

Date: April 16, 2007



TO: Board Members – Vancouver Park Board
FROM: General Manager – Parks and Recreation
SUBJECT: Stanley Park Restoration Plan

RECOMMENDATION

- A. THAT the Board endorse the park vision of the Restoration Plan which states ‘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’;***
- B. THAT the Board endorse the ‘Stanley Park Restoration Plan’ and approve the recommendations of the Plan as a framework to restore the damaged areas of Stanley Park;***
- C. THAT the Board authorize the General Manager to develop detailed implementation plans including related budgets and allocate the necessary resources to achieve the restoration of the park;***
- D. THAT staff develop detailed plans for the Prospect Point road adjustment and the park legacy program and update the forest management plan, all to be reviewed by the Board at a later date.***

BACKGROUND

Subsequent to the windstorms of December and January which damaged the Stanley Park forest, staff reported to the Board on January 15, 2007 outlining a process to develop a restoration plan and on March 12 to provide a progress report on the plan development. Attached to this report is the restoration plan proposed by staff and their advisors. The guiding principles of the plan are summarized as follows:

- 1) Remove hazardous trees that could fall on roads and trails and those trees which create a risk to safe working practices in the blowdown areas,
- 2) Reduce the volume of coarse woody debris in the blowdown areas to meet risk management assessments for slope failure, fire, insect and non native plant infestation,
- 3) Implement geotechnical and bioengineering measures to stabilize the slopes above the seawall near Prospect Point,
- 4) Respect environmentally sensitive areas and endangered species habitats within the blowdown areas,

- 5) Selectively replant and manage specific tree species to redress the imbalance in the forest composition,
- 6) Limit forest floor damage wherever possible and restore native understorey where appropriate, and
- 7) Repair or replace damaged infrastructure such as roads, trails, seawall, drainage, power and water.

DISCUSSION

The basic elements of the plan are as follows:

- 1) Minimize the risk to park users from falling dangerous trees and branches and landslides onto the seawall walkway/ bikeway,
- 2) Reduce the risks of further damage to the park from future windstorms, fire and invasive species of plants and insects,
- 3) Preserve and restore the park's forest environment in terms of the forest floor, the understorey, environmentally sensitive areas and biological habitats,
- 4) Plant tree species which redress the imbalance from the historical forest created by logging and fire suppression, and
- 5) Develop an educational/ interpretive legacy for the park including archaeology, biology and geology in terms of contemporary mapping, static on-site displays and audio/ visual archives.

While these basic elements appear straightforward in their own right, they are in many instances overlapping and intertwined. As a result, on the ground decisions made during implementation will be responding to finer, more detailed levels of information which will be developed as specific area prescriptions for restoration.

The plan also attempts to represent a number of community driven issues and choices which can be accommodated within the Recommendations. These deal in part with the relative accessibility of the forest, potential changes to the park – new viewing areas, new structures, demonstration forest areas and the disposition of the fallen trees.

The nature of community input was presented in the March 12 Progress Report and the outcome to date is outlined in the plan.

Provisional budgeting has some limitations in that in the geotechnical areas, we cannot accurately estimate until the debris removal phase is complete. Similarly, hidden undermining of the seawall will not be assessable until the seawall is accessible to consultants and work crews.

Thus the Board must anticipate budget estimate refinements as the project proceeds to benchmarks where data is available. Also, in the early phase work the restoration team will favour unit price contracts to avoid risk premium bidding on work to be done and to minimize clean-up damage to the forest floor and understorey. Acknowledging these caveats, the provisional budget is laid out as follows:

Road/ trail clean/ resurfacing	\$1,000,000
Prospect Point debris clearing/ stabilization/ drainage/ realignment	\$2,250,000
Remaining blowdown areas/ debris clearing-drainage	\$1,250,000
Reforestation – all areas	\$1,000,000
Legacy education/ interpretation	\$ 750,000
Community involvement/ consultant advice/ plans	\$ 500,000
Seawall rebuilding	\$1,000,000
Contingency	\$1,250,000
Total	\$9,000,000

A fully predictable timeline for the plan implementation remains a challenge. Beyond Board approval of the plan, the project requires relatively sustained dry weather to bring in heavy machinery. Saturated soils will result in considerably more forest floor damage and on steep slopes will endanger machine operators. This said, given good weather and no other qualifiers, the debris removal phase can be completed in two to three months for all the areas.

Environmental issues, particularly related to regeneration cycles of everything from eagles to salamanders could create the need to operate in a patchwork fashion which would extend the debris removal operations timelines.

Long term geotechnical solutions to slope stabilization must await debris removal to create accurate assessments. When complete, the on-site mechanical and bioengineering remediation would take four to six months.

The Restoration Plan does not contemplate replanting new “seedlings” until November 2007. This activity would continue throughout the winter and early spring. This works well because the plants are dormant and moisture is really available.

In a best case scenario, site restoration could be complete by November 2007 and replanting would carry through to March 2008. Seawall reopening would in best case occur in August 2007, subject to the amount of damage it sustained. All park trails beyond some of the blowdown areas were opened by April 6.

CONCLUSION

The attached Restoration Plan outlines, first at the big picture level, and in more detail through the details included in the five 'Guiding Principles', how the restoration team should proceed in responding to the challenge of storm damage and the opportunity to set up an improved legacy in the Stanley Park forest.

Many of the detailed decisions will have to be made on the ground/ at the time by the restoration team. Approval of the guiding principles recommended in this report will provide the basis upon which those decisions can be made.

Prepared by:

JDL/yf
Stanley District
Vancouver Board of Parks and Recreation
Vancouver, BC