



## For Committee

April 13, 2017

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To: City Manager  
From: General Manager Parks, Recreation & Culture

Subject: **Northeast SPEA Tree Management Project**

For: **Council-in-Committee**

**Recommendation:**

That the Committee receive the report of the General Manager Parks, Recreation & Culture Services dated April 13, 2017 and entitled "Northeast SPEA Tree Management Project" for information.

**Report Purpose:**

The tree removal and debris management components of the Northeast SPEA Tree Management Project are near completion. This report is intended to update Council on the progress to date on this project and to outline the next steps and timelines for completion.

**Strategic Goal:**

The actions proposed in the report support the strategic goal of enhancing the sustainability of City services and infrastructure. Council received the preliminary results of the Northeast Tree Risk Assessment (the "TRA") project on September 19, 2016 and in response to the findings and recommendations approved by Council in that report, this initiative has been included as a "B" Priority in the 2017 Business Plan.

**Background:**

On May 30, 2016 a report to Council titled, "Initiatives to Manage Trees within SPEAS in Northeast Coquitlam" was received by Council. This report highlighted the high level of tree failures that the City had experienced from Northeast Streamside Protection and Enhancement Areas ("SPEAs") in 2015-2016. These tree failures caused significant property damaged and presented a public safety risk. In consideration of this issue Council directed staff to initiate a comprehensive TRA of forested SPEAs in Northeast Coquitlam. BA Blackwell and Associates, a forestry consulting firm with expertise in this area, was hired to complete the TRA.

Council received the preliminary results of the Northeast TRA work on September 19, 2016, which included projected actions and anticipated costs based on wide area samplings that could be completed at that time only rather than on detailed information. It was also noted for Council at that time that this type of work is difficult to predict due to specific site factors and conditions, therefore variability in projected versus actual costs may result. In response to the findings and recommendations of this report Council:

1. Authorized the completion of all outstanding SPEA assessments and the expenditure of up to \$650,000 from the Extreme Weather Fund to complete the TRA windfirming treatments in the Northeast Streamside Protection and Enhancement Areas (“SPEAs”);
2. Authorized the City’s Consultant to enter onto private properties in Northeast Coquitlam as necessary to finalize the TRA; and
3. Directed staff to bring forward an operating request for the 2017 budget process to address the growing service needs in Urban Forestry. This request for ongoing operational funding and resources was separate and distinct from the one-time TRA initiative, which sought separate project funding, although it is clearly related as both stem from the need to manage SPEAs and to address the growing attention and public requests for tree hazard management.

**Discussion/Analysis:**

Staff moved forward based on the direction provided by Council at the September 19, 2016 Regular Council meeting as follows:

1. All outstanding private SPEA covenant areas have been assessed;
2. Three contractors secured to complete the Northeast TRA and associated SPEA windfirming treatments; and
3. An operating budget request to enhance tree risk management and associated activities was brought forward for the 2017 budget process, which was subsequently approved by Council. This approved request resulted in a one-time funding of \$160,000 for equipment, and an ongoing operational resourcing of \$240,000 per year to manage tree risk issues.

TRA Completion and Contract Procurement

The Consultant’s final Tree Risk Assessment report was completed in early October 2016 covering 28 individual sections of SPEA corridor (Attachment 1). 15 of these SPEAs were found to be generally windfirm forest stands that only required the removal or modification of a total of 122 trees. The remaining 13 SPEAs were found to require significant treatments to establish them as windfirm forest stands and required the removal or modification of 764 trees. In September 2016 staff prepared a Request for Proposals (RFP) for services to complete the Northeast TRA and SPEA windfirming treatments. This RFP was issued with the intent of securing a single contractor to complete all of the prescribed tree removal. This RFP closed on October 13, 2016 and submissions were reviewed by staff. Unfortunately this RFP was ultimately cancelled as only a few submissions were received, pricing was not competitive and proposed timelines for completion were not acceptable.

A second RFP was prepared with the intention of awarding the TRA work in batches to multiple contractors to promote competition and enable concurrent work to take place and reduce timelines to complete the project. This second RFP closed on November 9, 2016 and resulted in more competitive pricing and the work was

awarded to three different contractors. The original timelines intended for the windfirming treatments were also significantly extended by the extreme winter weather that shut the project down for much of last December, January and February. Despite these delays the tree removal and debris management portions of the Windfirming Treatments are now complete in all but three of the 28 SPEAs.

Throughout March and April the contractors have utilized Qualified Environmental Professionals to monitor the treatment areas to ensure that they are not impacting active nests. This has proven effective as a best management practice to protect wildlife and allow the project to continue to progress, and this approach will continue on the remaining 3 sites. Should nesting activity be confirmed on the remaining SPEAs, it may become impractical to continue this work and staff may need to postpone the work until a point in the summer when it can be confirmed that the nesting activity has ceased. Notwithstanding this, it is expected that the tree removal and debris management work will be complete on the last 3 SPEAs no later than the end of September.

#### TRA Replanting and Management

The final stage of this project is the replanting of the SPEAs. The City's consultant is preparing a replanting plan that will ensure that these forests regenerate to become stable and healthy forest stands in the long term, providing high ecological value. The replanting plan calls for the installation of 1,300 trees spread over all of the sites. This will be a substantial planting effort and in order to maximize both survival and success of these new trees they will be installed in the fall. Staff intends to issue a contract for the planting of these trees this fall with the work to take place in October and November.

Once the planting is complete in the SPEAs, a forest stand management program will be developed by Urban Forestry staff to ensure the stable and ecologically valuable forest stands are established in these areas. Without active management of these regenerating forest stands undesirable tree species such as western hemlock and/or invasive plants may become established compromising the long-term stability and health of these SPEAs.

#### **Financial Implications:**

Council approved the expenditure of \$650,000 to complete the TRA and windfirming treatments with the understanding that this value was an estimate based on sampling and estimates covering 1/3 of the SPEA assessments. The total final cost for tree removal and debris management has now been finalized at \$850,000. As discussed with Council in the context of this project cost, in addition to the variability of tree cover and site conditions that are difficult to anticipate in the sampling, challenges related to access and removal of debris also are key factors that have impacted this complex project and have been difficult to estimate. The replanting portion of this project will cost an additional \$70,000 for a total project cost of \$920,000. The \$270,000 costs above the original estimate will be charged to the project operating budget and will be a planned variance in the 2017 Parks, Recreation and Culture operating budget. Staff will endeavor to utilize some of the new operating resources in 2017 to support the TRA project, and all

efforts will be made to absorb total costs through other savings, resource efficiencies and budget management. Staff will report out on the final project as part of the annual budget reporting process.

Council supported Tree Risk Assessment and mitigation resource needs in Parks, Recreation & Culture in 2017 with the approval of \$240,000 in annual operating expenses (staffing and contractor support), as well as a one-time expense of \$160,000 for equipment from Infrastructure Reserve, which included a truck and a separate truck and chipper. This funding will support ongoing tree mitigation work as well as the work required to support completion of the TRA project, as best as possible.

**Conclusion:**

The Tree Risk Assessment of Northeast SPEAs identified hazardous trees in 15 SPEAS that had to be addressed, as well as significant windfirming treatments required in the 13 remaining SPEAs. This prescribed work, which has been completed with no significant public issues or results, is nearing completion with only three SPEA windfirming treatments outstanding. The remaining component of the project required to put these forests on track to becoming windfirm and ecologically valuable stands is the replanting. Final project costs of \$920,000 will be managed through the year utilizing previously allocated funding of \$650,000 and over expenditure from the PRC budgets, and costs will be absorbed as best as possible utilizing current operating resources, although a final budget deficit is anticipated for this project. The final project costs will be reported to Council at the end of the year as part of the annual budget process. The replanting plans for the SPEAs are nearly completed and will call for the planting of 1,300 trees as part of the final TRA project phase. As a result of this project, and ongoing forest stand management, current and future residents of Northeast Coquitlam will enjoy a legacy of stable forests with high ecological value.

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Raul Allueva, RPP

**Attachments:**

Attachment 1 – Northeast SPEAs Included in Tree Risk Assessment

This report was prepared by Lanny Englund, Urban Forestry and Park Services Manager and reviewed by Kathleen Reinheimer, Manager Parks, Michelle Hunt, General Manager Finance and Technology, Wade Pierlot, Fire Chief and Kathleen Vincent, Manager Corporate Communications.