

5.0 MANAGEMENT GUIDELINES

Management planning for conservation areas requires balancing the need to protect and preserve important environmental, cultural and heritage resources while at the same time providing opportunities for visitors to enjoy and appreciate the area through recreation, scenic viewing or educational activities. Some of the challenges of management involve trade-offs between managing for one value over another. The management guidelines presented in this section provide a broad framework for long-term protection and management of the conservation area. More detailed recommendations are presented in Section 6.0 in relation to particular issues and plan components.

5.1 Terrain

The relatively steep slopes of Burnaby Mountain have made some areas, particularly along the northern slopes, highly unsuitable for facilities or human use. As a consequence, land uses and management activities occurring or proposed in these areas must consider issues of slope stability, erosion, and public safety. The following management guidelines have been used in the development of a Concept Plan and Management Plan for Burnaby Mountain.

All trails formalized within the Management Plan will be designed or upgraded to meet environmental and public safety standards appropriate to the location and type of trail. Trails that are highly prone to erosion will be given priority for treatment.

Future activities or land uses on steep or unstable slopes will be limited. Any future developments of trails or facilities on the north slope, as recommended in this plan, will be preceded by a geotechnical assessment of the site to determine suitability and potential environmental impacts.

5.2 Vegetation

In keeping with the conservation mandate of the conservation area, the retention and enhancement of forested areas for vegetation and habitat will be a priority. The following guidelines have been applied to the Concept Plan to ensure vegetation values are maintained or enhanced.

Trees and shrubs on Burnaby Mountain will be thinned or removed only where required for the development of facilities specified in the Covenant for the conservation area, stream enhancement, forest or fish management, public safety, or view management.

Existing clearings, open meadows, and rights-of-way will be used for trails and facilities as much as possible to limit the disturbance and fragmentation of habitat. These clearings will be maintained and managed for wildlife

habitat, for view opportunities, or for parking, interpretive or staging areas where specified in the plan.

Any new clearings will be subject to ESA management principles and review process and will be compatible with the Covenant for the conservation area.

Replanting of trees and shrubs for landscaping, restoration, or enhancement will be limited to indigenous species compatible with the conservation area environment exclusive of entry ways and the Centennial Pavilion area where horticultural displays are warranted.

Prescriptive environmental programs may be established to encourage greater forest and habitat diversity in areas where diversity has been minimized (e.g., dense alder stands) or where re-planting is to take place.

5.3 Wildlife and Habitat

Managing for wildlife is closely linked to vegetation management as it potentially involves modification of the existing forest structure or composition. The following guidelines are designed to encourage the diversity and continuity of habitats at a broad level as opposed to improving habitat values for individual species.

Habitat loss and fragmentation will be minimized through the use of existing trails, rights-of-way, and clearings, and by managing access into important habitat areas. Continuous blocks of habitat will be maintained for their wildlife values, and in some cases, access to these areas may be restricted.

Recommendations will be conservative in respect of wildlife habitat requirements and in recognition of the need to acquire more data on wildlife populations and local distributions.

Wildlife migration corridors within the conservation area and to nearby regional green spaces will be protected as much as possible.

Burnaby will adopt a no-net-loss approach to habitat conservation within the conservation area whereby the development of new facilities with significant impacts will be off-set by preservation and enhancement of other areas for wildlife

Vegetation management conducted for the purposes of view management or landscape restoration should encourage forest and habitat diversity. Prescriptive vegetation programs, such as plantings, may also be established in appropriate areas.

Habitat enhancement measures, such as the creation of deer browse areas away from roadways, may be encouraged to sustain and enhance the deer population on Burnaby Mountain.

5.4 Watercourses

Burnaby Mountain contains numerous streams and watercourses concentrated mainly on the north and south slopes. A portion of the southern slope has been rated highly sensitive and contains the most significant watercourses on the mountain when considering fish and aquatic habitat values. However, all watercourses on the mountain are potentially sensitive as a result of terrain and slope factors. The following recommendations therefore apply to all watercourses within the conservation area.

Trail improvements, closures, and/or re-routing of trails near watercourses will be given priority in the implementation strategy. Trail and bridge design standards will be developed and put in place to ensure environmental impacts are minimized.

All trails or trail sections which lie within the creek bed of a permanent watercourse will be closed and restored.

Appropriate buffers and leave strips will be maintained between streams and trails (i.e., about 15 metres) and adequate vegetation cover will be retained to maintain habitat values for fish and aquatic species.

Prescriptive environmental programs, such as restoration or enhancement programs, may be established in appropriate areas to encourage healthy streams and productive habitats.

Natural hazards associated with water flows (e.g., debris and mudslides) will be monitored and managed as necessary.

All works or changes in and about streams will be in accordance with approvals and guidelines of the Department of Fisheries and Oceans and the provincial Ministry of Environment, Lands and Parks.

5.5 Environmentally and Ecologically Important Areas

Burnaby Mountain as a whole is considered an Environmentally Sensitive Area within the City of Burnaby. In addition, individual sites or areas on the mountain exhibit characteristics that make them relatively more sensitive than other sites within the conservation area. At both levels, areas of environmental sensitivity must be protected.

All management activities and strategies, particularly those requiring alteration of the landscape, will respect the spirit and principles of the City's ESA strategy.

Sites within the conservation area which have been identified as especially sensitive for their vegetation, habitat or watercourse values will be given

priority for implementation of management actions to improve and protect existing natural values and, where appropriate, recreational opportunities.

5.6 Cultural and Heritage Resources

Burnaby Mountain contains several resources of historical or cultural significance. One of these, North Road Trail, has been recognized by the municipality as an important artifact of Burnaby's historical development. Other sites, such as the club house at the former Barnet Rifle Club, are considered to have cultural values worthy of recognition.

Efforts will be made to protect any sites, artifacts, structures or landscape features that are historically or culturally significant, or that may be identified as significant through further assessment and inventory.

No object of archaeological significance will be removed, damaged or destroyed.

The Centennial Pavilion area will continue to be a major attraction and focus of the conservation area. Existing cultural facilities and structures will continue to be maintained and interpreted, such as the rose garden and works of public art.

Introduction of new public art pieces in Burnaby Mountain Conservation Area should be sited in the vicinity of the Centennial Pavilion or, potentially, in the former target range area. Sites should be selected which are sufficiently separate from existing art and garden installations to avoid impinging on their settings.

5.7 Visual and Scenic Resources

Burnaby Mountain offers considerable opportunities for scenic appreciation. Maintaining and enhancing view opportunities will require vegetation management. The following guidelines apply to the management of the mountain's visual resources.

View corridor management will be assessed and implemented relative to the protection of significant environmental features.

Scenic views and viewing opportunities will be maintained through vegetation management such as the selective thinning or removal of trees or tree branches to retain view corridors, or planting a different mix of species at important viewpoints to limit re-growth.

Planning will favour the use of native plant species and will encourage the creation of habitat.

Views from the Centennial Pavilion will be afforded the highest priority within the conservation area given the role of this area as a tourist destination offering panoramic views of the surrounding region.

5.8 Access and Linkages

Access points to Burnaby Mountain Conservation Area and to neighbouring communities and parks will be outlined in the Concept Plan according to the following guidelines.

Trail linkages and safe access between Burnaby Mountain Conservation Area, SFU, and regional neighbourhoods and parks will be provided as part of the Urban Trails System.

Where important blocks of habitat have been identified, public access will not be improved in order to minimize disturbances to wildlife and habitat. Pedestrian access will be allowed to continue on approved existing trails.

5.9 Recreation Management

Recreation is the most significant land use within Burnaby Mountain Conservation Area and future demand for access and recreational opportunities is expected to grow. During the planning process, efforts were made to ensure that the interests of all user groups were considered in the final plan. This challenging task resulted in the development of several guidelines for managing recreational use.

The Centennial Pavilion area will continue to be a major recreation focus of the conservation area accommodating active and passive recreation, scenic viewing, cultural appreciation, interpretation and special events.

Pedestrian use will be permitted on all trail routes except where a separate cyclist-only route is provided in a parallel location to a walking trail, or where a nearby trail with similar start and finish is available to walkers.

Mountain bike use of selected trails is proposed to be conditional with regular review and renewal based on performance in accordance with Management Plan principles. A one-year conditional review period is proposed along with implementation of a public education, monitoring, patrol and enforcement program.

Destination equestrian use will be accommodated in the conservation area on select trails where multiple-use standards are feasible given terrain and slope constraints, and monitored.

No motorized vehicles will be permitted on conservation area trails or unpaved rights-of-way except for service and emergency purposes.

Off-leash dogs are incompatible with the conservation objectives of the conservation area and are therefore not permitted.

5.10 Conservation Area Facilities

The most highly used facilities in the conservation area are trails for walking, hiking, horseback riding and mountain biking. Other facilities are concentrated in the developed area around the Centennial Pavilion and include cultural structures and public art, parking, walking paths, a playground, and restaurant/food services. The following guidelines will apply to both existing and future conservation area facilities.

All trails will be improved and upgraded to meet environmental protection and public safety objectives including the closure of informal trails and restoration of native vegetation.

A set of design standards for multiple use trails will be developed and will be implemented on a priority basis.

A priority will be placed on upgrading the Trans-Canada Trail route to a width and surface suitable for use by pedestrians and cyclists.

The creation of new trails is only proposed in areas where there is an opportunity to provide significant trail linkages, i.e., loops, within the conservation area, to deflect users from unsafe or sensitive areas, or to manage user conflicts.

Parking will be encouraged only in existing clearings. With the exception of short-term parking at viewing locations, new parking areas will be located at the periphery of the conservation area near access points to trails.

The inclusion of more developed uses in the Centennial Pavilion area will be considered only within the context of the Covenant for Burnaby Mountain Conservation Area which outlines appropriate types of development and land use, and the requirements of ESA strategies.

Expansion of the children's playground in its immediate vicinity is supported by the plan.

5.11 Education and Interpretation

Opportunities for education and interpretation often go hand-in-hand with nature parks. Offering low-key interpretation of conservation area resources is favoured by most user groups as a way to enhance the recreational experience. Burnaby Mountain Conservation Area offers many features and landscapes that could be interpreted with minimal resources or disruption to the natural setting.

Signage and information kiosks will be centralized at entry points to the conservation area and key trailheads, especially along the Trans-Canada Trail route. Signage will be in character with the natural environment.

Education and interpretive programs will promote public appreciation of the conservation area and its unique natural landscape as well as enhance awareness of conservation issues while discouraging activities which can lead to the destruction or disturbance of habitats.

5.12 Research and Monitoring

Research and monitoring will be an important component of the Conservation Area Management Plan and implementation program. General recommendations for research and monitoring are provided below. More specific recommendations are given in the following chapter.

Regular monitoring of environmental and trail conditions will be undertaken in all areas of the conservation area.

Monitoring the effects of mountain biking will be conducted according to evaluation criteria developed as part of the conditional review period.

Prescriptive environmental programs may be established in appropriate areas to encourage forest and habitat diversity, e.g., deer browse areas away from roadways, wildlife crossings, fish enhancement programs.

Biophysical inventories should be conducted on a regular basis to enhance the level and quality of available data, and to assist in making management decisions with respect to forest and wildlife management.

Environmental impacts of proposed developments will be reviewed on a project-by-project basis in relation to the guidelines presented in this plan, other ESA principles, and appropriate conservation area uses.

5.13 Regional and Community Cooperation

While the City of Burnaby will retain prime management authority, other groups have an interest in the future development and management of the conservation area. These groups include recreational users, SFU, environmental advocacy groups, other government agencies, leaseholders, and local residents and neighbouring land users. The following guidelines will be considered when addressing issues of local and regional land use.

Continued public involvement in the future management of Burnaby Mountain Conservation Area is recommended for key stages of implementation through the establishment of a Public Advisory Committee comprised of representatives from various user groups.

The use of volunteers may be encouraged where supplemental human resources are required to meet management objectives, e.g., biophysical inventory work, and where their use does not conflict with City work forces.

The City of Burnaby will continue to work with SFU, leaseholders, and industrial neighbours to ensure compatibility between conservation area management principles and the actions and activities of adjacent land users.