

Date: September 1, 2007



TO: Board Members – Vancouver Park Board
FROM: General Manager – Parks and Recreation
SUBJECT: Stanley Park Restoration – Progress Report #1

RECOMMENDATION

- A. THAT the Board receive this report for information.*
- B. THAT the Board endorse the sale of low value Stanley Park timber, the provision of timber to Park Board projects and the provision of timber to Olympic related facilities.*

BACKGROUND

Stanley Park is Vancouver's oldest, largest, and most popular park. Its forest is one of the park's central features, with an estimated 150,000 mature trees. During the winter of 2006-2007, three major windstorms struck Stanley Park, causing significant destruction, including the blowing down of more than 10,000 trees and substantial damage to the seawall between Prospect Point and Third Beach (appendix 1).

On April 16, 2007, the Park Board approved the Stanley Park Restoration Plan, which was prepared by a multi-disciplinary team and included broad community consultation. The Restoration Plan identified a vision for the whole of Stanley Park's forest, goals for the restoration of the park, and a series of restoration activities. This is the first of several progress reports that will be prepared over the next 12 to 18 months.

Vision

That Stanley Park's forest be a resilient coastal forest with a diversity of native tree and other species and habitats, that allows park visitors to experience nature in the city.

Restoration Goals

- 1) Establish and maintain conditions in the blowdown areas that will foster a resilient coastal forest with a diversity of native tree and other species and habitats, using methods and equipment that protect the environment, park visitors, workers and volunteers;
- 2) Repair the park's infrastructure so that the park activities can resume as quickly as possible; and

- 3) Create legacies that will support the whole of Stanley Park's forest in the long term.

The progress report has been prepared to summarize activities over the last six months.

DISCUSSION

1. When Stanley Park was closed after each of the windstorms, one of the top priorities was to **re-open the park with safe public access**. Stanley Park has 16 km of roadway and 43 km of pathways/trails. The first step was for Park Board crews to clear fallen trees and branches along these corridors. The second step was for an arborist to inspect each route for hazard trees and, once identified, these hazard trees were either modified or removed. Once these two steps were completed, a park roadway or pathway was opened to the public. As of June 15, 2007:

- 100% of roadways are open to the public;
- 100% of pathways outside the forest are open to the public;
- about 80% of the seawall is open to the public; and
- about 90% of forest trails are open to the public.

The major blowdown near Prospect Point has been cleared of dangerous trees, 90% of the timber in this zone to be removed has left the Park, and 35% of the fine woody debris (branches etc.) have been removed. This latter work continues daily. Completion will depend on timing for the decommissioning of the brush roads which are still in use by the excavator working on the escarpment crest. The seawall between Prospect Point and Third Beach, as well as Merilees Trail and Siwash Rock Trail remain closed to the public. Gates or barricades have been erected to prevent the public from entering these areas.

Detour routes have been established and signs have been posted until the seawall reopens later this year. Additional park rangers have been enlisted to assist with managing pedestrian, skating and cycling flows on the seawall and the detour routes.

2. In the blowdown areas, it is critical to **provide a safe environment for workers** before fallen trees can be removed and new trees planted. Trees that are identified as dangerous have been identified, mapped and tagged in the field (appendix 2). These trees have been modified or removed by work crews in the Prospect Point work areas. Guidelines have been established detailing when wind conditions create unsafe working conditions in the blowdown areas. Geotechnical engineers have assessed the stability of the steep slopes in the Prospect Point blowdown area and are coordinating with site supervisors to ensure that required work is performed safely. Park Board staff, consultants and contractors have had and will continue to have regular meetings with staff from WorkSafe B.C.

3. A process called “windfirming” is used to **reduce the risk of existing blowdowns spreading to non-damaged portions of the forest**, particularly the areas located immediately adjacent to blowdown areas. This process allows the new forest edges to gradually become resilient to strong winds over several years, by removing selective trees and/or removing selective branches. A contractor was hired to perform this “windfirming” work. About 95% of the work has been completed in the Prospect Point, Lost Lagoon and Causeway areas. The remaining work should be completed by the end of October.
4. The **reduction in the risk of forest fires** has been a major concern given the massive amount of new fuel on the forest floor. A consultant, in conjunction with all fire response organizations involved has developed a Fire Preparedness Plan for Stanley Park 2007 (appendix 3). Fine woody debris was removed in a five meter band from each side of all roads, trails and parking lots. Temporary watering systems have been installed at the road edge of both the Prospect Point and Lost Lagoon blow down areas. Fortunately, the cool damp summer has kept the fire risk at a manageable level, although a number of camp fire sites have been found in the Prospect Point work areas.
5. It is also important to **reduce the risk of insect infestation** in Stanley Park because pests and exotic insects are likely to be attracted by the large quantity of wood on the forest floor in the blowdown areas. Entomologists have installed a series of traps in the forest and have been monitoring the quantity of pests and exotic insects. Park Board staff and consultants have set up communication channels with federal and provincial officials to develop an appropriate response plan, should the need arise.
6. A series of measures have been taken to **protect environmentally-sensitive areas, species at risk and archaeological resources**. Registered professional biologists have been hired to survey and map out environmentally-sensitive areas in and near the blowdown areas, including habitat for nesting birds, as well as to survey and map out the habitat for species at risk (e.g. Pacific Water Shrew, Marbled Murrelet). Monitoring and protection measures have been incorporated into the prescriptions for the blowdowns. Biologists have also been working directly ahead of the forestry machinery to relocate vulnerable fauna. Registered professional archaeologists have reviewed all previous archaeological studies conducted in Stanley Park, and have completed a search for culturally-modified trees in three blowdown areas not previously searched (a report has been submitted). Protection measures will be incorporated into the prescriptions for the blowdowns.
7. Park Board staff, consultants and contractors have been working on **developing prescriptions to guide work in each of the 15 blowdown areas** (appendix 4). These prescriptions include specific targets and restrictions, yet are broadly worded to allow for work crews to adapt their work to specific forest conditions. In addition to identifying environmental and archaeological resources that require protection, the prescriptions outline work to be done with danger trees and fallen trees. The

prescriptions for the Prospect Point, Lost Lagoon and Brockton blowdown areas are completed. The prescriptions for the other blowdowns will be completed as needed.

8. A log sorting yard has been established in the False Creek flats area. All removed timber passes through this process. Approximately 4000 cubic meters of timber has been delivered to the site (about 170 truck loads). The low value material (pulp, shingles, railings, low grade dimension lumber) is being sent to market. This low value material is being removed and sold because it has limited cultural or institutional value and the sorting yard could not continue without its removal. All the better quality cedar, fir and top grade hemlock is being held pending the accommodation of Park Board, cultural and institutional requests for timber. Park Board consultants for Hillcrest, Trout Lake and South East False Creek are currently assessing the appropriateness of the timber for the above noted projects. The Province also wishes to display an old growth cedar trunk at its Beijing Olympics pavilion. Staff have secured one that is retrievable north of Lost Lagoon.

9. Although **tree planting in the blowdown areas** will only begin in the fall of 2007, Park Board staff have already put in orders for 19,000 trees from local nurseries. In addition, the Park Board's Sunset Nursery is currently growing native plants for Stanley Park.

10. Work on the **Prospect Point slope stabilization** is under way. Dangerous leaning trees on the crest of the high risk escarpment areas have been removed over a total length of 800 meters. The overhanging brow of the escarpment has been pulled back in the machine accessible areas (approximately 450 meters). The remainder will require hand scaling to remove the overhangs and will be undertaken by a separate contractor.

Machinery has started pulling down trees hanging on the cliff faces and clearing the downed trees from the seawall, working from the North East entrance. This work is difficult because of sharp, 1.8 meter wide turns on the seawall at the Prospect Point lighthouse and Siwash Rock. Only smaller equipment can reach the site and material to be removed has to be cut into very short lengths.

Damage to the seawall surface is being assessed as material is removed. Findings to date indicate that the seawall surface survived the impacts of falling trees and debris better than expected.

11. **Park Drive realignment** at Prospect Point is entering the design phase, with the site cleared and consultants to be retained within three weeks. Work will proceed over the winter with the old road alignment removal and replanting in the spring of 2008.

12. Project costs to end of August 2007 show \$1,990,000 expended or committed to date. A statement is attached as appendix 5.

13. All work associated with the restoration project has been incorporated by Park Board staff into a **new Geographic Information System (GIS) for Stanley Park**, including forest inventory information, terrain information, biological and archaeological data, built features such as roads, trails, buildings and utilities. The GIS allows staff and consultants to quickly retrieve and analyze information from the databases and to map it out accurately.

14. An ongoing effort as part of the restoration process has been to **keep the public engaged and well informed**. Park Board staff and consultants coordinated community consultation (including an interactive website, newspaper advertisements, and a public opinion survey) while the restoration plan was being prepared. Recent activities include the posting of the signs and the publication and distribution of brochures to give information out to park visitors while restoration is underway.

15. **Fundraising** - In the past year, the Park Board received a lot of support from the community mainly due to the public appeal campaign initiated as a result of the devastating effects of the December 2006 storm on Stanley Park. The community came together and pledged \$3.5 million, with over 6,500 donors making gifts ranging from \$0.50 to \$1,000,000. In addition to the support received from the community, the Park Board also received \$6 million of support from various governments. All of these donations will be used to restore and protect Stanley Park. Examples of donors include:
 - Banks & trust companies such as HSBC Bank Canada, TD Bank, VanCity, Coast Capital Savings, RBC
 - The mining community such as Teck Cominco, Goldcorp, First Quantum Minerals
 - Oil & Gas companies such as Enbridge, Spectra Energy
 - Forestry & Engineering companies such as Taiga, Golder Associates
 - Many local businesses such as Fasken Martineau DuMoulin, Super Save Group, Phillips Hager & North, London Drugs, Imperial Parking, Oppenheimer Group
 - Many national companies such as The Globe & Mail, Telus
 - Educational, health care and professional organizations such as schools, day care, clinics, accountants, engineering and law firms.
 - Generous individuals and community groups.

In addition, the Park Board has received generous gifts from several privately held corporations and family foundations and many community groups who supported the cause through fundraising galas and special events. A total of \$9,500,000 was raised; \$3,500,000 received from individuals, corporations, foundation, community groups, fundraising events and \$6,000,000 from the three levels of government. The public support to restore the Stanley Park is tremendous totaling to 6,500 donors from around the world.

The following is a breakdown of organizations/individuals contributing different amounts:

<u>Donation Ranges</u>	<u>Organizations/Individuals</u>
\$1,000,000+	4
\$250,000-\$999,000	1
\$100,000-\$249,999	5
\$50,000-\$99,999	5
\$10,000-\$49,999	25
\$2,000-\$9,999	25
\$2,000 Tree Dedications	75
\$0.5- \$1,999	6,360

While the majority of the pledged donations have been collected, staff are continuing to follow up to secure the balance of pledged donations. Over 6,000 tax receipts and personalized thank you letters have been sent out recognizing donor support. To stay connected with our donors, stewardship letters and annual reports outlining the current progress of the restoration project will be sent to all donors in September, 2007. A special open house event will take place in October 2007 and include reports, display boards and tours for donors to learn first-hand about the progress of the restoration project. In Spring 2008, donors will be invited to a special stone unveiling and tree planting ceremony to recognize their support to the Stanley Park Restoration Project.

CONCLUSION

Forestry work in the Prospect Point zone has moved quickly after wildlife and weather delays. About 10 days of brush removal remains before replanting could start.

Mechanized work on the crest of the escarpment is complete. Hand scaling will be required to complete this task.

Debris removal from the seawall is scheduled to start during the first week in September. Work on the Lost Lagoon zone will commence at the same time.

Prepared by:

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