

Progress Report

November 26, 2007

The following progress report is categorized on headings from the 14 "Recommendations for Action" in the April 16, 2007 "Recommended Plan" for the Stanley Park restoration project. For clarity purposes, the sequence of the headings differs from the "Recommendations for Action" while better representing the temporal sequence of the work. The headings show percentage of work complete and expenditures/commitments to October 31, 2007.

1. "Recommendation #5 - Reduce risk of forest fires by removing fine woody debris within five meters of all trails, roads and parking lots, and from areas of human activity within the forest, and by removing most fallen trees from the blowdown areas."

This process commenced in the spring and is presently complete except for one trail. The debris was picked with backhoes, grapples and in cases by hand and transported off site either as brush or ground wood chips, based on volume efficiencies. Essentially complete, the cost of the operation to date has been \$236,000.

2. "Recommendation #3 - Modify the newly created forest edge so that the risk of the blowdown areas spreading to remaining trees minimized."

Windfirming or tree thinning, is being performed on 13 kilometers of the newly created forest edge. 2,000 trees have been thinned to date. The thinning of the first few ranks of trees adjacent to new and open wind sensitive areas reduces the likelihood of additional damage from future storms. The windstorm of November 12, 2007 would appear to support this concept, as little damage occurred in the park. Expenditures to October 31, 2007 are \$131,000 against a projected total cost of \$250,000.

3. "Recommendation #1 - Modify or remove danger trees within or near the blowdown areas, and hazard trees elsewhere in the park."

"Recommendation #4 - Remove an appropriate amount of fallen trees from the forest floor, balancing the need to manage fire and insect infestation risks while meeting the current and future ecological needs of the forest."

Dangerous tree removal and dangerous tree modification has been completed in approximately 60% of the blowdown areas. This is reflected in the attached plan (Appendix 2). Approximately 7,000 cubic meters of timber (5,000 logs) has been removed from site, and 12,000 cubic meters of wood chips have been removed from the site. Unchipped debris (5,000 cubic meters) has also been hauled directly from the site, based on volumes and logistics. Generally, forestry operations west of the Causeway are 85% complete and ready for replanting. Forestry costs to date, including initial recovery operations, are approximately \$850,000.

4. "Recommendation #2 - Protect the forest floor and understory plant communities and retain as many trees and snags as possible in the blowdown areas."

Staff and forestry crews have worked extensively with senior government environmental staff and hired site monitors to ensure that the nature of the operation minimized the extent of forest floor damage and hence habitats for species at risk and nesting birds. This monitoring and prescriptive work is approximately 60% complete and has cost approximately \$185,000 to October 31, 2007.

5. "Recommendation #6 - Prepare and implement a slope stabilization plan for the area between Prospect Point and Third Beach."

Prospect Point slope stabilization is approximately 90% complete. This involved a detailed plan and its execution from clearing the seawall to hand scaling of the unstable material, tree removal and rock bolting. This consultant and contractor work has cost, as of October 31, 2007, approximately \$470,000. The bio-engineering/replanting of these areas will be accounted for under the forest replanting category, which to date has expended \$10,000.

6. "Recommendation #7 - Repair or reconstruct damaged portions of the seawall."

The seawall has been patched and temporarily reopened. In the spring hollow zones under the asphalt will be cut open and reconsolidated, and the stone and mortar repairs to the face of the wall will be undertaken. Some of the surface slumping has been the result of the heavy machinery driving over the hollow zones. Hence it was considered prudent to delay repairs until the heavy machinery use was complete. The narrowness of the seawall limited opportunities for machinery to pass. Also the very narrow pinch points at the lighthouse and Siwash Rock limited debris removal to one truck at a time.

7. "Recommendation #8 - Repair or reconstruct damaged roads, trails, drainage, and utilities."

For heavy equipment reasons similar to the seawall, trail and road repairs are being postponed to spring when the heavy equipment will no longer be required. Temporary upgrading of existing trails has cost approximately \$40,000. Siwash trail has been relocated over most of its length to pull it back from the new escarpment edge and provide a run-off diffusion zone between the trail and the edge. Elevation changes in the trail have been reduced to lessen the run-off flows, and armoured channels have been built to contain the run-off patterns. Through-draining final surfaces and near continuous safety fencing will be installed next spring. Cost to date on Siwash trail is approximately \$50,000.

8. "Recommendation #9 - Relocate Park Drive and parking lot away from Prospect Point to improve drainage, visitor safety and aesthetics."

Design options for the realignment of Park Drive and related changes to Prospect Point have been developed and are in the consultation stage. Final design concept will come before the Park Board on December 10, 2007. A consultant team has been retained for \$140,000 to examine aesthetic, safety and drainage/ geotechnical concerns and guide the project through to completion next summer. Estimates are in the \$1.5 to \$2 million range to give this prominent location the aesthetic design and finish it deserves.

9. "Recommendation #10 - Work with First Nations and agencies like Stanley Park Ecology Society, Nature Vancouver, Vancouver Historical Society and Vancouver Heritage Commission to enhance and augment educational and interpretive resources for Stanley Park."

Development of the interpretive and educational legacies for the park will commence in January 2008. Currently, staff are pursuing an opportunity to mount a joint "Stanley Park at 120 Years" display with the Vancouver Museum, tying together the on-site material to the six month museum event. This on-site material will be part of the long term interpretive legacy in the park.

10. "Recommendation #11 - Allocate the fallen trees that will be removed based on a hierarchy of needs."

A project log sort has been created on city property east of False Creek. This is operated by a commercial log broker who collects a fee - 4% - for the handling and disposition of the logs. To date 7,000 cubic meters of wood has passed through or remains at the log sort. This represents approximately 5,000 logs. Negotiations have been completed with the Squamish Nation for cedar carving logs. Musqueam negotiations should be completed soon followed by the Tsleil-Waututh. This will represent 42 high value logs. 300 cubic meters of fir is being held for possible Park Board use at Trout Lake Rink. VANOC is considering a possible Olympic Live Site longhouse. Timber requirements remain unknown at this time. Hemlock and lower grade timber is being actively marketed.

11. "Recommendation #12 - Plant Douglas fir, western red cedar, Sitka spruce, grand fir, big leaf maple, red alder and a variety of shrubs."

The first 3,000 Douglas fir and cedar seedlings will be planted in the Prospect Point blowdown zone by December 1. An additional 17,000 trees of various species will be planted in the remaining blowdown areas by March 2008. The large majority of this work and material has been donated to the project by forestry related firms and a native stock nursery.

Summary

Total expenditures to October 31, 2007 on the project are \$2,542,000 with an additional \$500,000 in the processing pipeline. It is estimated that this represents about 65% completion overall of the forest damage cleanup and log removal. Prospect Point to Siwash Rock escarpment stabilization is 90% complete with some run-off channel modifications on Siwash trail required over the next month. Major spring 2008 expenditures are Prospect Point redevelopment at approximately \$2 million and the long term seawall repairs at approximately \$1 million. Forestry/ planting completion for the park - estimated by April 2008 - will cost approximately \$750,000. The estimate for the legacies program remains at \$750,000. The overall project costs will remain within the currently approved budget and, barring future unseen delays, will be completed approximately two months beyond the initial schedule estimations.