (UVR) poses an identified health risk (such as skin cancer) to children and adults.
- 2.2 The Board recognizes that the strategic provision of shade:
- reduces the urban heat island effect by reducing the temperature of hard surfaces including paved areas and parking lots
 - enables children to play in outdoor environments while protecting them from the harmful impact of UVR.
- 2.3 The Board acknowledges the important role of communicating and promoting sun safety awareness and protective strategies to students and staff which include.
- 2.3.1 The potential ill effects of sun exposure
- 2.3.2 Protective Strategies:
- providing shaded areas for outdoor activities
 - wearing protective clothing (long sleeved shirts and long pants and tightly woven fabrics)
 - wearing hats with wide brims, visors and/or back flaps
 - wearing UV protective sunglasses
 - using sunscreens
 - using portable shade devices
- 2.4 The Board recognizes the importance of the provision of shade, either natural (trees or other appropriate vegetation) or constructed, as an essential element in the planning and design of new or renovations to board facilities. In addition, existing school sites should be reviewed periodically to ensure that appropriate shaded areas are being provided for children.
- 2.5 The Board supports and encourages schools and school councils to develop school based greening solutions to address ongoing sun safety behaviours and shading initiatives.
- 2.6 The Board acknowledges and accepts its responsibility in the community to participate in the development and support of a Region Wide Shade Policy with community partners.



TREE PLANTING PROCEDURE

1. PURPOSE

- 1.1 The purpose of this procedure is to communicate the general practice for tree planting on Waterloo Region District School Board property.

2. SCOPE

- 2.1 This procedure applies to Waterloo Region District School Board sites.

3. DEFINITION

- 3.1 Not applicable.

4. RESPONSIBILITY

- 4.1 Foreperson, Sites & Fleets

5. PROCEDURES

5.1 FACILITY GROUNDS

- 5.1.1 Facility Services currently supplies and plants all 'memorial' trees across board sites in conjunction with the Director's Office.
- 5.1.2 Tree planting for new schools and additions is undertaken as part of the design as developed by landscape architects and approved by various jurisdictions. Adequate shade is a consideration when developing landscape plans.
- 5.1.3 Three (50 mm trunk) trees are planted in kindergarten play areas.
- 5.1.4 Stressed trees are removed for safety reasons. They are removed and replaced with a 50 mm tree.
- 5.1.5 Schools are responsible for all plantings in their designated 'green' areas and coordinate with sponsoring organizations (e.g. Evergreen) according to established protocols.
- 5.1.6 There is an annual initiative to supply and plant six (50 mm trunk) trees at five designated schools. Efforts have focused on schools with limited ability to under take their own projects. Many other schools do fundraising for their particular planting needs.
- 5.1.7 When live trees are removed due to construction (eg. storm water management) or other appropriate needs as determined by Facility Services, they are replaced with two new trees. The construction budget generally funds this initiative.
- 5.1.8 Facility Services absorbs costs within existing budget accounts related to removal of routinely diseased trees or trees impacted by minor pest infestations.
- 5.1.9 Any major infestations with resulting significant remedial costs need to be addressed separately from regular operating budgets.