

DRAFT March 27

Stanley Park Ecology Society

Summary of Comments

Advisors Forum, March 16, 2007

**Stanley Park Ecology Society
Pavilion Building
Stanley Park, Vancouver
www.stanleyparkecology.ca**

March 2007

DRAFT

DRAFT March 27

Table of Contents

<i>Acknowledgements</i> _____	1
<i>Summary</i> _____	1
<i>Introduction and Background</i> _____	1
<i>What we have done: Summarized, restated and organized ideas into themes with hierarchies</i> _____	2
<i>What you can do: Correct and add to this summary</i> _____	3
<i>Results: Suggestions and comments from advisors</i> _____	4
Explicitly incorporate long term planning and management into Stanley Park management _____	4
Adopt an organized planning approach that identifies the steps from goals to implementation _____	4
Adopt clear and specific goals and objectives _____	4
Divide the park into different management areas and develop different goals and plans for each _____	4
Address issues related to the purpose and goals of the park and its forest areas during planning _____	4
Manage natural areas based on ecological goals _____	4
There are many different park users and many opinions about an overall vision or objectives for the park _____	5
Address a variety of technical issues for both planning and implementation _____	5
What was in the park and what is there now? _____	5
How can technical issues/goals/requirements from different fields or concerns be reconciled? _____	5
Link recovery efforts more conspicuously to longer term planning and management _____	6
Document current and past circumstances in Stanley Park more thoroughly and establish careful monitoring _____	6
Some important practices, goals or approaches remain debated. Address them in an open and comprehensive manner. _____	8
Involve the public and different interest groups in planning and implementation _____	8
Restoration could consider: _____	8
Species at Risk management could consider: _____	9
Invasive species management could consider: _____	10
Environmentally sensitive areas management could consider: _____	11
Five summary or umbrella approaches can assemble and integrate the comments made in the forum _____	11
Implement a <i>State of the Park</i> process to document current circumstances, trends, threats and options for the future _____	12
Implement a <i>Visitor Experience and Resource Protection</i> process to choose multiple long term goals and priorities, incorporate public input, set zones, indicators and monitoring strategies and establish feedback processes. _____	12
Document resources and processes using a GIS system, with key elements made public via the Public Mapping Network _____	12
Integrate the different partners, advisors, stakeholders, communities, research programs through a coordination and communications process _____	12
Integrate short and longer term actions with project management and management system tools _____	12

DRAFT March 27

Pavilion Building, March 16, 2007



**Towards Long Term Ecological Planning in Stanley Park
Forum Summary
March 16, 2007**

Acknowledgements

The Stanley Park Ecology Society greatly appreciates the time and ideas provided by the participants in the advisor's forum. It is their contributions that make up this document. They were:

Alton Harestad	Bruce Blackwell	Jim Lowden	Angela Gerst
Ken Lertzman	Sally Leigh-Spencer	Bill Stephen	Terry Taylor
Geoff Scudder	Jennifer	Michel deRocher	David Cook
Michael Feller	Ian	Mike Macintosh	Brent Matsuda
Ralph Wells	Matthew	Andrew Appleton	

SPES facilitators:

Glenn Brown	Koren Johnstone
Patricia Thomson	Robyn Worcester

Summary

This document summarizes notes made during a meeting convened by the Stanley Park Ecology Society and held on March 16, 2007. The meeting assembled individuals who are knowledgeable about Stanley Park, forest ecology and related subjects and focussed on suggestions concerning the long term ecological management of the park and about short term responses concerning ESAs, SAR and Invasive plants. The comments have been transcribed from group flipchart notes, and only slightly edited for clarity; they are assembled under twelve major headings, which seem to identify major suggestions and comments.

Introduction and Background

Windstorms in December 2006 and January 2007 caused substantial blowdown of trees in Stanley Park. Recovery plans include initial documentation of Species at Risk, Invasive Plants and Environmentally Sensitive Ecosystems provided by the Stanley Park Ecology Society (SPES). The long term ecological management of the park has long been an interest of SPES, and recent attention to recovery efforts have raised issues of how the recovery plans could include longer term perspectives. In this context, SPES requested a number of people to come to a half day forum to talk about ideas that might help planning for the long term well being of the park.

DRAFT March 27

To provide focus, the advisors were assembled at three tables, each with a facilitator to record comments and key points in the discussion that followed. For half the afternoon the participants' attention was focussed on responses to the general question : What issues, suggestions, concerns or thoughts do you think are important about: Long term ecological management in Stanley Park. For the second half of the afternoon, the focussing question was: What issues, suggestions, concerns or thoughts do you think are important about: SPES's preliminary reports on Species at Risk, Environmentally Sensitive Areas, Invasive Plants, and short term actions that might follow from the reports.

The facilitators filled many pages of chart paper with ideas, questions and suggestions during the forum. The purpose of this document is to record, organize and share those ideas with participants and the Park Board.

What we have done: Summarized, restated and organized ideas into themes with hierarchies

Facilitators recorded the ideas of the speakers as closely as they could. The original notes are included in the Appendix.

The comments were made at three different tables, in somewhat different contexts, although the organizing themes of the day were shared by all tables and participants.

Some comments were made, and were documented, in different grammatical and conversational forms: as questions, as suggestions, as statements, as observations of things missing, as goals or priorities, as techniques, as resources, as things to be avoided.

In many cases, one can determine a statement in an active voice (do such and such) that is embedded or implied in the different phrasings and we have rephrased comments that did not start as statements, into such statements. Some seemed better left, or rephrased, as questions. We have left, or converted, all comments to either statements or questions.

To make better sense of our advisors' comments, and to draw together ideas on similar topics, we have assembled them under 12 different titles (with 5 subtitles). These titles also are phrased as statements of what we felt were the underlying ideas being expressed by our participants. These statements were derived after the forum by SPES, not the participants themselves.

In summary, this document takes three steps with the comments recorded at the forum.

- 1) It records or paraphrases all comments as statements or questions,
- 2) It identifies three levels of titles or categories that seem to identify main messages stated and implied and
- 3) It lists as bulleted points, under those titles, the actual comments and suggestions recorded in the forum.

DRAFT March 27

A number of people made similar points, phrased somewhat differently. We have retained these individual but similar thoughts, in their different phrasings, to let the speakers' voices come through.

Comments are recorded only once below, under the one title which seemed most appropriate, although some comments logically relate to more than one title. Suggestions concerning resource people or literature have been left out of this summary.

The participants in the SPES forum made a variety of suggestions. Key among these are a series of recommendations around planning, and monitoring ecological processes in Stanley Park.

What you can do: Correct and add to this summary

Since the above steps clearly involve interpretation from notes and memory, these notes are offered as a draft to be reviewed by participants, for clarification and modification.

This is a draft document. It is being returned to all participants for review and comment. The text will be amended based upon additions and corrections suggested by the forum participants.

We have tried to accurately represent the intentions of the different speakers. However, in compiling and summarizing and restating, we might have misstated a position or introduced errors. Thus we return these notes for feedback.

Results: Suggestions and comments from advisors

Explicitly incorporate long term planning and ecological management into Stanley Park management

Adopt an organized planning approach that identifies the steps from goals to implementation

- A planning framework with long term strategic objectives that link progressively to the specifics of operations / implementation is crucial
- Outcomes need to be planned for (ecological outcomes plus all other outcomes)

Adopt clear and specific goals and objectives

- Long term ecological planning requires broad objectives
- Stanley Park is an urbanized park and this needs to be factored in (balance between ecological integrity and public safety, etc.)
- Long term ecological planning needs to be considered for the whole of Stanley Park (both forest and non-forest): a macro view
- Are there management objectives for the park?
- Create a new vision for the park for next 20-80 years from which focused objectives will follow. Objectives come from vision.

Divide the park into different management areas and develop different goals and plans for each

- Ecological planning for the “forest” of Stanley Park requires a definition and boundaries of such ‘zone(s)’
- Adopt a variety of site-specific plans for management (e.g. maintain thickets in areas favoured by birds), rather than an average approach overall.
- Is there zoning in the park for different types of areas?
- “Zoning” is not necessarily an outcome, but may be a likely outcome
- Park management steps to communicate with public
- US National Parks’ VERP as example. A step-by-step process that exists

Address issues related to the purpose and goals of the park and its forest areas during planning

Manage natural areas based on ecological goals

- Focus management at long term ecological objectives
- Identify ecological goals (e.g. biodiversity, structural diversity, forest integrity) and include them in the problem solving and planning
- Need to plan and set up clear goals for managing for wildlife habitat
- Need to plan in the light of predicted climate change, increase in extreme events and future blow downs

DRAFT March 27

- Are the forested areas managed for ecological integrity?
- Manage for biodiversity

There are many different park users and many opinions about an overall vision or objectives for the park

- Commemorative Integrity Statement currently sets parameters for Park management decisions
- Understand the mix of social and ecological objectives
- Much of Stanley Park is not ‘natural’. Strategic Planning must be macro.
- Decisions need to be settled around what is *reasonable* with respect to vision. (i.e. old growth may not be reasonable henceforth?)
- A main constraint is social values/desires/attitudes
- There are more than 7 million visitors a year in the less natural areas. They have many opinions

Address a variety of technical issues for both planning and implementation

What was in the park and what is there now?

- How we move forward fundamentally needs full understanding of meta-structure
Do we have a paraphrase for what is meant by ‘meta-structure’
- Long term ecological planning needs understanding that the Coastal Western Hemlock (drier maritime) park land may be under-represented in the region; implication may be to further prioritize this in Stanley Park
- Understand issues of changes in hydrology (and that the forest has been/ is correcting to it?)
- Hydrology may have changed even since the 1980’s
- It is crucial to understand current stand dynamics and critical habitat elements
- The 1980’s MacBlo work didn’t map aquatic communities; this is an important gap
- A succession map may be built upon the 1980’s Beese (MacBlo) work.
- A digital elevation model may show how much will be underwater.

How can technical issues/goals/requirements from different fields or concerns be reconciled?

- What does ‘ecological integrity’ mean in Stanley Park?
- What is ‘restoration’?
- How long is ‘long term’?
- Attempts should be made to preserve and increase biodiversity (despite Stanley Park being within an urban environment) (note example of Mosquito Creek)
- Old growth supports gene pool and biodiversity; heritage values, too.
- Invasive plants and animals need to be incorporated into long term ecological planning
- Climate change issues need to be considered in regard to outcome visioning

DRAFT March 27

- Identify/ensure ecosystem-specific patches that may be inaccessible to public (need to weigh off homeless habitation and safety risks)
- There is a need for a strong voice for the environment within Park management, integrated with engineering and management activities
- Determine what may / may not be done with respect to work / operations
- Different equipment options may lead to different choices for tree removal
- Plans and responses are needed for future blowdowns
- What are relationships between natural areas and other areas of the park? Do they have the same goals?
- Conduct risk assessment for restoration activities
- Ecological future of the park is also dependent on geotechnical plans
- Should some areas be closed off and left as natural forest?
- Need to get biologists together with those overseeing ground operations (foresters, engineers, etc)

Link recovery efforts more conspicuously to longer term planning and management

- Short term planning affects long term planning and vice versa
- Address a number of management issues in an organized way that addresses both short term and long term implications
- Seek opportunities for enhancement e.g. placement of CWD for habitat around Beaver Lake
- Time is required to make effective long term ecoplanning (the political / social reality is that we don't have this time within the current snapshot of storm restoration)
- Maintain existing and recruit new wildlife trees. Understand that as they age, they may become more dangerous; under what *guidelines* does safety trump ecology?
- A database is to be created that lists significant species or features to be protected, with GPS'd locations. Such a list should be consulted before any maintenance, or trail work is done.

Document current and past circumstances in Stanley Park more thoroughly and establish careful monitoring

- Current standards of resource inventory should be the foundation (e.g. forest stand cover); need a *new* inventory, and then reinforce and maintain inventory
- Consistent inventory of whole park is necessary – this inventory must meet today's standards
- A highest priority is to determine the forest structure for the long term (amount of CWD, snags, species composition, ...)
- Make a synthesis of the past and current info on the park's plants, animals, ecosystems, forest dynamics (disturbances)
 - a. Identify what's known
 - b. Do a gap analysis (What do we want to find out to make decisions?)
 - c. Develop a search strategy for how to fill gaps
- Past inventory – for restoration, features worth preserving from current knowledge

DRAFT March 27

- Identify trends and threats to link present circumstances and future actions
- Many steps could be included in a State of the Park report
- Link inventory work to prescription areas and buffer areas
- Institute long term monitoring and appropriate responses
- Monitoring is required
- Monitoring and research: monitoring needs to be low tech, low cost and well planned so that it can be easily undertaken and continued long term
- Long term ecoplanning requires an understanding of Stanley Park
 - on a site level (Structural characteristics vary from stand to stand; need to understand the specific sites / site specifics.)
 - within context of historical composition
 - and within context of climate change
- Inventory is the first step to ecological management
 - gaps should be identified
 - collect historical information
- Monitor the progress towards meeting the set objectives
- Monitoring is important
 - Set long-term monitoring strategies
 - Establish protocols
 - Use Citizen Science for data gathering
 - Planning is required
- Do aerial photography on a regular basis (2-5 years)
 - For monitoring – general and specific data
 - To track changes
- Set up ground based photostations (Good for communications: success, changes)
- Use LIDAR repeated regularly (10 years)
- Establish weather records – long term
- Use State of the Environment reporting
 - Create a “State of the Park” report
 - Gather inventory information
- Consider using historical satellite photography
 - Is it enough quality?
 - For inventory
 - For gaps in orthophotos
- Some aquatic/wildlife monitoring is done
 - Water quality in Lost Lagoon
 - O2 (Beaver Lake)/Salinity (Lost Lagoon) is being done – sporadic info
- Consider paleoecology studies
 - Species mix changes over time•
 - Beaver Lake more suitable **what does this mean?**
- SPES should be a repository of ecological information
- Make a team
 - To inventory what is here
 - To GPS special areas

Some important practices, goals or approaches remain debated. Address them in an open and comprehensive manner.

- Define ‘restoration’ or how does one define restoration
- How does one maintain successional or species diversity? Replanting versus natural regeneration, remove only downed wood that risks fire, disease and danger and leave the rest
- Climatic change needs to be considered in the planning process.
- Hemlock is a natural component of the forest. It creates clearings and CWD in shorter periods and therefore increases biodiversity
- The likelihood of other disturbance events needs to be considered in the planning process.
- Understory should be retained in blowdown areas = machine free zone
- Consider closing off some trails during and after restoration to allow forest recovery

Involve the public and different interest groups in planning and implementation

- Broader objectives must recognize social objectives
- Community engagement and continual education are important regarding potential objectives and opportunities for involvement.
- Create a public awareness regarding natural processes in the park
- Things need to be clearly articulated for the public
- Long term monitoring should involve academia
- SPES can facilitate and involve public to raise public awareness
- Academic and professional communities need to be included in the engagement.
- Facilitate research projects in Stanley Park by colleges and universities
- Long term ecology planning requires public awareness of issues (e.g. forest representation and health, mistletoe, etc)
- Provide education to the public regarding restoration plan; explain ecological principles and restoration process
- Educate the public on academic research being conducted in the Park
- Interpretation is a prime objective.

Restoration could consider:

- Minimize impact to soil as much as possible during the restoration process
- Use a variation of approaches according to sensitivity and importance of habitat, e.g. protect understory, layers, shrubs, deciduous; avoid machinery on wet soils, greater protection measures for critical habitat for SAR
- How much disturbance, compaction does machinery cause?
- Does machinery use cause increased spread of invasive plants?
- Low understory areas may
 - Require more planting
 - Already be impacted

DRAFT March 27

- Trail clearing 5-7 m could consider:
 - There are lots of plants along trails (more than in forested areas)
 - Trail sides are animal habitat
 - How use machinery
- Cliffs near Prospect Point are a unique habitat (i.e. Mosses)
 - They form a microhabitat of exposed sandstone
 - An inventory could be useful (mosses/liverworts)
 - Keep moss islands where possible, even if areas need to be safe (results in fragmentation but this can ultimately help recolonization)
- In blowdown areas
 - SAR/ESA areas need to be identified
 - Develop site/activity specific responses

Species at Risk management could consider:

- Consider Stanley Park's rare species and habitats in a regional context, with connectivity in mind when putting together the management plan
- Mapping is key to identifying and protecting rare species and important habitats
- Continue monitoring and identifying SARs and potential critical habitat in the park
- In addition to Species at Risk as listed by CDC / COSEWIC, consider
 - Important species (not necessarily at risk)
 - Eg. Culturally important species (valued by park users)
 - Ecologically important species (eg keystone species, forage plants, ...)
 - "Species of High Stewardship Responsibility in BC"
- Prioritize species list – For Paul Lawson
 - Doing so may include/eliminate more species than the current list
- Identify which species are in the park (long term)
- Only need to consider COSEWIC listed species for recovery plans [This should be changed to "Check federal and provincial legal responsibility for SAR"](#)
- Identify critical habitats for species that are present
- Mistletoe is important for gaps, fungi, habitat
 - There are safety issues
 - Matters more for forestry (exaggerated)
 - Doesn't matter in Stanley Park
 - Is an issue for specific areas
- Significant rare elements in the park should be mapped so [they can be prevented from damage during restoration and subsequent management activities.](#)
- Identify species that ought to be here
 - For habitat
 - For long-term management plan
 - Include invertebrates, fungi, mosses, algae, etc.
- Knowledge of birds is [more complete](#) than other taxa
- Big trees – Threats to them need to be identified
- Create a unique features/species database for operations

DRAFT March 27

- Don't use equipment in nesting season
 - Birds
 - Bad P.R. – media attention
 - Eagles at P.P. will be monitored
- Pay attention to species that are of special interest in Stanley Park as well as species at risk
 - Important to people (ie. Eagles)
 - Important to ecological process
 - Keystone species
- Consider what is rare for Stanley Park vs rare in general
 - Build into management plan
- Map wildlife trees
- Red listed communities may be linked through site series (Stanley Park 05 07 site classification) (query CDC) **Can we clarify this???** **Ralph Wells could...** **I don't know**
- Seral stages in themselves may have *potential* to become red listed

Invasive species management could consider:

- Monitoring for invasive species needs to start now and take place over the long term
- Priority to removal of giant hogweed.
- Hogweed should be a priority for invasive species management
 - This is for public safety
 - Address both seedlings and mature plants
 - Use VPB staff not volunteers, to ensure effectiveness
- Opportunistic on other invasive species **What did this mean???** **Andrew?**
- Invasive removal – focus on new stuff (point sources) vs established areas
- Habitat: consider sensitivity of removal, when invasive species are habitat for animals
- Be vigilant over the next couple of years (especially) – due to blowdown
 - Plan for the long-term
 - Consider climate Change
 - Observe and record actions
- Invasive plants are significant in respect to biodiversity impacts
- Note impact / potential impact of invasives with respect to Species at Risk
- Need for Control of invasives in order to protect endemics
- Consider how / who will approach and champion this?
 - VPB staff? Consultants / contractors? Organizations with volunteers? all?
- Invasive species strategies need to recognize priority strategies (because of limited resources)
- Need to first know / identify the sensitive areas
- Mapping is important re invasives
- It is important to understand the invasives' life cycles on a species-specific level
- It is critical to understand the natural species (their niches / needs) that are being invaded.

DRAFT March 27

- Proactive control vs [exponential] reactive control is important
- Recommend to concurrently / early manage the already-invaded forest and newly disturbed areas.
- Can be very expensive to deal with (Note that Surrey did a \$/m² cost analysis with respect to management) => a huge jump from proactive to reactive costs
- Aim for early detection / rapid response
- Important to strategize what happens after removal of invasives:
 - Inverse of removal is planting
 - Challenge to source some indigenous herbs / forbs
 - Salmonberry will be resilient
 - Include deciduous shrubs and trees for their high biodiversity values
- Biophysical inventory of invasives needs priority action
 - Priority work needs to happen perhaps by fall / summer 2007;
 - Priorities may include
 - Small / easily contained patches
 - Areas very close to the most sensitive of the disturbed areas
- Invasives may be spread by certain treatments, equipment; there is an immediate need to proactively avoid this
- Recommend invasives removal to be done after the work of CWD removal (ie after certain safety issues), but before replanting
- Engage community volunteers for a win-win collaboration
 - (Example of Jasper BBQ event re fuel management; Pacific Spirit Park community events)
- Any treatment (eg. opening or closing trails) needs to be within an ecological framework. E.g. Trails 'attract' invasives
- Invasive animal species require consideration as well

Environmentally sensitive areas management could consider:

- Have special emphasis on sensitive areas with respect to the landscape as a whole
- Maintain buffer areas around riparian areas
- What should we have as buffer zones? Where, how wide, etc. Verify with ground surveys
- Inventory and fill in aquatic and wildlife monitoring gaps; overlap ESAs and blowdown areas, integrate TEM **what is TEM?**
- GPS large trees and wildlife trees
- Identify rare ecosystems and focus on these
- Need interpretive signs for the public to understand the significance of these areas and why they are being protected

Five summary or umbrella approaches can assemble and integrate the comments made in the forum

The preceding comments were largely made as specific items, responding to the topics of long and short term management. However, it is possible to identify some mechanisms that might help implement the hundreds of comments here, through several organized approaches. SPES can identify five summary or umbrella approaches, some mentioned

DRAFT March 27

during the forum, that could help implement the many suggestions here, along with the many other concerns relevant to managing Stanley Park. We summarize them as statements below.

(Note. I think some elaboration is required. I will add additional information before the next draft. Glenn)

Implement a *State of the Park* process to document current circumstances, trends, threats and options for the future

Implement a *Visitor Experience and Resource Protection* process to choose multiple long term goals and priorities, incorporate public input, set zones, indicators and monitoring strategies and establish feedback processes.

Document resources and processes using a GIS system, with key elements made public via the Public Mapping Network

Integrate the different partners, advisors, stakeholders, communities, research programs through a coordination and communications process

Integrate short and longer term actions with project management and management system tools