Cuthbert Holmes/Tillicum Park

Management Plan

Appendices

Parks and Recreation Department
Parks Division | September 2015

Saanich

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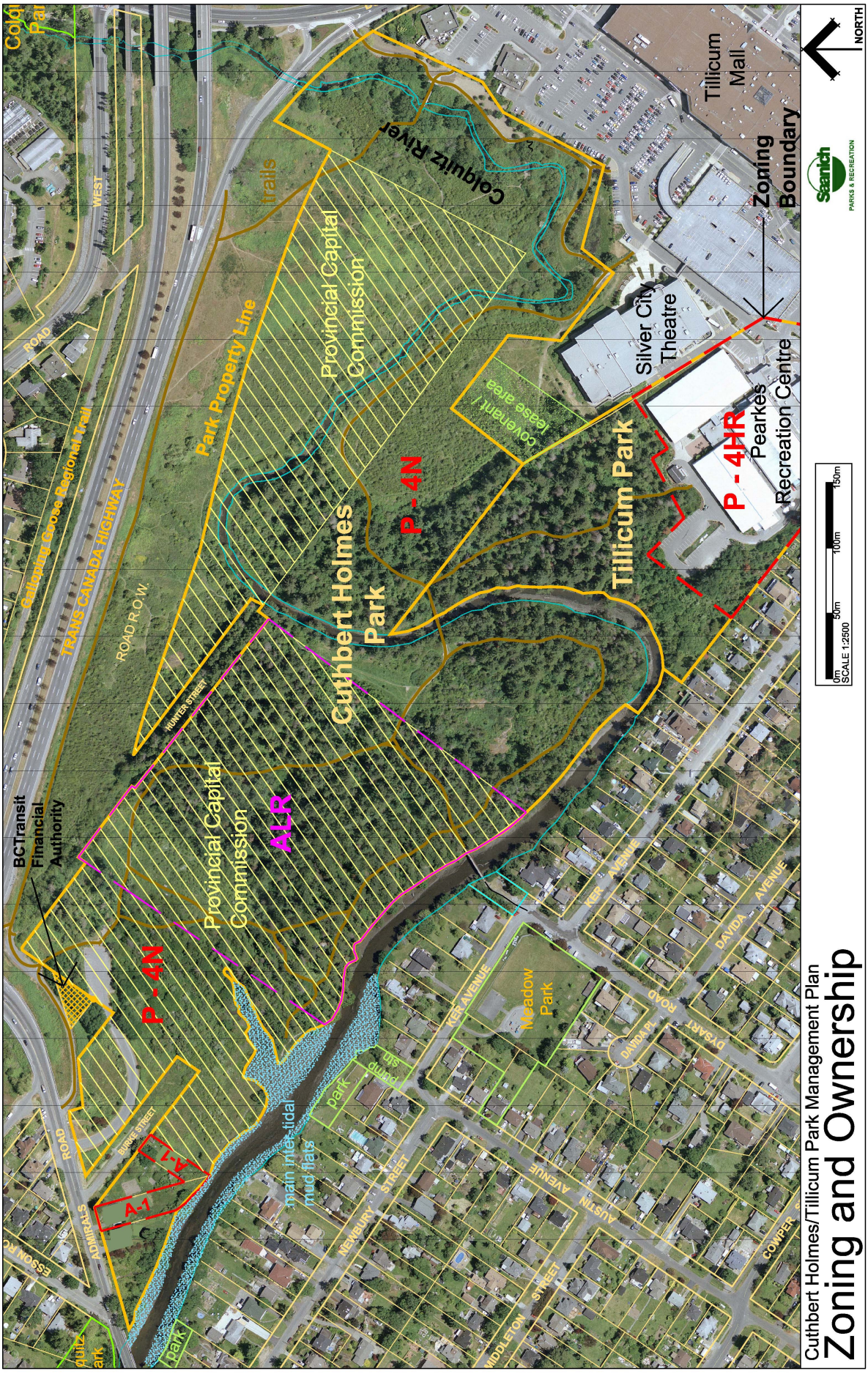
Appendix A – Cuthbert Holmes/Tillicum Park Zoning and Ownership



Appendix B – Saanich Policy Overview and Guiding Documents

- Official Community Plan Bylaw, 2008, No. 8940

The Saanich Vision is based on three themes; Environmental Integrity, Social Well-being, and Economic Vibrancy. The Environmental Integrity theme states that *'Saanich restores and protects air, land, and water quality, the biodiversity of existing natural areas and eco-systems, the network of natural areas and open spaces, and urban forests'*.

Several policies within the Environmental Integrity/Natural Environment section apply to Cuthbert Holmes Park including: 4.1.2.3. *'Continue to protect and restore habitats that support native species of plants, animals and address threats to biodiversity such as invasive species'*, and 4.1.2.4. *'Protect and restore rare and endangered species habitat and ecosystems, particularly those associated with Garry oak ecosystems'*.

- 2014-2018 Strategic Plan

The Strategic Plan is a roadmap of how to achieve the vision set out in the OCP. It identifies six corporate themes underpinning the OCP's themes, two of which are Sustainable Environment and Healthy Community. Several Parks Department initiatives are involved and are relevant to Cuthbert Holmes Park, including measures to further the Invasive Species Management Strategy and the Urban Forest Strategy.

- Parks, Recreation and Culture Master Plan

The updated plan outlines how municipal departments and services work together to achieve the over-arching vision and community themes in the Official Community Plan: environmental integrity, social well-being, and economic vibrancy. Within the Parks and Recreation Department, the Parks Division must balance interests relating to use, conservation and preservation. To help uphold the environmental integrity theme, the Parks Division ensures that 'the trail system, parks, environmentally sensitive areas and natural parks and urban forests are well developed, preserved and enhanced'. Parks and trails contribute to opportunities for balanced, active, and diverse lifestyles, and to the range of recreational services that contribute to social well-being.

- Zoning Bylaw 2003

Cuthbert Holmes Park is zoned Natural Park (P-4N zone), with the exception of an A-1 zoned parcel on Burke Street. The Zoning Bylaw defines 'Natural Park' as *'a park devoted to the retention, preservation, and enhancement of natural, historic or landscape features and is used primarily for informal or passive recreation proposes*.' Permitted uses are; natural park, nature centre, accessory residential and accessory buildings and structures.

- The Tillicum Local Area Plan

Policy 8.12 of the Open Space, Parks and Trails section of The Tillicum Local Area Plan is to *'enhance the wildlife values of Cuthbert Holmes Park by creating a dense vegetation buffer between the park and Trans Canada Highway'*.

- Parks Management and Control Bylaw, 1997, No. 7753

This document outlines general rules and regulations for all Saanich parks, as well as rules that apply only to specific parks. For example, Sections 27.c and f, identifies certain parks with sensitive ecosystems where cyclists are limited to hard surface trails or parking lots, including; Mount Douglas Park, Knockan Hill Park, Mount Tolmie Park, Rithet's Bog Nature Sanctuary, Glencoe Cove, and Swan Lake Christmas Hill Nature Sanctuary.

- The Animals Bylaw, 2004, No. 8556

This bylaw regulates keeping animals in Saanich, including domestic farm animals and pets. Regarding dogs, with some exceptions, Saanich does not require that dogs be leashed, but rather that no dog be in any public place 'unless the dog is accompanied by and under the effective control of a competent person or is confined by a leash or chain' (Animals Bylaw, 2004, No. 8556, Section 10). Additional dog restrictions apply (Section 13.1 – 13.4) in some parks with sensitive areas:

- Swan Lake Christmas Hill Nature Sanctuary (P-5 Conservation Zone) – prohibits dogs
- Quick's Bottom (P-4N Natural Park Zone) – prohibits dogs
- Rithet's Bog (P-5 Conservation Zone) – allows leashed dogs on the perimeter trail only
- King's Pond (in Cedar Hill Park) (P-4 Recreation and Open Space Zone) – allows leashed dogs on the perimeter trail only

- Saanich Park Property Inventory

States that a natural park '*is dedicated to the preservation and protection of indigenous wilderness while allowing access for the enjoyment of the natural conditions without appreciably detracting from them. Development must be carried out in a sensitive manner and is normally restricted to elements that cause minimum disturbance of the eco-system while allowing for access to appreciate the area's natural attributes'*.

- Urban Forest Strategy

The purpose of the Urban Forest Strategy is to provide a long-term plan to achieve a sustainable urban forest in Saanich, its goal is to 'Protect and Enhance the Urban Forest'. The Saanich urban forest is defined as the sum of all trees and their associated ecosystems within the municipality, including all trees on public, private, commercial and institutional lands, and in all road right-of-ways.

- Park Natural Areas Management Guidelines (PNAMG)

The PNAMG identifies key threats to natural areas as urbanization and increasing pressure from human activity. Urbanization means that protective natural area buffers are reduced by development, and more users directly disrupt ecological processes. Negative results include; the introduction of invasive plant species, increased numbers of nuisance/invasive domestic animal species, loss of biodiversity, decrease of effective habitat size from 'edge effect', and increased wildlife stress and mortality.Its management themes are: Ecosystem, Use and Access, Risk Management, and Community Collaboration. Each theme has a goal and supporting guidelines.

Two of the Guideline's goals are particularly relevant to Cuthbert Holmes/Tillicum Park; the Ecosystem Management goal is to '*preserve, restore, and enhance ecological integrity while providing for appropriate use and access'*. The Use and Access management goal is to *'meet appropriate recreational demands of park users while protecting ecological integrity, and to educate park users regarding respect for park natural areas'*.

The PNAMG provides direction for decision-making regarding the development, operation, and maintenance of Saanich park natural areas, and guides the delivery of the initiatives in the Park Natural Areas Action Plan 2012 – 2017.

- Park Natural Areas Action Plan 2012 – 2017

The Action Plan works toward putting the Park Natural Area Management Guidelines into effect. It describes the major management initiatives to be undertaken in park natural areas over the next five years. The initiatives are:

- Invasive Species Management Strategy
- Mapping, inventory and Monitoring
- Community Partnerships and Outreach
- Best Management Practices
- Park Management Plans

- Invasive Species Management Strategy

The Invasive Species Management Strategy (ISMS) is one of the main initiatives of the Park Natural Areas Action Plan. When complete it will provide the framework for successful invasive plant species management throughout Saanich. The ISMS goal is to prevent, reduce, control and mitigate the effects of invasive species on natural ecosystems, human health and the economy.

There are four strategies to support this goal:

- Comprehensive approach
- Prevent and eradicate
- Contain and control
- Ensure program sustainability

The 'contain and control' strategy is used where infestations of certain invasive plants are severe and complete eradication is not realistic, and is applicable to CHP. It uses an approach called 'intervention ecology' where the emphasis is on containing invasive plants' spread and preventing new populations from establishing.

The Invasive Species Management Strategy provides criteria for prioritizing sites for restoration activities, and best management practices (BMPs) for restoration activities. It also lists measures to encourage the continuation of volunteer efforts.

- Saanich Parks and Recreation Trail Guidelines 2007

  This document outlines different categories of trails, where they are found, what their purpose is, and what their physical characteristics are. It guides trail development throughout Saanich Parks. Various types of trails are defined as follows:

  - Community trails – multi-use and accessible, asphalt or compacted granular surfaces, typically 3 – 5 m wide.
  - Neighbourhood trails – multi-use, asphalt or compacted granular surfaces, typically 2 – 3 m wide.
  - Rustic trails – multi-use, compacted gravel or natural soil/rock surfaces, 1 – 2 m wide.
  - Specialty trails –specified uses only, width and surface materials are determined on a site by site basis, used in areas with topographic or special environmental features.

- Trail Closure and Restoration Best Practices (Draft)

This document outlines detailed trail construction, maintenance and decommissioning techniques. which reduce or prevent negative impacts to the environment.

- Saanich Parks Best Management Practices (BMPs)

BMPs are the collective group of techniques and policies that are used to minimize impact to the environment, and maximize efficiency and safety during any particular activity.

Appendix C – Environmental Review: Executive Summary & Final Map

Executive Summary

This report is an Environmental Review of Cuthbert Holmes Park, a 25.7 ha park zoned Natural Park Zone, located in the District of Saanich on southern Vancouver Island. The purpose of the report is to provide an inventory of environmental information for the park to determine the park's sensitivity to human use, and identify potential park use areas that would not significantly interfere with ecological functions of the park.

Methods

Environmental information about Cuthbert Holmes Park was obtained from existing plans and reports, map data obtained from the District of Saanich, relevant legislation, environmental databases, and field work conducted by Westland Resource Group with District of Saanich staff and knowledgeable community members. The environmental information was used to rate the sensitivity of areas in the park to human disturbance.

Plant communities

Cuthbert Holmes Park is in the Coastal Douglas Fir moist maritime (CDFmm) biogeoclimatic zone. All naturally occurring plant communities and ecosystems in this zone are listed as "at risk" by the provincial Conservation Data Centre. There are no records of provincially or federally at risk plant species in the study area, but a full plant survey has not been done. The park contains wetlands, stands of trembling aspen (*Populus tremuloides*), closed-canopy forested areas (mature and old Douglas fir, arbutus, and Garry oak), shrubs, old fields, riparian vegetation, an estuary, and rock outcrops.

Some ecosystems in the park are undergoing environmental stress. Tree loss due to wind, disease, root saturation, drought, and high creek water levels are evident throughout the park. Historic uses of the area, including agriculture, recreation, infilling, and development, have altered plant community composition from their natural state. Non-native invasive plant species are abundant in the study area, and include English ivy, English hawthorn, Himalayan blackberry, agronomic grasses, Canada thistle, and Daphne laurel.

Restoration areas

Considerable habitat restoration has been undertaken in the park by the District of Saanich and community groups. Invasive species have been removed from eight areas in the park. Four of the removal areas have been replanted with native species.

Wildlife habitat

Cuthbert Holmes Park has a variety of wildlife habitats, ranging from closed canopy mature and old forest, to open canopy forest, and shrub thickets. The riparian corridor in the park makes this area attractive to a diverse array of wildlife throughout the year, including over 120 species of birds. Species such as the Great Blue Heron (*Ardea herodias*), Great Horned Owl (*Bubo virginianus*), and Coopers Hawks (*Accipiter cooperii*) are commonly observed by naturalists and

walkers visiting the park. The Colquitz River provides foraging habitat for cormorants, ducks, geese, and other waterfowl, and these species often nest in the riparian habitat adjacent to the river.

Cuthbert Holmes Park supports the largest breeding colony of Great Blue Heron on Vancouver Island (66 nests in 2010). The Pacific subspecies of Great Blue Heron (*Ardea herodias fannini*) is provincially blue listed, and federally listed as 'special concern' by COSEWIC. Human disturbance in the park may affect the reproductive success of herons. During active nesting (January 15 to September 15), human activity, such as walking or boating on the Colquitz River, within 165 m of the nests has the potential to affect nesting or foraging birds (Vennesland, 2000).

Fish habitat

The Colquitz River winds through Cuthbert Holmes Park. The Colquitz River is fish bearing, and is known to support coho salmon, chum salmon, cutthroat trout, threespine stickleback, sculpin, brown catfish, bass, herring, and sunfish (Fish Wizard 2010; FISS 2010). Coho Salmon in the Colquitz River are thought to be genetically distinct, indicating that they are not introduced through hatchery programs. On average, 300 coho salmon return to spawn in the Colquitz River each year (Gorge Waterway Initiative, 2007). The herring in the Colquitz River are also known to be genetically distinct.

The Colquitz River's morphology is dynamic, and flows are affected by tidal changes, as well as storm water influx. Flooding of the river is common, and erosion of the river banks is apparent.

Assessment of environmental sensitivity

Analysis of the gathered environmental information was used to determine an area's sensitivity to human disturbance. The sensitivity to human disturbance rating is an indication of the degree of potential negative impact that human activity could have on the environmental integrity of that area, including; plant communities, wildlife and wildlife habitat, fish and fish habitat, and riparian corridors.

Human activities in areas with low sensitivity to human disturbance have a lower risk of negatively affecting the plants, wildlife, wildlife habitats, or riparian values of the area. Conversely, human disturbance in highly sensitive areas has a greater risk of negatively affecting the natural environment.

The study area was rated according to four categories of sensitivity to human disturbance: high, medium, low, and very low. Information obtained during the Environmental Inventory (Section 3) was used to assign sensitivity ratings for the study area. Map 6 shows the results of the analysis.

High sensitivity. Areas of the park considered to have high sensitivity to human disturbance include: sensitive ecosystems and plant communities (riparian areas, mature old forest, rock outcrops), and those with important wildlife habitat values (including the heron colony). These

are mainly located in the south-central and eastern parts of the park and adjacent to Colquitz River.

Medium sensitivity. Areas of the park considered to have medium sensitivity have young forest and shrub. These areas are adjacent to high sensitivity areas, and provide a buffer for high sensitivity habitat such as the heron colony and riparian area by helping to decrease the number of direct impacts on high sensitivity ecosystems.

Low sensitivity. Areas of the park considered to have low sensitivity contain shrub and young forest with some wildlife habitat values and are located in the northeast corner of the park, and along Highway 1 and Admirals Road. These areas are generally used only by common wildlife species tolerant of urbanization.

Very low sensitivity. Areas of very low sensitivity have been degraded by historic use and retain very little natural function. Very low sensitivity areas are located in the northeast and northwest parts of the park adjacent to highly active roadways with little wildlife value.

Activities that affect the natural environment of the park

Activities that impact the natural functions of Cuthbert Holmes Park include walkers (including school groups, fitness, etc.), dogs, introduction of yard waste, trail building (sanctioned and non-sanctioned), off trail use, and boating on the Colquitz River.

- Walkers can have a low impact on the park if kept to main trails, and if they refrain from loud noises. However, off trail walking by humans and dogs may cause soil compaction, invasive plant dispersal, trampling of vegetation, erosion, and disturbance of wildlife.

- Soil compaction can cause stress to root systems, decrease tree health and increase susceptibility to disease. Soil compaction can also affect hydrology by decreased infiltration of precipitation.

- Invasive plants often prefer compact soils and their seeds often adhere to clothing, shoes, and pets. Seeds are then unknowingly transported along trails where they propagate readily.

- Wildlife disturbance can include disruption of nesting and foraging behavior. Disruption of natural behavior patterns can make wildlife more vulnerable to predation or cause a decrease in the defense of nests and young.

- Boating along the Colquitz River may disturb foraging wildlife including Great Blue Herons and ducks and other waterfowl. The presence of row boats, paddle boats, motorized water crafts, and noise disturbance that may accompany them can impact foraging success.

Summary

The study area, for simplicity referred to as Cuthbert Holmes Park, contains varying levels of sensitivity to human disturbance from high to very low. Consideration should be given to these ratings when planning the development and maintenance of amenities in the park.

Note that walkers can have a low impact if kept to main trails and refrain from making loud noises, and that many of the negative impacts resulting from human activity would be reduced by controlling the movement of people and dogs.

Although much of the park is heavily impacted by invasive plant species, significant efforts are being made to reduce these areas. Even heavily impacted areas would benefit from restoration efforts, and a strategy to guide these efforts could be developed.

Cuthbert Holmes Park Management Plan

Environmental Review Report - Final Map

0m 50m 100m 150m
SCALE 1:2500

Saanich PARKS & RECREATION

NORTH

Appendix D – Public Participation Events and Summaries

Public Participation Events

- **Community Mapping exercise, May 2, 2010** – a 'brainstorming session' initiated by the Gorge-Tillicum Community Association, based on the original 5 themes; Natural Areas Management, Trails, Recreational Opportunities, Safety and Security, and Community Gardens*. The purpose of this exercise was to encourage as many ideas and comments about the themes as possible. Other public events in 2010 further explored these ideas.
- Gorge Canada Day Picnic, July 1, 2010
- Music in The Park event at Meadow Park on August 24, 2010
- Riversong event held in Cuthbert Holmes Park on September 26, 2010
- Colquitz Middle School presentation and discussion on Oct. 27 and Nov. 8, 2010
- Spectrum High School student presentation and discussion on November 4, 2010
- **Public Workshop, June 18, 2011** - sought feedback on a proposed vision statement, goals and directions which were developed based on Saanich policy, the Environmental Review Report, and previous public input. Participants were asked to consider the statements in the context of Saanich policy, and the Environmental Review report.
- **Public Open House, June 13, 2012** – sought feedback on the ideas of active recreation in the park, a 'voluntary compliance' management strategy for trail use, and a slightly revised vision statement and goals.
- Presentations to Advisory Committees, 2014
- On-line **Draft Plan Review and Survey** and Social Media promotion Mar-April 2015
- Presentations to key Stakeholder Groups and Advisory Committees, 2015

The idea of accommodating active recreation in a low sensitivity area was explored at all public events. The idea proved to be controversial, and public feedback determined a lack of support, see the Public Participation document for more details.

*Note that the community garden proposal was withdrawn in May 2011 due to environmental concerns, and was omitted from subsequent events.

Public Participation Events Summaries - Feedback from these events is summarized below. Full details can be found in the Public Participation document.

- ☐ Summary of Public Feedback to the end of 2010, including **Community Mapping exercise** and **Colquitz** and **Spectrum** school visits.
  - Desire to preserve and restore the park's natural environment
  - Desire to accommodate public access
  - Support for recreational activities that promote nature appreciation, and have minimal impact on the environment
  - Desire to have safety and security concerns addressed

- ☐ Summary of **Public Workshop, June 18, 2011**
  - The large majority of participants supported the proposed vision statement, goals and supporting management directions
  - Desire for Municipal leadership in identifying compatible activities, and to proceed with developing the Management Plan

- ☐ Summary of **Public Open House, June 13, 2012**

Approximately 100 people attended this event. Participants were asked to review information panels presenting background information, information regarding the park vision and goals, active recreation, and proposed management strategies. Specific feedback was requested on the following topics;

1. To determine support for the park vision, goal statements and management directions.
2. To determine the level of support for active recreation in the park.
3. To determine the level of support for a 'stay on trails in sensitive areas' (voluntary compliance) management approach for people, bikes and pets.

84 participants completed the survey, independent submissions were also received.

<u>Survey Highlights</u>

83% indicated that they live within a 15 minute walk of the park
8% live within other areas of Saanich, and 8% live outside of Saanich
67% said they use the park to walk a dog
62% use it for walking
60% for nature appreciation
24% for bike riding
23% to get to a local destination
18% for running
7% for other purposes

Key Findings:

1. Vision and Goal statements:
   - Park Vision - received 64% support
   - Natural Areas Management Goal - received 86% support
   - Trails Goal - received 84% support
   - Recreational Opportunities Goal - received 64% support
   - Safety and Security Goal - received 87% support

2. Active Recreation:
   Participants were asked to indicate their support for active recreation in the park in general, and for specific active recreational activities.
   - 38% of respondents supported active recreation in general

   Of the 38 % who supported active recreation:
   - 53% supported a bike skills facility
   - 44% supported a playground
   - 50% supported an informal open space for active and passive use

3. Voluntary Compliance (voluntary 'stay on trail' management approach) support:
   - 83% support voluntary compliance for people
   - 83% support voluntary compliance for bikes
   - 68% support voluntary compliance for dogs

Conclusion:
Participants at the 2012 Open House largely supported the vision statement and goals which are detailed in section 7. Support for proposed active recreation even in a low-sensitivity area is weak, and consequently it has not been incorporated into this plan. There was strong representation of dog owners and local residents at the event. Dog owners, many of whom are regular local users of the park have a general reluctance to support any restriction on dogs' movements. However, the idea of a voluntary compliance management approach was generally well received, and has been incorporated into this plan as the initial approach to manage impacts caused by off-trail travel.

☐ Summary of **Public Survey**, March – April 2105

The draft plan with supporting documents were posted on the Saanich website and promoted through Social Media, and a public survey was undertaken. There were almost 17,000 views on its Facebook page, and 215 survey responses were received. The breakdown of support for the Vision Statement and actions supporting the 4 Goals was:

- Vision Statement: 67% strongly support, 30% somewhat support
- Natural Areas Actions: 67% strongly support, 29% somewhat support
- Trails Actions: 46% strongly support, 37% somewhat support
- Recreation Actions: 53% strongly support, 38% somewhat support
- Safety and Security: 53% strongly support, 37% somewhat support

Overall support for 'all action steps' was 31%, and 49% for the 'majority of steps'.

Appendix E – Preservation and Restoration Priority Areas: Maps & Methodology

Methodology

Restoration areas were identified using information from the Invasive Species Management Strategy (ISMS), and Westland Resource Group's Environmental Review Report. According to the ISMS, the invasive plant species found in Cuthbert Holmes/Tillicum Park put it in the 'Contain and Control' category of invasive plant management. Within this category priority is assigned according to: 1) the presence of Species at Risk and their habitat, as identified by the Conservation Data Centre (CDC), 2) sensitive ecosystems identified in the sensitive ecosystem inventory (SEI) in Saanich's Environmentally Significant Areas (ESA) atlas, and 3) parks with active volunteer groups.

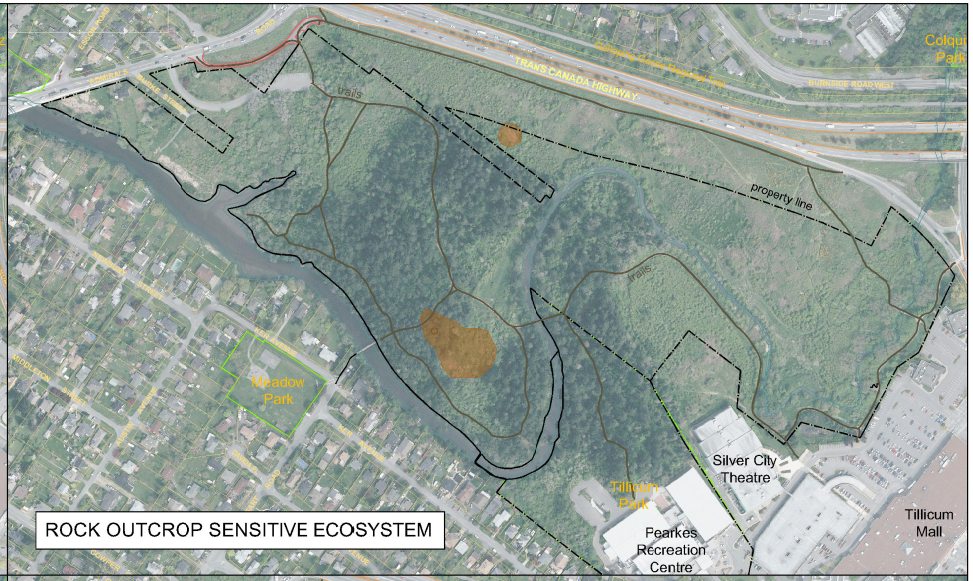
Cuthbert Holmes/Tillicum Park is home to bird species that are on CDC's list, and has ecosystems identified as sensitive in the SEI including: 'riparian areas', and 'old forest' (riparian is defined as 'of, situated, or dwelling on the bank of a river or other body of water', and the riparian buffer is 30m from the top of bank). Westland's Environmental Review Report identifies an additional sensitive ecosystem, 'rock outcrop', as identified in the Sensitive Ecosystem Inventory (SEI) Standards for Vancouver Island. Cuthbert Holmes/Tillicum Park has active volunteer groups including the Saanich Pulling Together Volunteer Program and the Friends of Cuthbert Holmes Park.

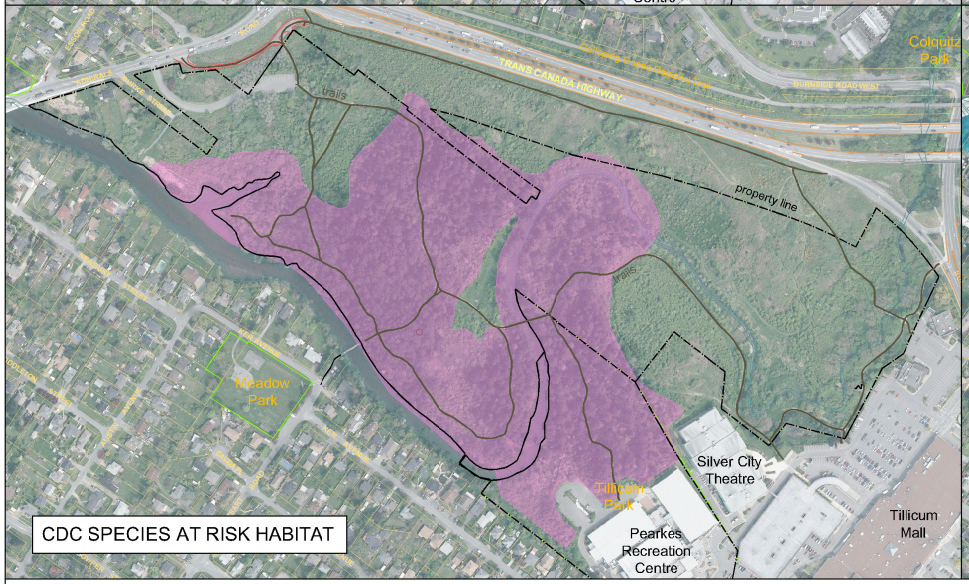
These areas are shown separately on the 'Restoration and Preservation Priority Criteria' map and are overlaid on the 'Restoration and Preservation Priority Areas' map. Highest priority is given to those areas with the most overlapping layers, and lowest priority to those with the least (eg a sensitive ecosystem area that also falls within a 'species at risk' habitat area will have a higher restoration priority than a sensitive ecosystem outside of a 'species at risk' habitat area, etc).

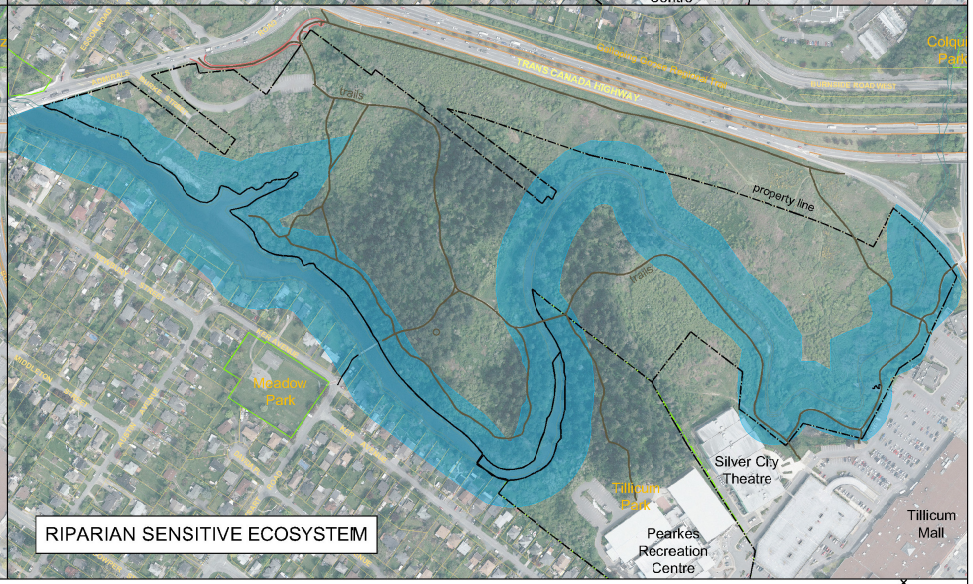
This method is illustrated by the following matrix.

Methodology Matrix

		Restoration Priority Criteria from the Invasive Species Management Strategy				Westland Environmental Review Criteria
		CDC Species at Risk Habitat	Forest Sensitive Ecosystem	Active Volunteer Group(s)	Riparian Sensitive Ecosystem	Rock Outcrop Sensitive Ecosystem
Priority Level Groups	1A	X	X	X		X
	1B	X	X	X	X	
	2A	X		X	X	
	2B	X	X	X		
	2C		X	X	X	
	3			X	X	
	4			X		







Cuthbert Holmes Park Management Plan

Preservation and Restoration Priority Criteria

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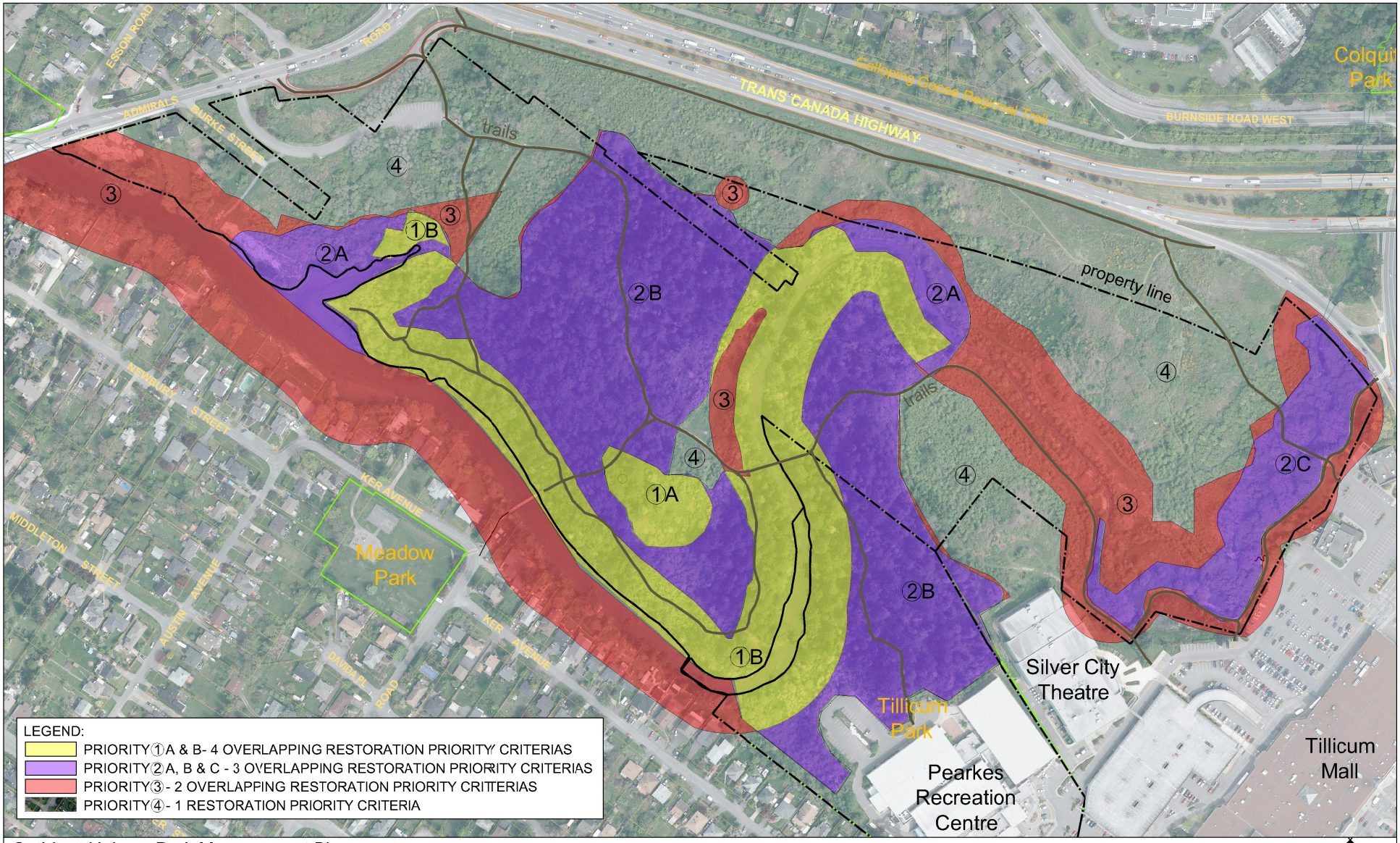
Saanich PARKS & RECREATION

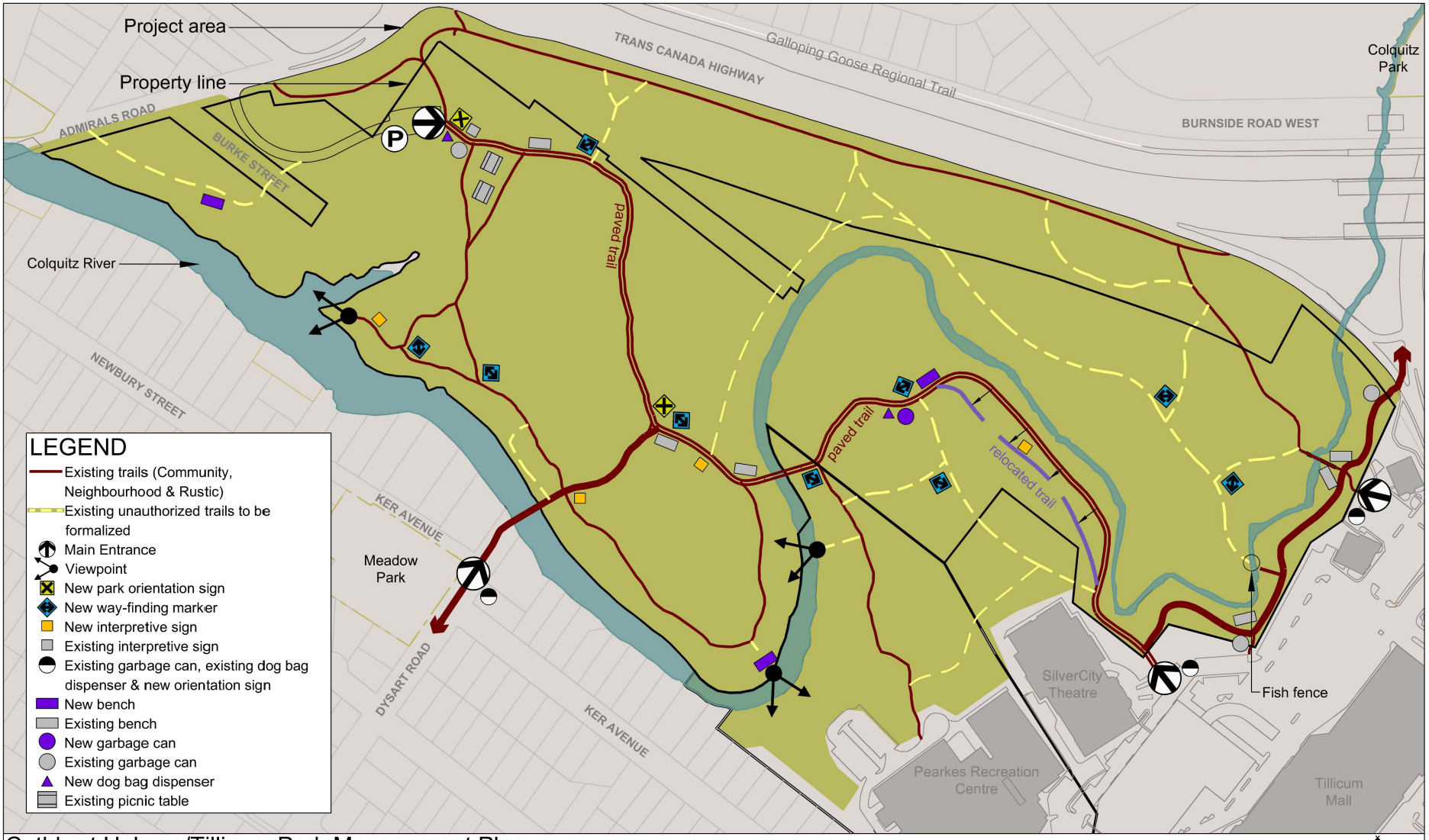
NORTH



Cuthbert Holmes Park Management Plan

Preservation and Restoration Priority Areas

Appendix F – Concept Plans



Cuthbert Holmes/Tillicum Park Management Plan

Concept Plan - Amenities & Infrastructure

Appendix G – Sign Examples

Interpretive Sign - table-top style

Interpretive/Orientation Sign - horizontal style

Interpretive Sign - upright style

Regulatory Sign

Regulatory Sign on Admirals Bridge

Regulatory Sign at Mount Douglas Park

Way-finding marker at Mount Douglas Park