

"IT STARTS IN YOUR PARKS"

Parks Master Plan – District of Coldstream

April 2016





Recresynthesis Consulting Inc.



Acknowledgements

We would like to thank the many citizens, staff, and community groups who provided extensive input for the development of the first ever District of Coldstream Parks Master Plan. The project was a true community effort, anticipating that this plan will address our residents' priorities now and in the future.

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The Community

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All others who shared their perspectives on the future of parks, trails and open spaces in the District of Coldstream.

A Framework for Action – Executive Summary



It Starts in Your Parks is the initial Parks Master Plan for the District of Coldstream. The Plan provides a framework for decision making for future parks and open service delivery and resource allocation. The Plan process began in May 2015 and concluded in the early months of 2016. The Plan is basically designed to cover a 10 year period. The goal of the Plan is to: "*Develop a community-supported plan that provides guidance for future development and redevelopment of the District's parks,*

waterfront, open space, trails and associated facilities." The Parks Master Plan will guide policy development, prioritize demands and opportunities, and generate a strategic action plan to assist in the various master plan proposals. The Parks Master Plan will be included as part of the current and future District of Coldstream's overall planning process.

In addition to the goal of the development of a community-supported plan that provides guidance for future development, other goals included:

- Integration of core values in the delivery of services
- Protection for District of Coldstream's unique natural and open space resources
- Strengthening a coordinated approach with other providers of parks and open space services
- Aligning services and programs with changing demographics
- Creation of a enhanced sense of place and local identity building the District's brand and image



The most significant element of the Master Plan is a call to action and future positioning of the District in the supply of parks and open space

resources. The Master Plan referenced several technical reports and analysis as well as community input. These elements are important in setting the stage for the most important part of the Plan: the Strategic Initiatives. Planning is important, but it's the implementation of the Plan that is most critical to ensure the District's success. The Master Plan will assist Coldstream with ensuring resource allocation is determined according to the greatest community needs. It also positions the District to pro-actively make decisions and receive the greatest return on investment of taxpayer dollars. Finally, the Plan will become a major initiative and reference for District of Coldstream Council as well as employees providing them with a sense of direction in their daily work.

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Greystone Park

Chapter 1: Introduction

CHAPTER 1 –Introduction

1.1 OVERVIEW: Purpose of the Parks Master Plan

The District of Coldstream parks and open space system, prior to 2014, was managed through the Greater Vernon Services, a function of the Regional District of North Okanagan. As such the District was included as a partner in all comprehensive park and recreation planning for the area including the *Greater Vernon Parks, Recreation and Culture Master Plan 2004.* Since 2014 through the *Greater Vernon Sub-regional Parks and Trails Service Agreement,* the District of Coldstream became responsible for designated local parks within their municipality. A rationale of this first ever District of Coldstream Parks Master Plan – *It Starts In Your Parks,* is to build off of the previous parks planning efforts and incorporate changes that focus on community needs and trends related to park use in the District of Coldstream.

The purpose of this Parks Master Plan is to develop a comprehensive updated vision for parks and open space areas in context with existing facilities, natural resources, and visions of the community providing direction and implementation strategies to guide the acquisition, development, and operation of District-owned parks and trails in their jurisdiction. This effort will reposition the District of Coldstream park and open space planning and implementation priorities to a framework that more closely represents the perceptions and needs of its citizens and visitors, providing a variety of recreational opportunities in a strategic and logical manner.

This document emphasizes a vision and mission for the future of District of Coldstream parks and open space, outlining implementation strategies and priorities that will guide their operations through the next ten years and beyond.

It Starts In Your Parks does not provide detailed planning or design for individual park or trail resources. Rather, it is concerned with how the overall system of parks and trails will be developed and managed to reflect the relative priorities and needs of the current and future District of Coldstream population.



Sovereign Park

1.2 DISTRICT OF COLDSTREAM - Mission & Vision

The Mission outlines the core purpose of the Parks Master Plan. The Vision reflects shared values and aspirations of District of Coldstream residents and frames a future consistent with the vision statements and goals of the *District of Coldstream Draft Official Community Plan 2015*. Policies focusing on our mission and vision will guide future decisions and ensure consistent long-term direction for parks and open spaces within the District.

District of Coldstream Parks Mission:

To provide parks and open space within the District of Coldstream providing a diverse, high-quality recreational experience that meets the needs of the community.

District of Coldstream Parks Vision:

District of Coldstream parks and open space will be recognized for providing thriving natural areas, accessible and well-maintained facilities, and a variety of recreational opportunities in a fiscally responsible manner.

1.3 THE BENEFITS OF PARKS & OPEN SPACE

There are many ways in which parks, open space and trails provide important benefits to the people of the District of Coldstream. These range from the quantifiable economic gains such as geo-tourism jobs and increased property values, to the quality of life improvements associated with regular exercise, access to the outdoors, and connections with community. Parks, open space and trails provide benefits across a wide range of age groups and physical abilities, for local residents and visitors alike.

The functions of these open spaces include providing neighbourhood meeting places, low-cost and accessible options for physical activity and play, attractive corridors connecting distant parts of our community for those using alternative modes of transportation, enhancing the urban landscape and preserving habitat.

1.4 PARKS & OPEN SPACE

Open Space:

Land in an essentially undisturbed natural state or enhanced for the purpose(s) of resource preservation, conservation, or recreation uses and shall be protected from any future re-development.

Land designated as open space may include any or a combination of the following characteristics:

- Ridges and hillside slopes
- Streams
- Natural shorelines
- Wetlands
- Scenic buffer areas
- Agricultural land
- Developed parks
- Linear connection and areas conducive to passive and recreational use

There are two classifications of Open Space :

- Natural Open Space
- Developed Open Space

Natural Open Space:

Open Space consisting of natural, undisturbed landscape set aside for the purpose of preservation or conservation of natural resources, natural features or scenic/aesthetic values.

This classification may include:

- native vegetation
- geological landforms
- historic/cultural sites
- water bodies/wetlands/riparian areas

- wildlife habitat
- hillside slopes
- ridgelines & view sheds
- scenic buffer areas
- agricultural & rangelands
- trails

Developed Open Space:

Open Space consisting of enhanced or developed landscape set aside for the purpose of active or passive recreation. This classification requires improvements necessary to accommodate and promote higher levels of use.

Improvements may include:

- Irrigated and maintained green space
- Pedestrian/bicycle circulation systems
- Open play areas and play fields
- Playgrounds
- Picnic shelters and seating
- Architectural features or buildings
- Community plazas
- Parking related strictly to use requirements
- Other recreation amenities

Trail/Pathway/Linear Connectors:

Trails, pathways and linear connections are designed to provide walking, bicycling and other non-motorized means of linking various parts of the community, development or open space system. Both paved and unpaved trails are appropriate. Linear connector serve two main purposes; one, to provide a recreation experience and two, transportation to other parts of the community, development and/or open space system.



Long Lake Estates Park



Trestle Park

Chapter 2: Community Input & Park Master Plan Profile

CHAPTER 2 – Community Input & Parks Master Plan Profile

2.1 Approach & Methodology

Parks play a critical role in the quality of life for residents and visitors. To develop a park system that meets the needs of the community, it must be informed by the community. The Parks Master Plan was created through a collaborative effort between the District of Coldstream and their consulting team, along with the invaluable contributions of the public and other stakeholders. The approach to producing the plan included the following major activities:

- gathering of background data and review of documents, in order to provide a baseline condition assessment of the District's existing open space system
- consulting with the District Staff, key stakeholders and public
- · on-site assessment of Coldstream's existing open spaces and identifying potential gaps and needs
- identification of issues and opportunities regarding open space
- performing a District analysis including a historical evolution breakdown in order to understand how the District and its open spaces have developed over time, and to recognize spatial patterns and trends
- development of a vision and guiding principles to provide a standard and ultimate goal to work towards in developing District of Coldstream's open space system
- development of a typology of open space in order to identify the range of open space types that are required for the municipality
- development of a concept (draft) plan to address the issues and opportunities, to illustrate the vision, and to provide an overall framework for open space within the District
- preparation of a Parks Master Plan, as an overall document consisting of the analysis, concepts and policies that identify and address public needs and priorities; provide strategic direction to address long-term open space needs; and ensure the efficient, coordinated use of open space.

2.2 Parks Master Plan Related Studies & Documents

A number of studies and documents – some statutory related while others more generic and/or parks specific in nature were utilized in the development of the parks master plan. Each, in their own state have been, and in some cases will continue to be, influential in directing the development of the District's parks, and open space system. These documents included:

- Greater Vernon Parks, Recreation & Culture Master Plan March 2004 Addendum January 2005
- District of Coldstream Bicycle & Pedestrian Plan January 2007
- District of Coldstream Draft Official Community Plan June 2015
- Ribbons of Green Trails Society Trails Plan 2013 2033 February 2014
- Greater Vernon Sub-Regional Parks and Trails Service Agreement December 2013
- · Parks Master Plan Draft City of Vernon October 2014
- A Framework for Recreation In Canada Canadian Parks & Recreation Association February 2015
- PRORAGIS 'The Impact of Parks' National Recreation & Parks Association Database 2015

2.3 Community Planning Sectors

An important part of developing a successful Parks Master Plan is understanding the community and its existing conditions. For this study the District of Coldstream was divided into key planning sectors. Each of these eight sectors was identified to reflect the local cultural landscape and natural features for the area as well as existing parks and open spaces.

These eight sectors are:

- Lavington
- Deep Lake
- Coldstream Valley Estates
- Coldstream Neighborhood Centre
- Middleton
- Long Lake
- Kal Lake Beach
- Kalview West



Constraints and opportunities for each sector were documented and then discussed and some further expanded during the public consultation process.

2.4 Community Survey Synopsis

At the end of September a community survey regarding the parks master plan was distributed as an insert in the quarterly utility invoice to households in the District of Coldstream. Respondents were given up to the end of October to complete and return the survey to the municipal office.

The survey results, a total of 264, have been compiled with interesting results. Resident responses indicate the some of following:

- Most are satisfied with the present park system
- · Use of local parks is relatively high with respondents
- · Walking, relaxation and lake access are main reasons for park use
- · Although parks are close at hand for most, the use of vehicles to access remains high
- · Acquisition of new park space including waterfront property is important for most
- Environmental areas are vital for a large majority which is common with most communities today
- Parks and open spaces are an important means to promote the District of Coldstream

Results of the parks and open space household survey can be found In Appendices F (Page 61).

2.5 Key Leader, Stakeholder & Public Meeting Summary

Throughout the development of the Parks Master Plan the consulting team met several times with Coldstream Council and staff with their input incorporated into the draft document prior to presentation to the public. As well, a park stakeholder group was formed by invitation to a variety of individuals representing both user and special interest groups within the District. These individuals provided comment(s) regarding specific proposals within the draft plan as well as areas of interest for current and future park needs. Members of the park stakeholder group represented School District 22, Coldstream Ranch, Friends of Kalamalka Park, Ribbons of Green Trail Society, Wildlife/Search and Rescue, Society for Protection of Kalamalka Lake, Lavington Community, Naturalists Club and other concerned community individuals. This group actively participated and contributed in the development of the draft and final Parks Master Plan Update document.

A sample of a few stakeholder comments for consideration include the following:

- Consider Binns Road as a potential walking trail (already used as such) from Coldstream Valley Estates area east to Grey Road and return. It allows for an easy quiet walk and they can observe the agricultural activities that occur on the properties adjacent to the road. Would require some minimal shoulder work along parts of Buchanan and Grey Roads.
- The Parks Master Plan document seems to be missing specific recommendations that could provide future direction for staff and Council regarding parkland deficits, etc.
- Ensure that pathways and trails from other adjacent properties and organizations have linked access points to those in Coldstream in order to create a seamless connectivity between municipalities in terms of green space linkages.
- Minimize impacts to native grassland areas as it provides habitat for a variety of native plants, birds and wildlife.
- Collaboration within and beyond District of Coldstream borders with matters pertaining to parks, open space and trails. This could include fundraising for specific local park issues.

In March an open house was hosted at the District of Coldstream Council Chambers which provided residents the chance to review the draft Parks Master Plan and its associated documents. Those attending were also given the opportunity to indicate what they felt were most important components to have within their local parks system by



posting their comments on a parks design board. During the community engagement session attendees were also requested to complete a short five question survey regarding the present and future of parks and open spaces within the District. Questions were specific in nature including: priorities in parks, trails and open spaces over the next five years; protection and enhancement of its parks system; community partnerships in parks and open spaces; encouraging local involvement in its parks and open spaces; and, favorite outdoor space(s) within the District of Coldstream.

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It is obvious from these two exercises that the residents of Coldstream truly care about their parks, trails and open space system with several of the main outcomes including:

- emphasizing more promotion of parks and their safe usage
- · creation of connector routes for non-motorized transport
- standard signage, both informational and directional, for parks, trails and open space
- · lake accessibility both upgrade existing and acquisition of new sites
- more benches and tables in parks
- protection for environmental significant areas
- · preparing adequate local amenities to support the future Rail to Trail system

See Appendices F (Page 62 - 64) for survey and park design note results.











Chapter 3: Existing Park & Open Spaces

CHAPTER 3 – Existing Parks & Open Space

This section provides a discussion of current parks and open spaces in the District of Coldstream, and detailed inventory of each space. It also includes: trail connectors, ROWs and other sites that may add to the inventory, either used or unused.

3.1 PARK & OPEN SPACE CLASSIFICATION & STANDARDS

The District of Coldstream recognizes the individuality of each of its parks and open spaces including size, setting within its service neighborhood, its amenities and accessibility to its users, its vegetation and habitat combining to make each site a unique asset. In understanding the uniqueness of each property there also comes a need to group parks and open spaces based on their similarities across a number of characteristics. For the most part classification is guided by size, use and purpose, and serves to:

- Provide a general guideline for future park and open space development options
- Serve as a basis for appropriate programming and uses in different types of parks
- Inform on initial functional design standards
- Provide a guideline for overall park and open space management

The categorizing of parks and open space is not projected to serve as an inventory of assets (i.e. total natural areas in hectares or total number of playing fields) as different combinations of similar assets appear in each park type. The classification of parks and open space is also not intended to serve as a naming procedure for each site as the list of desired or optional opportunities is not inclusive to each park and open space asset.

The District of Coldstream implements the following park and open space classifications and their respective description:

- Mini / Pocket Parks
- Neighborhood Parks
- Community Parks
- Urban-centered Parks
- Natural Areas
- Greenways
- Community Trails
- Special Use Parks
- Waterfront Parks



DEFINITION

Mini / Pocket Parks

These are existing tot-lot or other redundant park spaces that will convert to some form of community use or be disposed of with credit to the existing park system. As these spaces are replaced by adjacent neighbourhood or community park spaces, the District of Coldstream will work with community groups to identify passive and/or natural uses for the spaces or disposal agreement. Alternate uses may include naturalization for habitat, interneighbourhood pathway linkages, dog walking space, or other forms of community use (that does not require the placement of structures, play equipment or other high-maintenance objects).

Mini/pocket parks can also include ornamental areas, traffic islands, small boulevards, rightsof-way, medians, and minor drainage areas. Currently the District of Coldstream has several facilities that could be classified as a mini park including:

- Lochaven Tot Lot
- Tebo Drive
- Meadow Road
- Pointe Sage (undeveloped)
- Postill Drive

Neighborhood Parks

This is the local gateway park that provides nearby recreation and leisure opportunities within a 20 minute walking distance of any residential front door. This park is developed to be a social and recreational focal point in the neighbourhood, and serves as a high-use amenity within existing and developing neighbourhoods.

The design-model for this facility is based on basic neighbourhood park needs. Thus, park components may include informal court space, elevated and exciting play equipment, cognitive play spaces, informal field play space, shade, seating, natural space and access to connector networks. The site is usually a minimum of one hectare with surrounding activity that may include higher density residential and neighbourhood commercial uses (to support the notion of neighbourhood focal point and 'eyes on the park' for safety reasons).

Design Guidelines

The following explains design attributes associated Neighborhood Parks. The development, operation and maintenance of this classification are subject to the guidelines, recognized standards and best practices observed and practiced by the District.

Access

- · Consider on-street parking, which is preferred over delineated parking lots
- Incorporate sufficient street frontage to provide sightlines for safety and access
- Ensure access by walking and cycling
- Provide links to neighbourhood sidewalks, pathways, trails, adjacent parks

Amenities (may include)

 Benches, Bicycle racks, Community gardens, Animal-proof garbage receptacles, Lighting, Pathways and trails, Picnic tables, Public art, Shade structures, Signage, Multi-use court, Small playgrounds, Trees and shrubs, Viewpoints

Functional Design

- Ensure a relatively flat, level site to accommodate informal field play space
- Include marker posts or other methods to delineate site from private space
- Incorporate open, unobstructed area to accommodate unstructured play
- Ensure mix of shade and non-shade areas to accommodate year round usage
- Consider crime prevention through environmental design principles when determining locations, programming and design
- Where possible locate utility right-of-ways along the periphery so as not to interfere with recreational and functional use of the park

Location & Functional Site

- Locate centrally within a given neighbourhood
- Provide sufficient street frontage (two sides preferable) to recognize access to park
- Locate in close proximity to school site where feasible
- Park Area Requirement Standards: Approximately 1 hectare placed at 20 minute walking intervals. Recommended population benchmark: 0.8Ha/1000.

District of Coldstream - Neighborhood Parks

Parks in the Coldstream system classified as Neighborhood Parks range in size from 0.47 to 3.6 hectares and include:

- Jeffers Park
- Kalavista Park
- Kalview Park
- Kirkland Beach
- Long Lake Estates Drive
- Middleton Mountain Park
- Stenquist Park

Community Parks

These centrally and strategically located parks provide an active and passive recreation amenity to several neighbourhoods through trail, sidewalk and street access. Community Parks are diverse in nature, serving a broader purpose than the neighborhood or mini parks. While community parks may include neighborhood park amenities, and do act as neighborhood parks, the focus of a community park is on meeting community-based recreation, athletics and open space needs. These parks may contain significant athletic fields, large open spaces, walking paths, picnic areas, natural areas, restrooms, and various other active and passive services depending upon community needs and site suitability.

The design model for this facility is simple: this is to be a downsized version of a sub-regional park relative to the need of the community the park serves. Thus, park components include the same elements as the neighbourhood park as well as natural areas, community connectors, sport and/or enhanced play facilities. Enhanced play facilities may include

skateboard parks, splash pads and other play elements that are intended for multiple neighbourhood use. Community park sites are located by arterial and/or collector streets and usually include off street parking.



Design Guidelines

The following explains design attributes associated with

Community Parks. The development, operation and maintenance of this classification are subject to guidelines, recognized standards and best practices observed and practiced by the District.

Access

- Incorporate adequate street frontage to provide sightlines for safety and access
- Locate centrally in the community to maximize neighbourhood catchment areas
- · Provide accessible opportunities to participants of all abilities and mobility
- Ensure access by walking or cycling
- Provide links to neighbourhood sidewalks, pathways, trails, adjacent parks, school yards
- Provide nearby safe street crossings
- Provide street parking or parking lot

Amenities (may include)

 Benches, Bicycle racks, Community gardens, Cultural installations, Animal-proof garbage receptacles, Gateway to trails, Gazebos, Lighting, Off-leash area, On-site parking, Outdoor rinks, Pathways and trails, Picnic tables, Public art, Restrooms, Shade structures, Signage, Sports fields, Spray parks, Trees and shrubs, Viewpoints

Functional Design

- Where possible locate utility right-of-ways along the periphery so as not to interfere with the recreational and functional use of the park
- Include multi-use design with flexibility to change over time
- Ensure mix of shade and non-shade areas to accommodate year- round usage
- · Provide adequate access for fire, emergency, and maintenance equipment
- · Ensure square or rectangular site to accommodate sports fields
- · Include marker posts, fencing, or other methods to delineate site from private space
- Provide links to schools and/or other park sites where feasible

Location & Functional Site

- · Ensure placement near collector or arterial roads to facilitate vehicular access
- Provide sufficient street frontage to recognize and access park
- Locate centrally between neighbourhoods or developments within a 40 minute walking interval from residential front door
- Functional site: 3 12 hectares. Recommended population benchmark: 4.0Ha/1000

District of Coldstream - Community Parks

Community Parks can include multiple athletic fields and courts as well as other unique amenities that service the entire community. Community parks include:

- Lavington Centennial Park
- Coldstream Park
- Creekside Park
- Sovereign Park

Urban Centered Parks

Urban centered parks are generally smaller sites developed in what is considered the community's core. These facilities provide important social interaction and public event space for street festivals, art shows, performance, open air markets and community focused functions. Second, the park provides opportunities to attach residents to important cultural and historic assets.

Design Guidelines

The following explains design attributes associated with Urban Centered Parks. The development, operation and maintenance of this classification are subject to guidelines, recognized standards and best practices observed and practiced by the District.

Access

- Provide links to parks by sidewalks, pathways, trails and adjacent parks
- Include a minimum of one major street frontage to maintain sightlines
- Ensure no more than two sides bounded by roads of collector standard
- Provide perimeter decorative barriers to block off vehicular access from site

Amenities

Determine amenities by function of the area

Drainage

- Site to be relatively flat with overall gradient of two to five percent if possible
- Ensure functional storm water management if required

Functional Design

- · Incorporate frontage to attract people and create a vibrant public space
- · Design for four-season and if possible day and night use
- Promote development in 'downtown core' district

Location

Variable - based on function and overall neighbourhood design

Functional Size

Variable - based on function and overall neighbourhood design

Catchment Area

· Variable - based on function and draw of adjacent amenities

Park Area Requirement Standard

Variable - based on function and overall neighbourhood design

District of Coldstream - Urban Centred Parks

There is only one site in the District of Coldstream that could be classified as Urban Centred and that is Cenotaph Park which houses the war memorial cenotaph, seating benches and a small children's playground. What could be considered a part of the park is the adjacent Coldstream Women's Institute Hall which hosts both public and private functions.

Natural Areas

Natural areas are park sites established for the protection and stewardship of wildlife, habitat and other natural system support functions. Most natural areas are accessible for low impact use with minimal infrastructure on site in order to not adversely affect the local habitat or natural systems. Larger natural areas, in some cases, may have a small portion of the site developed for community park use. Interpretive signage is critical in order to delineate recreation use areas, habitat, restoration status, wildlife area designation, etc. in order to describe resource needs and use priorities.

Design Guidelines

The following explains design attributes associated with Natural Areas. The development, operation and maintenance of this classification are subject to guidelines, recognized standards and best practices observed and practiced by the District.

Access

- Linked to neighbourhood sidewalks, pathways, trails, adjacent parks
- Should contribute to connectivity of open space system

Amenities (may include)

 Benches, Fencing, Informal viewpoints, Animal-proof garbage receptacles, Interpretive signage, Pathways, Trees and shrubs

Drainage

- Natural drainage courses commonly found within this classification may be used for drainage provided water does not collect within site or around recreational amenities
- Where applicable, low impact development principles will endeavor to be incorporated to ensure functional storm water management and protection of local habitat

Functional Design

- Primary objective is to protect and manage natural or cultural environment Ensure improvements are in accordance with riparian and wetland policy where applicable
 - Develop low impact recreational trails where feasible
 - Include marker posts, fencing, or other methods to delineate natural areas from private space
 - Develop through public utility right-of-ways, reserve dedication, road rightof-ways, utility right-of-ways and/or easements to permit ecological or trail connectivity

Location

- Areas identified as environmentally significant areas will endeavor to remain undisturbed during subdivision design and construction process and be designated as Natural Area
- Areas considered un-developable in accordance with the District of Coldstream by-laws will endeavor to be dedicated as Natural Area

District of Coldstream – Natural Areas

Park sites in the District of Coldstream classified as Natural Areas include:

- Aberdeen
- Grey Canal Trail
- Glacial Erratic Rock
- Jestef Parkland
- McKergow Meadows
- Ranchlands
- Upland Heights
- Webster
- Whisper Ridge



Greenways

Greenways are corridors of protected open space managed for conservation and recreation purposes. Greenways often follow natural land or water features, and link nature reserves, parks, cultural features and historic sites with each other and with populated areas. Greenways provide open space connections to and from parks, schools, and neighbourhoods, and may include wildlife corridors, pathways, and trails. Development of these areas will endeavor to be kept to a level that preserves the integrity of the initial resource.

Design Guidelines

The following explains design attributes associated with Greenways. The development, operation and maintenance of this classification are subject to guidelines, recognized standards and best practices observed and practiced by the District.

Access

Openings and access points

Amenities (may include)

 Benches, Bicycle racks, Formalized viewpoints, Animal-proof garbage receptacles, Interpretive signage, Pathways and trails, Planting beds, Trees and shrubs

Drainage

- May be used for drainage provided water does not collect within site or around recreational amenities
- Low impact development principles will endeavor to be incorporated to ensure functional storm water management

Functional Design

- Include marker posts, fencing, or other methods to delineate these lands from private lands
- Develop through public utility right-of-ways, reserve dedication, road right-ofways, utility right-of-ways and/or easements to permit ecological or trail connectivity
- May accommodate linear utility right-of-ways; however, these should be located along the greenway's periphery and surface installations must not directly interfere with recreational and functional design of the greenway
- May accommodate regional pathway or trails or perform linear recreation function
- May serve as adequate protection and habitat to permit animal movement though a developed area
- May also include riparian areas recognized and protected through easement or reserve dedication
- May include publicly held corridors such as power line right-of-ways

Location

Located along waterways, natural areas, historic features, roadways

Functional Size

Variable - based on function

Community Trails

Trail networks or connectors are designed and constructed throughout the District to provide connectivity to neighborhoods as well as other destinations. Non-motorized and self-

propelled recreational activities that occur within the District's trail network can include walking, in-line skating and cycling. Not all trails will support all activities with some supporting foot traffic only while others being multi-modal in scope.

COLLEGE WAY BIKE/WALK PATH

Design Guidelines

The following explains design attributes associated with Community Trails. The development, operation and maintenance of this classification are subject to guidelines, recognized standards and best practices observed and practiced by the District.

Access

- Provide bollards or gates at pathway access points
- Ensure sections of trails functioning as maintenance access will accommodate the equipment as well as emergency vehicles

Amenities

- May include benches and interpretive stops adjacent to the pathway or trail
- Keep lighting to a minimum; it may be appropriate for pathway access points, staging areas and bridges

Drainage

- Incorporate cross slope or crown tread to prevent pooling of water on tread surface
- Ensure trails are not used as drainage conveyance along longitudinal line of trail
- Ensure trails adjacent to watercourses are located above recognized high water line

Fringe

- · Preserve existing vegetation where appropriate
- Incorporate localized vegetation and/or local aggregate materials

Functional Design

- Locate street crossings, pavement markings, curb extensions, lights, signage, etc.
- Establish vision clearance triangle where pathways intersect with roadways and other pathway networks. Ensure pathways intersect streets at right angles

- Engineer and construct with slope and grade considered
- Recommended population benchmark varies from 2K/2000 population for walkers and cyclists to 2K/+6000 for fitness and equestrian trail users

Interface

- Address key elements of *Crime Prevention Through Environmental Design*principles in design decisions
- · Provide minimum three meter radius clearance zone at intersections
- Ensure a smooth transitions in grade at access points (i.e. dropped curb structures)

Potential Infrastructure

 Suggested additions may include: animal-proof garbage bins, bike racks, bollards, engineered drainage, bridges, signage, benches, geo-textile, stairs, boardwalks, railings

Special Use Parks

This category refers generally to stand alone parks that are designed to serve one particular use. For each special-use park type the descriptors will vary depending on industry standards and best practices for the intended activity. Special uses generally fall into three categories: Historic/Culture/Social Sites The following parks in the Coldstream system are classified as Special Use Parks and include:

- Mackie House
- Coldstream Cemetery
- Morphet Dog Park

Waterfront Parks

A significant portion of the District of Coldstream is a waterfront community. The area has an identity that is intertwined with history and culture of life on Kalamalka Lake and it is important to recognize the significance of this waterfront and how it captures the spirit of the community. Each park site plays an important role in the waterfront park



system and serves a different need for the overall community. As well, the lakefront is, in essence, a natural area and the residents of Coldstream are the custodian of their waterfront. As such, it is important to recognize the responsibilities of environmental stewardship.

Waterfront Parks within the District of Coldstream, for the most part, are seasonal in use but integral to the overall open space system. These sites include:

- Lisheen Beach
- Long Lake Beach
- Pumphouse Beach

- Kinloch Boat Launch
- Westkal Boat Launch
- Kalavista Beach (boat launch)

School Sites

Schools sites, although not identified directly, are a part of the overall open space system. The District of Coldstream will endeavor to be a partner in formal joint use agreement with School District 22 as these properties will endeavor to be considered as an important factor in widening opportunities for parks and open space utilization within their jurisdiction. School sites include:

- Coldstream Elementary
- Kidston Elementary
- Lavington Elementary
- Kalamalka Secondary

The District of Coldstream will endeavor to ensure that, where possible, neighbourhood scale parks are sited in collaboration (i.e., signing of a joint use agreement) with the local school board to maximize opportunities for joint uses on the site for formal and informal play as well as school and community related activity areas.

3.2 CREATING CONNECTIONS

Until recently, many municipalities never had to address the need for trails in their community, but that situation is rapidly changing. In areas that have experienced growth, municipal officials now find themselves trying to meet the growing recreation needs of their constituents in an environment where there is less open land available for new parks. In many of communities, the solution to this dilemma is to establish public connector trails recognizing that public parks provide highly valued benefits for both residents and visitors alike.

Safe routes to parks is a relatively new and emerging concept to advance safe corridors to and from parks, to improve the well-being of all citizens and to promote the creation of livable communities. With the high occurrence of obesity and chronic diseases in Canada, parks and open spaces located in our community have proven to be affordable locations for physical activity.

Evidence shows that people who reside in communities with safe, active travel to parks are more likely to be physically active than their counterparts. However, we still face the challenge of many neighborhoods not appropriately linked to parks via safe connector routes presenting difficulty for people to easily access parks without motorized transportation. People are more likely to utilize their parks if their neighborhoods are better connected to parks by trails, bike paths and greenways. In the District of Coldstream's case the majority of parks and open space over the years have been well established without the thought getting the users to the facility in as safe a manner as possible. The purpose of this section of the parks master plan is to recognize the obstacles limiting connectivity to parks and identify the essential elements of a safe route to a park in order that our recreation spaces will become more utilized by all.

BARRIERS TO ACCESS OUR PARKS

Barriers limiting connectivity to parks are dependent and many times unique to each specific park and its respective service area. However, distance and physical barriers are the most common obstacles in building safe routes to parks. Major arterials and geographical barriers such as creeks can be identified as key impediments. In addition, multi-modal trails could also be classified as somewhat of a barrier discouraging specific groups from walking to parks as there are some walkers who may not be comfortable walking to a park on a trail with bicyclists.

Proximity to Parks

Long distances to parks are a deterrent to park use. Research demonstrates that people who have easy access to parks are more likely to walk at the daily-recommended level (30 minutes) than those who do not have easy access. Moreover, when the distance from a park doubles, the likelihood of park use decreases by close to 50 per cent.¹ Consequently, in the District of Coldstream with its diversity of urban, suburban and rural living, inequity in park access is a challenge as the distribution of these amenities is not uniform.

Need of Infrastructure

While long distances from parks is a clear barrier to connectivity, lack of physical infrastructure is also a deterrent to park use.² Incomplete and/or disconnected streets present difficulties for pedestrians, thus making walking or bicycling to parks an unattractive choice. The absence of appropriate infrastructure leads to the next barrier — traffic safety concerns.

Traffic & Crime

Traffic safety is a major barrier to active transportation. Research demonstrates that negative traffic perceptions are associated with decreased walking as people purposefully avoid dangerous traffic areas fearful of traffic volume and speed.³

¹ Cited in The Trust for Public Land. n.d. *A Healthier America? It's a Walk in the Park*.

² Active Transportation Alliance. n.d. Safe Park Zones Policy Brief.

³ Jacobsen, P., Racioppi, F. & Rutter, H. 2009. Who owns roads? How Motorized Traffic Discourages Walking and Bicycling

Crime can be another factor that discourages people from accessing parks. The type of physical design in and around parks can either create a risk factor for crime or a protective factor for residents of the neighborhood. Problematic features of physical design around parks that influence crime include:

- Narrow pedestrian paths located between dense planting;
- Dense shrubs that block the view of the park from adjacent houses;
- · Secluded or unmonitored pedestrian routes that encourage misuse;
- Inadequate lighting on pedestrian routes;
- Signs of physical disorder such as graffiti and garbage; and
- Lack of formal surveillance of parks.

It is recommended that the District of Coldstream in its design, retrofit and operation of its park and open spaces that CPTED (Crime Prevention Through Environmental Design) be considered.

Affiliation Building

Building safe routes to parks is a shared responsibility of every agency responsible for public services and every segment of municipal services. Although there are certain agencies responsible for developing public infrastructure, partnerships with non-profit and community organizations also play a vital role in building safe routes to parks. Potential partners include bike and pedestrian committees, citizen advocates, economic developers, municipal management, schools, health departments, advisory boards and law enforcement.

Building partnerships with local government agencies, developers, nonprofits and community organizations is a major challenge in order to successfully work toward a unified goal. The District of Coldstream will endeavor to approach partnerships as a process of creating a shared vision on connectivity, building trust and communicating effectively, recognizing that one goal of building partnerships is to reduce the need for new resources for the respective agencies while being be prepared to share physical assets as well as ideas to improve routes to parks.

VITAL ELEMENTS OF SAFE ACCESS TO OUR PARKS & OPEN SPACE

Simplicity

The conditions of the sidewalks or trails and aesthetics are key factors to take into account when building a safe route to a park. It is particularly important to make walking or bicycling to parks inviting to residents by introducing a visually appealing and clean environment, ensuring low traffic and developing off-road trail access.

Handiness

Routes to parks will endeavor to be in close proximity to where residents live. The route to the neighborhood park will endeavor to be no longer than a \pm .5K (within a 15 minute walk) from where people reside. To ensure that citizens are in close proximity to parks, appropriate site selection of new parks is an extremely important factor in the dialogue on building safe routes to parks because siting can heavily influence travel patterns for park users.

Security

Physical separation boundaries are critical in establishing pedestrian and cycling safety. Separating paths from roads with physical barriers is important when building a safe route to a park so that users are not competing with motorized vehicles. Introducing physical separation of sidewalks from curbs and parking areas reinforces a safer environment. Other essential safety elements required are well-maintained infrastructure, adequate lighting and winter maintenance for those facilities that may host winter activities.

Perceived safety is also a major element of what makes a route to a park safe. Perceived safety is defined as the community's interpretation and assessment of whether routes to parks are safe and secure. It can be related to fear of accidents (safety-related risk perception) and/or fear of crime and violence (securityrelated risk perception). Although stakeholders may identify a route as safe, the community's perception of safety may differ; therefore, perceived safety is a determinant of whether residents will use routes to a park.

Access and Design

A safe route to a park must reflect various levels of mobility. Proper design benefits all users and allows all citizens to use safe routes to parks. Important elements of access and design include effective wayfinding systems such as the use of landmarks, signage, distance to destination markers and interest points to assist in navigating the routes easily.

Ensuring multiple access points to parks is also important. While many homes may be in short linear distance to parks, pedestrian access to park entrances often results in longer walking distances due to the limited number of entrances due to fencing and other barriers. Consequently, it is essential to develop multiple access points around the park where possible.

3.3 PARKS & OPEN SPACE OPERATIONS & MAINTENANCE

The District of Coldstream's parks and open space facilities are carefully managed and maintained to ensure they are safe and enjoyable places for the users. A combination of sound management policies, ongoing maintenance, and periodic renovation of grounds and structures is needed to protect these public resources and ensure long-term functioning of the park system. This commitment to a properly maintained and safe park and open space system is expected by Coldstream citizens and is a priority of the District.

The District of Coldstream is encouraged to develop a formalized Operations and Maintenance Plan based on individual park space requirements. The Parks Master Plan proposes the classification of parks into types of open space. Using this system of classification will allow the District to define specific operations and maintenance criteria for each type. Each type (regardless of size) will have standard elements and activities therefore the transition from asset to maintenance requirements should be straightforward.

Park Management & Maintenance

Parks & Open Space Operation/Maintenance Program should include:

- A Resource Management Information System that monitors service levels, schedules, on-site inventory and fiscal data;
- Necessary equipment to maintain efficient and economical service delivery;
- Ongoing staff training to ensure the maximum level of maintenance and efficiency;
- Using a mix of in-house part-time and full-time staff, public and private partnerships, contract workers, and volunteers when responding to specific workload demands throughout the system to ensure all maintenance and renovation needs can be met in a timely manner;
- Coordination of park and open space maintenance schedules with park programming to minimize conflicts between park activity needs and required maintenance;
- Active pursuit of grants and alternative funding for renovation, energy conservation, and other projects to maximize and leverage budgeted funding;
- Customer feedback through surveys to ensure needs and concerns are met and acceptable performance measures are achieved.

Maintenance

Well-maintained parks and trails create a welcoming and safe environment for users, who in turn contribute to creating safe and welcoming parks through their activity and respect for the park environment. This cycle enriches communities, and it starts with a consistent level of maintenance. Park maintenance involves keeping assets in good repair, turf maintenance, litter pickup, washroom cleaning, graffiti removal, playground inspection, snow removal, maintaining gardens, and much more.

Standards

Park and open space service delivery standards support a consistent level of maintenance across the District. The standards set out requirements for keeping parks attractive, green, clean and safe. Factors like volume and intensity of use, neighbourhood density, season and park type guide the frequency and type of maintenance activities in different parks. These in turn determine staffing levels as well as equipment and material supply needs.

Service delivery standards specify what needs to be done, when, how often and to what level in each season. They provide detailed lists of duties to be undertaken and describe the expected outcomes. Park service delivery standards are living documents that evolve with changes in budget, updates to industry best practices, and to respond to trends that affect park operations such as weather patterns and new recreation activities. When these standards are shared with park users, stakeholders and the community one and all will have a better understanding of what their park system is about.

Maintenance Service Objectives

Maintenance and Service Levels identify minimum acceptable levels of maintenance to be provided. Park and open space maintenance is the key to protection of the public's health, safety and welfare, as well as the basis of the public's image of the quality of community facilities and services. The following objectives are recognized to assist in establishing a comprehensive maintenance program:

- *Safety:* Maintain parks and open spaces in a condition which protects the health, safety and welfare of the public.
- *Cleanliness:* Maintain facilities in a clean and sanitary condition.
- *Responsiveness:* Respond to public needs, requests and unsolicited concerns in a timely manner.
- *Amenity Performance:* Maintain amenities in a condition which allows for the intended recreational use.
- Resource Protection: Protect natural resources, developed improvements, and infrastructure from deterioration, vandalism and natural processes such as erosion.

MAINTENANCE SERVICE LEVEL A

Examples: Athletic Fields, Urban Centered Parks, Community Parks (based on use) Description: These parks and open spaces are typically located in highly populated areas and experience intensive year-round use by a variety of user groups.

Turf & Planting Bed Management

- Maintain turf between 76 mm to 89 mm (lower for highly used sport fields)
- Trim park perimeter and around features before every cut
- Service level frequency is subject to current weather conditions, accumulated precipitation and subsequent growth
- Maintain planting beds in a weed-free condition
- Bed edging properly maintained. If used, keep bedding mulch at a consistent level

Garbage and Litter Management

- Inspect site a minimum of four times every two weeks during peak season (May-October) and as deemed necessary by administrative staff during the off-season
- Clear fence lines of visible accumulated litter

- Pick up litter and trash minimum of twice weekly during peak seasons (May-October) and as deemed necessary by administrative staff during the off-season
- Empty trash if more than half full or sooner if strong odor is present or attracting insects; clean up area around garbage receptacle

Weed Control

• As per municipal specification (District of Coldstream Chemical Application Guidelines)

Tree Maintenance

- Inspect on a monthly basis (or as required by administrative staff)
 - Maintain tree wells; if cultivated, well should be free of weeds, intact and able to hold water; if mulched, mulch should be spread evenly and not piled against the tree
 - Remove dead, diseased or broken branches
 - Remove low-hanging branches, and branches interfering with clearance zones of signs, benches, pathways, etc.

Play Equipment

- Inspect daily during peak seasons (May-October) and twice weekly during offpeak season
- Follow District of Coldstream Inspection Sheet when performing inspections

Fence Maintenance

- Inspect on a monthly basis
- Ensure no broken or bent posts are present
- Tighten cable and/or fabric as required
- Ensure fence is straight and at same consistent height
- Install all gates according to standard procedures and ensure fully operational

Snow Clearing and/or Removal (only sites used in off-peak season)

- Consider intensive-use areas require more frequent monitoring and maintenance performed to ensure safe conditions
- Remove snow accumulation to a depth sufficient for public safety relative to District snow clearing priorities
- Add anti-slip compound where required
- Monitor areas prone to frequent ice accumulation; and address relative to District snow clearing priorities

MAINTENANCE SERVICE LEVEL B

Examples: Community and Neighbourhood Parks

Description: These parks and open spaces are typically located in populated areas and experience moderate seasonal use by a variety of user groups including: families, school groups, formal and informal sports assemblies and any other recreational user groups. Turf Management

• Maintain turf between 76 to 89 mm

- Trim parks perimeter and around features before every cut
- Service level frequency is subject to current weather conditions, accumulated precipitation and subsequent growth

Garbage and Litter Management

- Inspect site a minimum of four times every two weeks during peak season (May-October) and as deemed necessary by administrative staff during the off-season
- Clear fence lines of visible accumulated litter
- Pick up litter and trash at least twice weekly during peak seasons (May-October) and as deemed necessary by administrative staff during the off-season
- Empty trash if more than half full or sooner if strong odor is present or attracting insects; clean up area around garbage receptacle
- Remove unapproved structures (tree forts, building materials, etc.)

Weed Control

• As per municipal specification (District of Coldstream Chemical Application Guidelines)

Tree Maintenance

- Inspect on a monthly basis (or as required by administrative staff)
- Maintain tree wells; if cultivated, well should be free of weeds, intact and able to hold water; if mulched, mulch should be spread evenly
- Remove dead, diseased or broken branches
- Remove low-hanging branches, and branches interfering with clearance zones of signs, benches, pathways, etc.

Play Equipment

- Inspect twice weekly during peak seasons (May-October) and monthly during offpeak season
- Follow District of Coldstream Inspection Sheet when performing inspections

Fence Maintenance

- Inspect on a monthly basis
- Ensure no broken or bent posts are present
- Tighten cable and/or fabric as required
- Ensure fence is straight and at same consistent height
- Install all gates according to standard procedures and ensure fully operational

MAINTENANCE SERVICE LEVEL C

Examples: Greenways, Mini/Vest Pocket Parks

Description: These parks and open spaces are typically located in populated areas and experience moderate seasonal use by a variety of user groups including families.

Turf Management

- Maintain turf areas between 152 and 203 mm, roughly cut once a month or as needed basis
- Trim park perimeter and around features before every cut

• Service level frequency is subject to current weather conditions, accumulated precipitation and subsequent growth

Garbage and Litter Management

- Inspect site a minimum of four times every two weeks during peak season (May-October) and as deemed necessary by administrative staff during the off-season
- Clear fence lines of visible accumulated litter
- Pick up litter and trash once weekly during peak seasons (May-October) and as deemed necessary by administrative staff during the off-season
- Empty trash if more than half full sooner if strong odor is present or attracting insects, clean up area around garbage receptacle

Weed Control

• As per municipal specification (see District of Coldstream Chemical Application Guidelines)

Tree Maintenance

- Inspect annually
- Maintain tree wells; if cultivated, wells should be free of weeds, intact and able to hold water; if mulched, mulch should be spread evenly to and not piled against trunk of tree
- Remove dead, diseased or broken branches
- Remove low hanging branches and branches interfering with clearance zone of signs, benches, pathways, etc.

Play Equipment (on mini-park sites only)

- Inspect daily during peak seasons (May-October) and twice weekly during offpeak season
- Follow District of Coldstream Inspection Sheet when performing inspections

Fence Maintenance

- Inspect on a monthly basis
- Ensure no broken or bent posts are present
- Tighten cable and/or fabric as required
- Ensure fence is straight and at same consistent height
- Install all gates according to standard procedures and ensure fully operational

MAINTENANCE SERVICE LEVEL D

Examples: Natural Areas (environmental reserves, bio-swales, streams, storm water 'wet' ponds, etc.)

Description: These are areas which do not typically support intensive recreational activities due to a natural and native environment and in some cases, location; therefore, minimal maintenance is required.

Turf Management

- Turf not normally mowed with the exception of trail heads, parking lots and staging areas, clearance zones along pathways, to reduce fire danger or to perform weed control; frequency is typically once per season
- Service level frequency is subject to current weather conditions, accumulated precipitation and subsequent growth

Garbage and Litter Management

- Inspect site on a bi-annual basis
- Clear fence lines of visible accumulated litter
- Remove unapproved structures (tree forts, building materials, etc.)

Weed Control

- Inspect annually and control noxious weeds only
- Identify any noxious weeds, which shall be addressed immediately by an applicator with a valid herbicide application license
- Provide public notice prior to application

Tree Maintenance

- Inspect bi-annually
- Remove standing dead trees, low or hanging branches and branches interfering with clearance zone of signs or those which threaten property or amenities

Fence Maintenance

- Inspect on a monthly basis
- Ensure no broken or bent posts are present
- Tighten cable and/or fabric as required
- Ensure fence is straight and at same consistent height
- Install all gates according to standard procedures and ensure fully operational

TRAIL MAINTENANCE SERVICE LEVEL 1

The objectives of trail maintenance are to: provide for user safety, access, and convenience, protect adjacent resources, and preserve trail investment.

Pathway and Trail Classifications: Community Trails – hard surfaced

Description: These fully accessible pathways and trails are typically located in populated areas and can experience extensive year-round use by a variety of user groups including: cyclists, walkers, joggers, hikers and in-line skaters.

Tread Surface Management

- Inspect pathway and corridor on a bi-weekly basis (year round)
- Ensure pathway or trail tread is free from hazards and obstructions
- Keep tread surface swept and free of debris asphalt, sand, grass clippings
- Ensure painted line work is legible and not fading
- Repair and seal cracks and surface crumbling

Fringe Vegetation Management

• Regularly maintain fringe turf grass as not to encroach on tread surface

Signs and wayside amenities

- Ensure that all signs and wayside amenities are free and clear of any hazards
- Keep information kiosks or interpretive signage free from graffiti and keep content current and relative to the location

Adjacent Tree and Shrubbery Maintenance

- Remove any low-hanging branches interfering within the specified/illustrated vertical clearance zone
- Remove any standing dead vegetation that may pose a threat (deadfall) to the pathway or trail
- Remove any vegetation obstructing signs adjacent to pathway or trail

Litter Management

• Pick up litter monthly from tread and immediately adjacent to pathway or trail

Winter Maintenance (only on year-round trails used in winter)

• Ensure maintenance during winter months includes snow clearing contingent on District snow clearing priorities

TRAIL MAINTENANCE SERVICE LEVEL 2

Pathway and Trail Classifications: Community Trails - soft surfaced

Description: These fully accessible pathways and trails are typically located in populated areas and experience moderate seasonal use by a variety of user groups including: cyclists, walkers, joggers, and hikers.

Tread Surface Management

- Inspect pathway and corridor monthly seasonal restrictions may apply
- Ensure pathway or trail or tread is free from hazards and obstructions
- Keep tread surface free of debris rocks, gravel, sand, weeds, grass clippings
- Surface washouts/degradation to be repaired

Fringe Vegetation Management

• Regularly maintain fringe turf grass; typically cut monthly, weather depending

Signs and wayside amenities

- Ensure that all signs and wayside amenities are free and clear of any hazards
- Keep information kiosks or interpretive signage free from graffiti and keep content current and relative to the location
- Ensure appropriate "trail closed" signage installed at trail head during off season

Adjacent Tree and Shrubbery Maintenance

- Remove of any low-hanging branches interfering within the specified/illustrated vertical clearance zone
- Remove of any standing dead vegetation that may pose a threat (deadfall) to the pathway or trail
- Remove of any vegetation obstructing signs adjacent to pathway or trail

Litter Management

• Pick up litter monthly during seasonal use from tread and immediately adjacent to pathway or trail

SPECIAL USE PARKS

Description: These are sites that are of interest for their architectural, historical, cultural, environment, archaeological, aesthetic or specific single value within the parks system. As such, each site is totally unique in its own right and therefore requires respective operation and maintenance level.

WATERFRONT PARKS

Description: Waterfront Parks present very different operational and maintenance issues from other parks due to frequency of seasonal use, potential conflict with incompatible uses and shoreline upkeep. For this reason Waterfront Parks are recognized as unique park sites within the system each requiring its respective maintenance standard.

Beach Management

- Rake beach area and remove debris on a daily basis during high season use •
- Ensure on-site portable toilets cleaned and stocked daily. Pump on a weekly basis •

Garbage and Litter Management

• Pick up litter and trash minimum of twice weekly or as required during peak seasons (May-October) and as deemed necessary by administrative staff during the off-season

Adjacent Tree and Shrubbery Maintenance

- Remove any low-hanging branches interfering park use
- Remove any standing dead vegetation that may pose a threat to park users
- Remove any vegetation obstructing signs adjacent to entry pathway or trail

Level C

Level B Level B

Level A

Level D

Level C

The following illustrates District of Coldstream parks and open spaces and their respective service levels:

•	Mini	Pocke	et Parks
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- Neighborhood Parks
- **Community Parks**
- **Urban-centered Parks**
- Natural Areas
- Greenways
- **Community Trails**
- Special Use Parks
- Waterfront Parks

Levels 1 / 2

3.4 Operations Analysis Estimates

User safety, satisfaction and community pride are to a great extent related to its parks, recreation and open space. Proper maintenance will increase the useful life of a park or facility and reduce operational expenses. Parks operation and maintenance expenses may in some cases represent a significant percentage of the total municipal annual budget. As each park site is unique, not only in its amenities and use but its level of service as well, standard maintenance costs can be a challenge to estimate. One difficulty of reviewing comparative data from various communities is that a multitude of factors contribute to staffing and operating levels. They include:

- Seasonal vs. year-round operation
- Cold weather vs. warm weather
- Overall duty emphasis on programming vs. land management and operations
- External duties related to jurisdiction (e.g., street trees, special events, grounds care of public facilities, etc.)

Presently the District of Coldstream's parks and their associated facilities are managed and maintained to ensure they are safe and enjoyable places for the public. A combination of sound management policies, ongoing maintenance, and periodic renovation of grounds and structures is needed to care for public resources and ensure long-term functioning of the park system. A commitment to a properly maintained and safe park and open space system is expected by Coldstream citizens and will endeavor to continue to be a high priority of the District.

3.5 DISTRICT OF COLDSTREAM PARKS & OPEN SPACE INVENTORY

PARK	Developed Ha	Undeveloped Ha	Total Ha	Previous Designation	New Designation (refer to 3.1)	Level of Service (refer to 3.3)	Ball Diamond Socrer Pitch	Volleyball	Hard surface sport courts	2	informal Tury / Play space Shelter/Gazebo	Picnic Tables	Playground	Skate Park	Site Benches	Garbage Cans Restrooms	off street parking	cession	Beach Access	Water View	Comments
Aberdeen (1)		4.1	4.1	NA	NP	-															Undeveloped riparian area
Braeburn South (2)				NA/T	NA/CT	2															Soft surfaced connector trails
Braeburn West (2)				NA/T	NA/CT	2															Soft surfaced connector trails
Brewer Road Connector (3)				-	СТ	-															Soft surfaced path linking to Whisper Ridge Trail system
Coldstream Cenotaph (4)	.22		.22	CWP	UC	А							•		•						War Memorial Cenotaph, WI Hall adjacent
Coldstream Cemetery (5)	3.84		3.84	Mun	SU	-									•	•					Memorial Wall
Coldstream Meadows (6)		.76	.76	PDA	-	-															Undeveloped
Coldstream Valley Estates (7)	·95		.95	NP	NP	В							٠		•	•					Dog Park Designation
Coldstream (8)	4.08		4.08	NP	CP	В	•				• •	•	•		•	•	• •				Picnic shelter, playground, ball diamond, picnic tables
Greystone Drive (9)	1		1	TL	NP	В					•	•	•		•	•				•	Potential staging area to future CN Rail to Trail
Jeffers Park (10)	•34		•34	NP	NP	В			٠			•			•	•	•				Lighted multi-use surface, owned by Lavington Comm. Assoc.
Jestef Parkland (11)	0.81		0.81	NP	NP	В			٠				٠			•				•	Views of Kalamalka Lake
Kalavista Beach (12)	0.01		.01	SU	WP	В										•	•		•		Adjacent to boat launch area
Kalavista (13)	.62		.62	RP	NP	В			٠			•			٠	• •	• •				Paid parking for boat launch users, tennis courts, small turf area
Kalavista Boat Launch (14)	.06		.06	SU	SU	В										F	Ρ •			•	
Kalavista (Log Cabin) (15)	•34		•34	NP	NP	В										•	• •			•	On lagoon adjacent to boat launch area
Kalview (16)	.48		.48	NP	NP	В			٠		•		٠		•	•				•	Superb views of Kalamalka Lake & Coldstream Valley
Kidston Multi-use Trail (17)				TC	CT	1															1K paved trail along road r/w to Kalamalka Prov. Park
Kinloch Boat Launch (18)	.06		.06	SU	SU	В										• F	Р			•	Boat launch only / limited parking on access
Kirkland Beach (19)	.13		.13	NP	NP	В					•	•				• F	P •		•		Buoyed swimming area
Lavington (20)	4.28		4.28	N&AP	CP	В	• •	•	٠		• •	•	•		•	•	• •				Seasonal Swimming Pool, War Memorial Cenotaph
Lisheen Beach (21)	0.15		0.15	NP	WP	В										•	•		•		Buoyed swimming area
Lochaven Tot Lot (22)	0.34		0.34	TL	MP	С				•			٠		•						Connector route through park
Long Lake Beach (23)	0.20		0.20	NP	WP	В					•					•			•		Buoyed swimming area
Long Lake Estates Drive(24)	•47		•47	NP	NP	В					•		٠		•	•				•	
Mackie House (25)				-	SU	В															Heritage building designation, View point & beach area only by District
McKergow Meadows (26)		8.5	8.5	NA	NA	D															Views of Kalamalka Lake
Meadow Road (27)		.1	.1	TL	MP	C															
Middleton Mountain (28)	3.6		3.6	NP	NP	В		•	٠		•	•	•		•	•	•			•	Link to Farnsworth Reserve Trail system, great viewing of Kalamalka Lake
Morphet Dog Park (29)	1.40		1.40	NP	SU	C							25		•	•	•				Former kennel club location / dog park designation

Mud Lake (30)				NA	NA	D											Pond area abutting McKegow Meadows Natural Area
Palfrey Connector (31)				-	СТ	1											Connector to Kidston Trail to Kalamalka Park
Pointe Sage Park & Trail (32)		.1	.1	TL/C	MP/CT	2											Undeveloped park space/trail head to Kal beach area
Postill Drive (33)		.2	.2	NA	GW	С											Open space natural area
Pumphouse Beach (34)	0.30	0.30	.30	СР	WP	В							•	Р		•	Swimming area buoyed off/seasonal use only
Ravine Drive (35)				NA	NA	D											Adjacent to Ranchlands natural area
Sovereign (36)	2.16		2.16	СР	CP	В	•	•	•	•		•	•	•	•	•	Heritage park site / bocce courts
Stenquist (37)	.77		.77	NP	NP	В			•	•	•	•		•	•		Dog Park Designation
Tebo Drive (38)	0.10		0.10	TL	MP	С											Cul-de-sac green space, connection to Lagoon
Rail Trestle (39)				Mun	GW	С											Entry park at beach center core area
Upland Heights (40)		2.69	2.69	NA	NA	D											Buffer area to residential
Webster (41)		1.62	1.62	NA/T	CT	2											Linkage w/Middleton Mtn. Trail and Braeburn
West Kal Boat Launch (42)	0.06		0.06	SU	SU	В							•			•	Boat launch access only w/floating wharf
West Kal Lake Accesses (43)		±.18	±.18	-	WP	D											Undeveloped used r/w to Kal Lake
Whisper Ridge Trail (44)		14.5	14.56	T/NA	CT/NA	2								•	•		Walking/equestrian trail system through development
Women's Institute Hall (45)				Mun	SU	1											Adjacent to Cenotaph Park, community use rental facility
TOTAL	26.77	33-35	60.12														

Park classification: MP – mini parks • NP – neighborhood parks • CP – community parks • UC – urban centered parks • NA – natural areas

GW – Greenways • CT – community trails • SU – special use parks • WP – waterfront parks • P – portable toilet









Chapter 4: Parks Master Plan Analysis

CHAPTER 4 - Parks Master Plan Analysis

Guiding principles in park planning include: finding a balance between the natural environment and public recreation; sustainability of the parks system relative to the needs of the environment, society, and economy; make the parks system a vibrant place; pursue design excellence and innovation; pursue best management practices; ensure safety, security and accessibility; create parks as good neighbours within the community; and ensure an inclusive process for decisions and actions related to the overall park system. The Parks Master Plan identifies several focus areas where the District of Coldstream will endeavor to centre their attention in order to meet the park, open space and recreation needs of their community.

4.1 Natural Areas, Greenways, Wildlife Corridors & Trails

Goal: Acquiring and protecting natural open space to establish a network of greenways throughout the community. These greenways function to meet passive and active recreation needs of the community, protect wildlife and critical habitat areas, and provide linkages between parks and commercial or residential neighborhoods.

District of Coldstream's natural areas, wildlife corridors, trails and greenways can be part of the solution to both environmental degradation and public health. Tree masses absorb carbon dioxide, emit oxygen, reduce erosion, moderate temperatures, protect wildlife, and provide aesthetic relief. Wetlands filter pollutants, absorb surface water runoff, help maintain stream base flows and groundwater replenishment, and provide a rich biological habitat. Riparian corridors, which include the stream



channels and the streamside vegetation, provide flood water attenuation, groundwater replenishment, water quality filtering, and fish and wildlife habitat. Trails which can be easily accessed from residential neighborhoods and places of work, provide a low-barrier way for individuals to get outside and benefit from all that our natural environment has to offer in terms of physical activity and mental well-being.

Natural open space areas include ecologically sensitive and/or unique natural areas, greenways, wildlife corridors, historical agricultural lands, and managed native growth protection areas. Dispersed throughout the District are a variety of these natural open space areas that add to Coldstream's "Second to None" image. Well-distributed and connected greenways and open spaces provide important linkages for habitat and people, bring nature's beauty closer to everyone, and maximize opportunities for enjoying the environment.

Where and when possible, the District will endeavor to classify and regulate native growth protection areas as permanent open spaces. In some cases trails through these spaces could be built to provide limited public access while still preserving the area for other purposes, such as wildlife habitat, ensuring that their environmental functions and values are maintained or restored, while also providing public access opportunities.

Greenways provide a natural contrast to more built-up concentration. They combine the natural functions and separations provided by a linear and connected greenbelt. By connecting different sites via boulevards, trails, and natural areas, park spaces become more usable, accessible by walking or biking, and visible on a day-to-day basis. The various parks and open spaces throughout the District become a system, achieving a sense of integration and completeness. The Kal Beach Sector indicates an emphasis to the Trestle Park intersection as a pedestrian oriented community hub.



Trails play an important role and may also function as greenways, and, at times the only means of connecting parks and open spaces. They provide pedestrians and non-

motorized transportation users shorter and safer connections between various neighborhoods and open spaces. *In addition to more major trail connections, the District will endeavor to develop well-signed trails within neighborhood areas in order to create a trail network connecting the neighborhood to the parks and open space systems within close proximity to people living in the area.* These localized trail systems provide connection opportunities allowing people to explore their immediate neighborhood area encouraging interaction and a sense of community within these areas. These community level pathways will endeavor to connect with other regional trails where possible, as well as other key destinations within the community, such as community scale parks, schools, and commercial areas.

4.2 Parks – Neighborhood & Community Parkland

Goal: Providing walkable access to neighborhood and community parks through acquisition, development, or redevelopment. Siting for active recreation facilities throughout the community provide needed outdoor recreation spaces and activities of interest to a wide spectrum of diverse users.

The heart and soul of Coldstream's parks system are the neighborhood and community-scale parks that dot the District from one end to the other. Each has its own distinct character and set of features that add both economic and social value to their respective service area. These parks are responsible for Coldstream's image as "Second To None" and are responsible for the enviable quality of life that District residents enjoy. These types of open spaces are generally population-based, and will endeavor to be provided according to the accepted norms and standards.

A primary goal of the Parks Master Plan is to create a geographically dispersed system of park and recreation facilities that are within walking distance of all Coldstream residents. Neighborhood parks and trails are the main tool used to reach this goal which is evident by the number of existing facilities throughout the District. Geographic distribution is less of a priority for community parks since they are designed to serve the District as a whole. Siting of community parks is more dependent upon the availability of large contiguous parcels of land and could include the protection of sensitive areas.

For neighborhood parks, acquisition priorities may focus primarily on the areas determined to be underserved (see Service Area Map). At present the District is decently served in terms of community parks and with well-sited and large tracts of land for new community parks at a premium, acquisition for community park space will endeavor to focus on acquiring available land adjacent to existing community parks and/or school sites when/where appropriate.

The District of Coldstream will continue the practice to upgrade and develop their existing park and open space sites particularly in underserved areas in order to satisfy current and future demands for both structured and unstructured recreation uses.

Small, single use park spaces (i.e., less than one acre) shall be discouraged where the costs associated with capital and maintenance are not justified by an appropriate level of use (i.e., frequency of use). Similarly, where the lifecycle of the park space (the period of time over which an age-cohort will use the facility) is not sufficiently long enough to justify costs of the park space, alternative open space uses will endeavor to be considered and/or the site disposed of with sale revenue placed into parks reserve fund.

4.3 Waterfront Access

Goal: Acquiring and developing additional publicly-owned waterfront property to meet community demand.

The District of Coldstream is bounded on the west by Kalamalka Lake, however, for many in Coldstream the Lake and its shoreline are an unseen resource. Because of residential development, topography, and the almost continuous private ownership of the shoreline, except in the case of Kalamalka Provincial Park, the general public has limited visual and physical access to the Lake.

The ratio of public to privately owned waterfront is not sufficient to meet the demand of Coldstream residents. When surveyed, waterfront park acquisition and development was listed as a high priority of survey respondents. In order to address this demand, the District of Coldstream will continue to place a high priority on acquisition and development of additional waterfront while at the same time optimizing the use of existing shoreline parks.

The District of Coldstream has always made a substantial commitment over the past to increase its public presence along the waterfront. However continued acquisition of waterfront property is challenging due to cost and limited opportunities. Acquisition will take time and depend on opportunity.

The District will endeavor to provide resources in order to acquire key waterfront properties when they become available. Creative acquisition strategies, such as lease-backs, renting, and life estates, may be a options available to acquire waterfront land. The continued use of these less-than-fee techniques will be essential as the District continues to acquire these properties. More aggressive pursuit of grants and other outside revenue sources will also be needed.

4.4 Municipal Centred Parks

Goal: Addressing the unique challenges of designing and providing parks, open space, and trail facilities serving the Neighborhood Centre Core on Kalamalka Lake Road as identified by the District of Coldstream.



Cenotaph Park is currently the only open space 'squeezed' within what could be designated as the District's Core. Surrounded by a mix of residential, institution, small commercial and municipal structures the long term development of this site will be determined by the District's comprehensive planning strategies for the area. A factor in the long term plan for the site is the future of the Coldstream Women's Institute Hall which, since 2014, is operated by the District. Although the structure does

not have heritage status it does have a long term history with Coldstream and helps to identify the 'heart of the community'. At present the Hall hosts a few ongoing user groups and private rentals however, due to its age, the ongoing sustainability of the facility is questionable relative to the needs of the environment, community, and economy.

The District investigate viable options for the ongoing efficient operation and maintenance of the Women's Institute Hall in order to satisfy current user groups and individuals.

Consider development of a reserve fund for future replacement of the Women's Institute Hall when the existing facility can no longer meet community demand.

4.5 Historic, Cultural & Art Interpretation

Goal: Protecting and interpreting Coldstream's cultural history as well as providing space and an outlet for artistic expression. The District needs to lay a policy foundation for how cultural history and artistic expression will endeavor to be incorporated in existing and future parks and open spaces.

The location of historic or cultural sites depends upon local history and physical landmarks. Their identification provides the basis for a rich layer of open space. It is not expected that these will be evenly distributed throughout the District, however their existence provides an excellent base for place-specific plans to be developed that build upon unique resources. There are no accepted standards for provision of these sites.

The District will endeavor to chart all historic and cultural landmarks in their geographic information system to aid in the proper and long term identification of these sites until such time as additional interpretive projects are implemented. These major cultural and historic resources will endeavor to be brought to the attention of the public and to historical societies interested in their long term preservation (support funding may be available to the District for this project).

4.6 Partnership Opportunities

Goal: Working with community partners in the public, private and non-profit sectors to enhance parks and open spaces in providing recreation and community service needs for Coldstream residents.

Increasing service demand and decreasing funding capabilities will lead the District of Coldstream to seek innovative ways to maintain existing parks and facilities and to increase recreation opportunities. Developing partnerships with other public agencies, School District 22, and private for-profit and non-profit organizations will help meet increased demands for service. In addition, partnerships may enable the District of Coldstream to serve a broader clientele, offer new services, and provide existing services more effectively than could be provided individually.

The District will continue to develop collaborative partnerships with the City of Vernon, Regional District of North Okanagan, School District #22, B.C. Parks, and other organizations with similar missions to pool their resources and work together to deliver mutually beneficial services which could help enrich and expand park and open space services for Coldstream residents.



The District will endeavor to develop a policy process that would generate consistencies and expand donation, partnership and sponsorship opportunities to the parks and open space system.

When partnerships with local non-profit organizations are in place the District of Coldstream will endeavor to take a leading role to ensure the ongoing sustainability of the respective partner agency and their associated responsibilities.

Increase opportunities for resident, group and stakeholder involvement . Create and implement a community engagement framework that provides guiding principles and sets priorities for community engagement in the parks and open space system.



Kalview Park

Chapter 5: Implementation Strategy

CHAPTER 5 – Implementation Strategy

Parks and open spaces are important components of the District of Coldstream's identity, attractiveness and municipal infrastructure system. Parks help the community achieve sustainable development patterns, enhance the District's competiveness and on-going prosperity, aid in community well-being and are a significant factor in place-making and Coldstream's identity. Parks give people a place to play and relax, they clean the air and water, help keep people healthy, provide habitat for wildlife and increase the opportunities for learning and environmental stewardship. Parks provide a broad range of benefits to citizens and represent a high return on public investment.

5.1 Park Land Acquisition & Development

Municipal funding and acquisition tools for new park land are primarily established by the Provincial Local Government Act and the Land Titles Act. Depending on the circumstance, the District can make use of one or more of these tools to acquire land for the various park uses/classifications that make up the District of Coldstream's park land inventory. The funding and acquisition tools largely used by Coldstream can be defined by the following four categories:



- Park Land Development Cost Charges (DCC's)
- Park Land 5% Dedication or Cash-in-Lieu
- Designated Natural Areas and Open Space Designations
- Purchase of Park Lands
- Park Land Donations/Bequeathing

DEVELOPMENT COST CHARGES (DCC'S)

It is anticipated that the majority of the District of Coldstream's park land funding will come from DCC's. Currently Coldstream Parks DCC's are included in the Regional District of North Okanagan DCC Parks Bylaw which, has been a convenient tool as land costs within different local jurisdictions are relatively consistent. *It is important that the District of Coldstream endeavor to endorse through their own DCC parks policy by-law rates for the District that are in alignment with property values within their respective area.* This will make certain that the requisite funds will be in place when a particular park site becomes available for acquisition and/or for approved redevelopment of existing park spaces.

The Provincial government has produced a *Parkland Acquisition Best Practices Guide (DCC Guide)* that sets out guidelines and recommended best practices for establishing DCCs. Further to the six guiding principles

mentioned in the document, the *DCC Guide* also states that municipalities must consider their responsibilities as outlined in the Local Government Act and determine if DCCs will:

- be excessive in relation to the capital cost of prevailing standards of service;
- deter development; or,
- discourage the development of reasonably priced housing or serviced land.

As well, DCCs must integrate with other District of Coldstream plans, specifically the Official Community Plan (OCP) and the Financial Plan.

PARK LAND 5% DEDICATION OR CASH-IN-LIEU ACQUISITIONS

The District of Coldstream is authorized through subdivision application to require developers to dedicate 5% of the subject land (or an equivalent value as cash-in-lieu) for park purposes. This acquisition tool is used to complement other park purchase tools. When calculating the value of a 5% cash-in-lieu payment, an independent appraisal of the proposed subdivision or development site is undertaken - this ultimately produces the 5% dollar-equivalent figure.

This legislative provision would allow the District to acquire land in certain parts of the community and potentially allow some of the Master Plan "development initiative" objectives to be fulfilled. Moreover, if cash were provided instead of land, monies could be used to acquire or develop other park land initiatives. However, the acquisition of parks under this scenario would require a developer to make application for subdivision before any land dedication or cash equivalent could be contemplated. In short, if no subdivision proposal is made, no land or money can be anticipated. Accordingly, unless and until such a proposal occurs, this acquisition strategy remains a useful, but at the same time only a potential tool.

NATURAL AREAS AND OPEN SPACE DESIGNATIONS

The District of Coldstream plays host to a diversity of topography and geography, with steep slopes and myriad watercourses often resulting in undevelopable sections of private property. It is not uncommon for large private parcels of land to be encumbered with designated conservation areas that encompass a large portion of the entire property.

Designated natural areas are typically undevelopable and characterized by steep slopes, watercourse areas and/or other geotechnical challenges. They are typically left undeveloped as designated green space at the time of development. When the District acquires an undevelopable, designated natural area through a rezoning process, no compensation is paid to the property owner. The designated area is simply severed from the original property and dedicated as Park to the District.

PURCHASE OF PARK LANDS

Purchases may need to be made where high priority sites are identified and no subdivision applications are anticipated. Occasionally private individuals may be interested in selling surplus property to the District and an opportunity to acquire a key site emerges. In those cases where key parcels or trail connections are held by other agencies or private corporations or individuals, negotiations for either purchase or right-of-access should be pursued. Engaging these entities is often successful since land owners such as these – public and private - often share an interest in public benefits.

In an effort to become aware of other such opportunities, the District of Coldstream may wish to consider developing ongoing dialogue with land owners holding key properties in the community. Communicating in this way may yield opportunities not only to acquire, but also, where appropriate, enter into partnerships and agreements for leases and access rights. A recent example would be the negotiations of the abandon portion of Canadian National Railway right-of-way in west portion of the District for future public rail-to-trail.

PARK LAND DONATIONS & BEQUEATHING

From time to time individuals may wish to leave some form of "living" family legacy to the community in the form of a donation to acquire parkland, improve a park or bestowing of property for future park land. While this is not likely to be a significant part of an acquisition strategy, the District, as stated earlier in the parks master plan, will endeavor to develop a policy that makes provisions for residents to make donations for acquisitions or improvements. In return the District may offer to provide some form of donor recognition and/or to be responsible for site development and/or maintenance in perpetuity.

5.2 Park Land Disposal

Over time there may be properties within the parks and open space system identified as surplus to the parks inventory. The District of Coldstream will endeavour to consult the community prior to disposal of an existing property in the parks inventory, keeping in mind that there is a legislated park disposal process that the District must follow.

Specific powers and restrictions of the District in relation to disposal of parks and open space include:

- Exchange or disposal of parkland: Because of the implication of parks and open space to community values, there are special provisions. Two cases need to be identified:
 - Parkland dedicated on subdivision: Elector approval is required for disposal of these parklands (*Community Charter Section 27*). Such land can only be disposed by bylaw of the District in return for alternative park land, which must be vested with the municipality exclusively for park purposes on its acquisition, or for monies that must be placed in a reserve fund to be used for park acquisition and/or development.
 - Parkland dedicated by bylaw: a two-thirds vote of Council is required to approve a bylaw that establishes a park dedication; elector approval is then required to remove the dedication *(Community Charter Section 30).* Once a dedication is removed, the District could dispose of the property under regular land disposal rules.

Although these formal procedures exist to allow the community to respond to Council on a park disposition proposal, the District will endeavor to engage the public through an informal process prior to the formality of a Council hearing. Given that park disposals can be controversial this method could accomplish several outcomes: the residents may feel more comfortable in making their comments in a less formal setting; meeting the residents in their neighbourhood and listening to their concerns demonstrates the District's appreciation of the value of these parks and open spaces to the local residents; and, meeting informally offers District staff an opportunity to explain the reasons why the dispositions have been recommended.

5.3 Park Master Plan Implementation

The Parks Master Plan includes short [±5 years] and longer [±10years] term proposals for parks, natural areas, trails, public grounds, and operations and management. Some specific suggestions for the ongoing development of the District of Coldstream's parks system are as follows.

Integration

It Starts In Your Parks is the first integrated parks master plan for the District of Coldstream. While it provides proposals for parks, open lands, trails, and public grounds for the next ± 10 years, it also presents new directions for the entire park system through the anticipated District build out.

Based on community inclination, priorities and trends in recreation, several directions are proposed in this plan:



• *Integrated Planning and Development [short term]*: Priorities for the integrated park system will endeavor to be set by identifying adjacencies, connections and other synergies between parks, open lands, trails and public grounds to determine how access, resource distribution, and even elements such as their value as wildlife habitat can be improved by planning and developing sites jointly.

• *Community Park Focused Park System [long term]:* The District of Coldstream's park system of the future will endeavor to be more focused on highly popular, larger scale parks and recreation facilities such as community parks, specialized facilities, and interconnected trails. More dispersed neighborhood parks will endeavor to be planned where residential densities increase and open spaces are lacking.

- *Interconnected Trail System [short term]*: The District recognizes and is moving toward developing an interconnected system of local and regional trails that provide access to parks, open lands and other destinations within the District and beyond.
- Accessible Open Lands [long term]: Responding to community priorities, Coldstream will endeavor to increase access to natural areas and open lands to provide more nature-based recreation opportunities and connect residents to the outdoors, while protecting sensitive natural areas and wildlife habitat from impacts.

 Financial Feasibility [short/long term]: The District will continue to enhance services in a fiscally conservative manner using available resources. Guidelines will endeavor to be set to allow flexibility in responding to changing market conditions; future development of specialized facilities based on financial feasibility and the possible role of private providers in meeting service levels; and park standards adjusted based on densities and actual need within residential development.

Parks

It Starts In Your Parks Master Plan includes short and long term proposals for parks, open lands, trails, and operations and management.

Parks Master Plan Key Sector Analysis Map (Appendix D) illustrates references for the acquisition and development of parks and open spaces in the next ± 10 years. Specific related proposals are as follows:

- Enhance/improve parks where needed[short term]. Using park inspections and information compiled in this planning process, improve and enhance parks where needed. Recognize funding sources in a 10year Capital and Operations plan to add park amenities, ensure visible park signage, upgrade restrooms at select sites, and address other needed improvements.
- Acquire and/or develop new neighborhood parks [short term]. When acquiring and developing of new
 neighborhood parks consider locations connected to trail systems, adjacent to other open land
 opportunities or coordinated with other District development plans.



• *Design future parks for water conservation [long term].* Use native plants, apply xeriscaping, and reduce turf areas that are not needed as open play space to reduce water needs at future parks balanced with long term funding for maintenance needs.

• *Replace infrastructure, refresh or renovate old parks [short/long term]*. Continue monitoring facility condition, replacing old, worn or damaged facilities or equipment as per the capital replacement plan allows. Refresh or renovate old parks periodically, updating facilities and landscaping as per new recreation trends and needs.

Acquire and/or develop new waterfront parks and lake access [long term].
 Acquire, master plan and develop new waterfront park spaces along with lake accesses.

Attempt to prioritize these park acquisitions and development in locations connected to the trail system or potentially augmented by adjacent park spaces.

NATURAL AREAS

Existing Conditions – Parks & Open Space Map (Appendix C) illustrates the number of open space sites classified as natural areas. These green spaces, although undevelopable in most cases, add to the open space inventory of the District. Proposals for these properties include:

 Pursue "quick win" projects [short term]. Focus on projects that increase public access to open lands, as per community outreach findings. Publicize these projects and future strategies to make open lands more accessible and connect people to nature while protecting natural resources. Consider developing trail viewpoints and/or low maintenance waysides (e.g., benches, interpretive signage/kiosk, water access and/or picnic tables) to promote opportunities for trail use and nature experiences for families and others.

- Inventory and plan for natural areas in development categories [short term]. Integrate the natural
 areas development in future planning. Categorize open lands by function (similar to parks planning)
 rather than ownership to provide a better sense of which open lands are accessible, developable for
 outdoor recreation and environmental education/nature interpretation, or acquired for primarily
 habitat/resource protection. Institute consistent naming to communicate the primary functions of
 each site.
- Consider natural areas along trail corridors [short/long term]. Continue with plans to acquire trail corridors by easement or ownership, including buffers along trail corridors where these pass through natural areas. Focus on corridors that support access to existing and
- Acquire natural areas adjacent to existing/proposed parks [long term]. As the
 District acquires park land evaluate opportunities and acquire land where
 feasible to connect these sites to existing or proposed natural areas and
 trail corridors. Jointly master plan adjacent parks and open lands. Foster
 access and connections to nature at these sites where consistent to site
 management plans.

proposed open lands and parks.



• Update and implement site restoration and asset replacement plans [long

term]. As natural areas become accessible and developed, ensure that resources are available for site improvements including natural area restoration and capital replacement. Continue monitoring facility condition, replacing old, worn or damaged facilities when needed.

TRAILS

Existing Conditions – Parks & Open Space Map (Appendix C) illustrates some of the connectivity within the District of Coldstream.

- *Inventory soft-surfaced and hard-surfaced trails [short term].* Update the inventory of Districtprovided trails in the municipality and identify additional trails provided on partner properties in addition to the developed Ribbons of Green recreation trail loops.
- *Designate loop trails in neighborhoods [short term]*. Identify and provide hard-surfaced loop trails in the existing community where feasible to support walking, biking, exercise, nature interpretation, and other non-motorized trail activities.
- Develop trails in designated natural areas [long term]. Develop accessible hard-surfaced and soft surfaced trails, trail viewpoints and trailheads in existing or acquired natural areas where these trails will not impact significant natural resources.
- Provide and enhance trail connectivity to parks and community facilities [long term]. Enhance access
 to community parks and identified community facilities by prioritizing trail development in corridors
 tied to these locations.

Provide regional connectivity [long term]. Support regional trail connectivity within the District of Coldstream and lands beyond.

OPERATIONS/MAINTENANCE

Within the Parks Master Plan (3.3 Parks & Open Space Operations & Maintenance) level of service for specific park classifications is documented. As with any plan such as this, these are strictly guidelines for the staff to think about in the day-to-day operation of the various parks and open spaces. Other short and long-term considerations for public parks and open spaces are as follows.

- Address operating expenditures [short/long term]. While capital may be available to acquire and develop new parks and open spaces, it is of paramount importance to identify a funding source and budget for operating expenditures. These expenditures may include administrative, supervisory, maintenance and support staff as well as supplies and services needed to operate and maintain new and existing amenities to meet or exceed the recognized District standard.
- Integrate maintenance [short/long term]. Continue to integrate the District's approach for maintaining
 parks, open space and public grounds to ensure the efficient use of resources. Share staff, equipment
 and expertise, partner with other agencies or contract out for services to increase maintenance
 efficiencies for all lands and facilities maintained.
- Consider changing trends [long term]. As time passes and the population changes, the interests, needs and desires of the District's citizens also change. When new parks facilities are brought onboard in response to growth and other demographic changes, ensure that new trends are considered for both short and long term development of these facilities.
- Update the Master Plan [long term]. Continue to assess community priorities on an ongoing basis, review and update the Parks Master Plan on an annual basis by integrating recommendations for parks, open spaces, trails, and facilities into the District of Coldstream's planning for the future.



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Appendix A – Benchmarking Ratios & Best Practices in Parks

Benchmarking Our Parks

The following is a basic guideline of estimates arrived from utilizing NRPA Parks and Recreation Operating Ratio and GIS system, a comparative benchmarking tool to collect and analyze data about parks and recreation agencies, both in Canada and United States, allowing owners/operators to compare themselves to departments of similar size. It must be recognized that the type(s) of equipment available, length of season, population/area served, etc., are not factored in the following.

General Parks (Neighborhood, Community, Mini/Pocket Parks)

Annual Estimates: \$7,500(low) - \$15,500(median) per 0.4Ha (1 acre) Hectares of Parkland Maintained per FTE: 1.5(low) – 2.5(median) General Operating Expenditures per 0.4Ha (1 acre) Managed: \$9,582

Natural Area & Undeveloped Parkland

Annual Estimates: \$875 - \$1,125 per 0.4Ha (1 acre) Estimated Weekly Maintenance: 1 - 3 Hours

Trails (Hard Surfaced)

Annual Estimates: \$6,250 - \$10,000 per 1.6K (1 mile) of trail Estimated Weekly Maintenance per 1.6K (1 mile): 1 - 3 Hours

Trails (Soft Surfaced)

Annual Estimates: \$3,500 - \$6,000 per 1.6K (1 mile) of trail Estimated Weekly Maintenance per 1.6K (1 mile): 1.5 – 2 Hours

Character, magnitude of scope, frequency, service level, materials, and environment are the key factors in determining maintenance costs and budget. Currently the District of Coldstream is responsible for ± 22.8 Ha (± 56.3 acres) of developed general park space, ± 38 Ha (± 94 acres) natural areas and undeveloped parkland and a variety of trail connectors both hard and soft surface with the District working on determining approximate number of kilometers presently available. Based on the median numbers shown, the District of Coldstream, during the peak season of April through September, should have eight FTEs employed in the parks system, including contractors, to ensure level of service as indicated above is maintained.

The "acres of parkland per 1,000 population" metric also known as a community's "acreage level of service (LOS)", is the most common technique for determining whether a community has sufficient parkland. There is truly no standard acreage LOS in Canada and/or United States, with LOS varying widely due to a community's history, culture, demographics, density, development patterns, and other factors.

In 2014, using communities comparable to the District of Coldstream, a median level of service for parkland was 2.23Ha (5.5 acres) per 1,000 population. Using 10,550 (Table 5.2 Draft OCP 2015) as a population estimate, indicates the District currently has 2.2Ha (5.4 acres) developed park space per 1,000 population which places the community within the median range of communities of equivalent size. If all open spaces in the District are included in the evaluation the hectares per 1,000 population would increase to 14.3 which is well above the overall benchmark ratio.

An often-asked question is "what should be counted in an acreage level of service"? Here again, there is no standard answer. Since the primary purpose of acreage LOS is to determine a community's need for park space, this document has only taken into account developed, publicly accessible parkland currently owned and/or operated by the District of Coldstream and not public park spaces by other agencies. It is therefore important that Coldstream Council establish its LOS for park space in order that it can determine its own development cost charge by-law for parks and open space acquisition and growth.

Determining park acreage level of service should also be used in conjunction with other needs assessment techniques including user surveys, focus group meetings, and population projections that may indicate that the District's population's needs are not being met, requiring the need for supplementary park space.

Operating expenditures per acre managed and operating expenditures per capita are two metrics used to gauge whether the District is adequately funded to manage, operate, and maintain its parks and open space areas.

Based on the District's 2015 Parks Services budget the operating expenditures per acre are \$12,142. This is slightly above the 2014 community comparables at \$10,012 per acre as well as the overall benchmark ratio of \$9,582 as indicated above. Operating expenditures per capita based on 10,550 population are calculated at \$64.45 which is slightly higher than 2014 median comparables of \$51.40 but substantially less than the overall benchmark ratio of \$100 per capita.

It is important to note that operating costs can vary widely between communities due to differences in parks and recreation facility standards, types of equipment, repair and replacement schedules, types and topography of parkland, degree of maintenance required, levels of use, and other variables. Operating costs and efficiencies can also vary with the number of acres managed and/or the size of the population served.

The District of Coldstream will endeavor to benchmark park and open space operating expenditures it is recommended to conduct follow-up research to analyze and document the specific reasons for any significant differences in operating expenditures from comparable communities and/or operating years. Elected officials, managers, and residents may be more supportive of increased operation budgets if they clearly understand the reasons for variations in funding between communities, and/or the implications of different funding levels.

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Best Practices for Parks

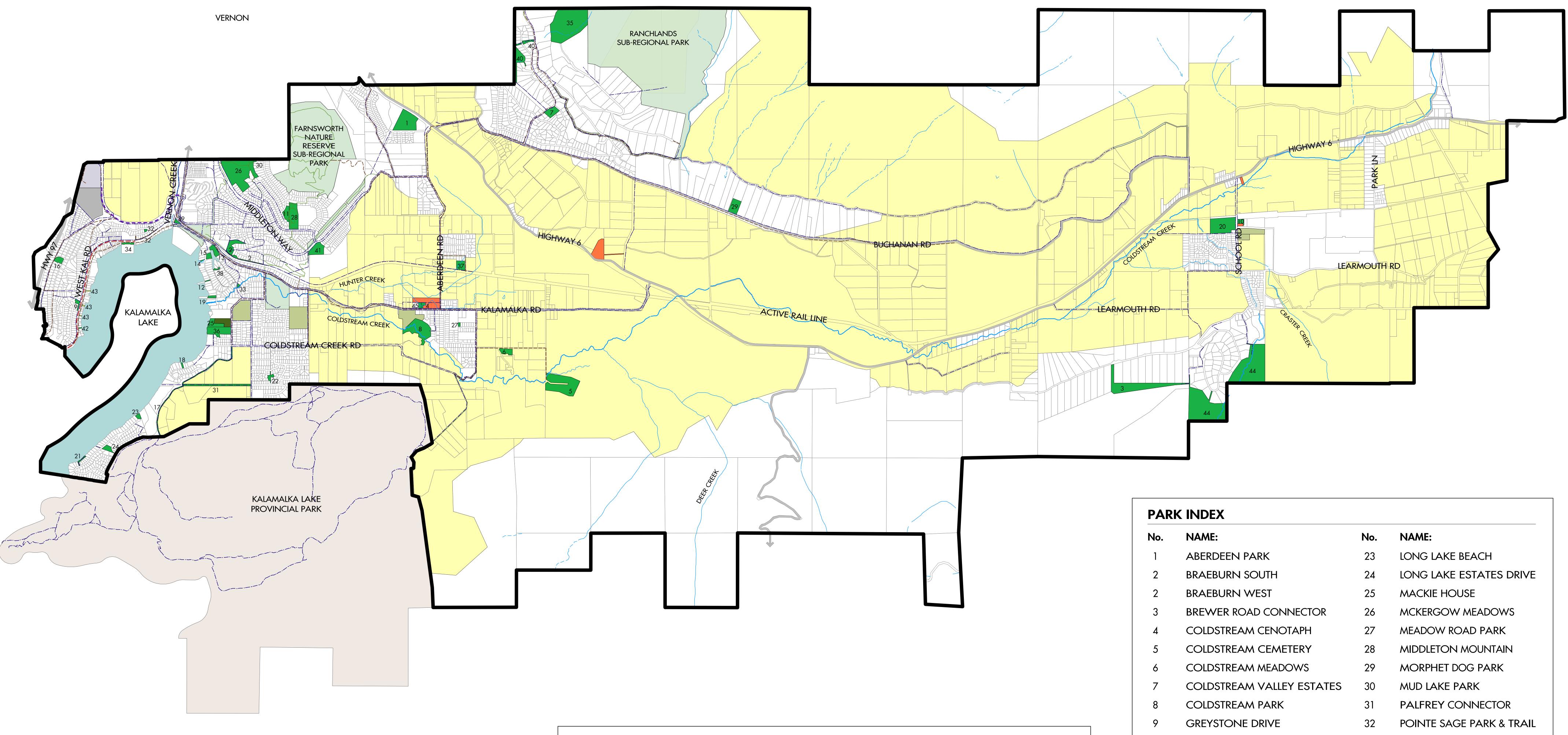
With over 40 years experience in the parks and recreation industry the consulting team has developed a set of best management practices for park and recreation agencies. Several of these are related directly or indirectly to maintenance responsibilities. The consulting team assumes that some of these practices, at one level or another, may already be in place within the current system.

The best practices proposals described below should be, if not already in place, considered over a period of time and integrated into the District of Coldstream management priorities and supported by decision-makers for purposes of preserving the quality and integrity of facilities, structures, and assets throughout the parks and open space system.

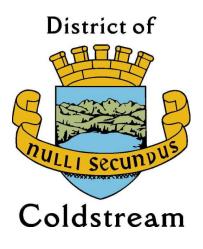
- Park maintenance personnel in best management systems maintain 12 to 14 acres per person of managed park space. This can be a combination of public and contract employees.
- Best managed park and recreation systems have a maintenance work order system in place to track the cost of maintenance, utilities, supplies, equipment and employee time for parks and recreation facilities based on set standards. The work order system also manages asset lifecycles for all replacement schedules to keep parks and facilities up to the level they need for public use.
- Best practice agencies have an equipment replacement program established and funded to keep equipment tied to employee productivity and supporting the efficiency goals of the District.
- Best practice agencies usually outsource their maintenance operations at no less than 20% of their total labor with the remaining resources dedicated to continuity in case where a contract is discontinued the municipality can step in and continue operations ith limited impact on the users.
- Best management agencies have maintenance management plans in place to keep control of maintenance costs and efficiency. These plans are updated every three to five years.
- Best practice agencies have established design standards for parks and open space facilities based on the outcomes that they want to achieve and based on the dollars available to develop and the return on investment from users to support operational costs. These standards apply to neighborhood parks, community parks and all respective amenities the municipality may have under its management and control.
- Best practice agencies spend 4-6% of the estimated value of their park total assets, less land values, maintaining what they own, and uphold this awareness keeping them well positioned in the minds of their residents.
- Best practice agencies have maintenance and program standards that support design standards to operate as efficiently as possible while supporting the level of service requirements of the function.
- Best practice agencies have alternate funding sources, including earned revenues, that they can access to support operational and capital costs to keep the parks function as sustainable as possible.

APPENDIX B -	DISTRICT OF COLDSTREAM PARK CLASSIFICATION - A SUMMARY
Mini / Pocket Park	
Purpose & Function	Provide a little green in dense residential areas. They are small parks transformed from developed urban land sites and acquired by the District primarily serving the immediate area.
Typical Characteristics	Small in size. May include traffic islands, boulevards, over-sized rights of way, etc.
Typical Size	Generally less than 0.05Ha
Park Access & Connections	Usually surrounded by residential. Access on foot. ±15 minute walking radius
Built Environment	75-100%. Desired assets: benches, grassy area for informal play. Optional assets: picnic table, designed landscape, play area
Typical Activities	Informal play where space allows. No programmed events
	Ex: Tebo Drive Lochaven Meadow Rd Pointe Sage
Neighborhood Park	
Purpose & Function	Primarily serves local residents. Acts as a focal point of the neighbourhood that brings residents together. Used for passive enjoyment and limited amounts of active recreation
Typical Characteristics	Located on local connector streets with good visibility and access
Typical Size	0.1 – 3Ha
Park Access & Connections	Surrounded by residential small or arterial streets. ±20 minute walking radius
Built Environment	30-100%. Desired assets: benches, picnic tables, level grass area for informal play,
	playground equipment. Optional assets: Gazebo, sport court(s), designed landscape, lighting for safety, boat launch, restrooms
Typical Activities	Passive enjoyment, retreat and informal play
	Organized active recreation and special events are generally limited and must respect othe
	park uses, adjacent residences and character of the neighbourhood
	Activities and programming respond to local needs
	ates Greystone Dr Jeffers Kalavista Kirkland Long Lake Estates Middleton Mtn Stenquist
Community Parks	
Purpose & Function	Serves several neighbourhoods. Acts as a focal point and gathering space for these neighbourhoods. Provides specialized features, functions and programming and higher leve of use and activity compared to Neighbourhood parks. Also provides areas of passive use, typical of a Neighbourhood Park to adjacent residents, especially when a Neighbourhood neighbourhood park to adjacent residents.
Typical Characteristics	park is not nearby Located in busier community areas, fronting on collector or arterials streets Within response to welking distance (1.20 minute welki)
Trusiaal Ciaa	Within reasonable walking distance (±20 minute walk).
Typical Size Park Access & Connections	Not less than 2.5Ha
	Should be next to arterial connectors, natural area and/or institutions rather than surrounded by residential
Built Environment	35-100%. Desired assets: benches, picnic tables & shelter, restrooms, sports fields, informal play space, pathways, lighting for safety, sports courts, designed landscape. Optional assets: concession, community gardens, off-leash area, public art, performance stage, on-site parking, lighting for sporting activities
Typical Activities	Scheduled athletic activities, community gatherings, local passive use, small concerts, sports tournaments, nature viewing
	Ex: Coldstream Sovereign Lavington
Jrban Centered Parks	
Purpose & Function	Smaller developed sites within the town core. Provide a respite from busy streets with places to sit, space for performers and/or vendors. May have historical significance and are signature parks of interest to the entire community
Typical Characteristics	Generally surrounded by busy streets and commercial properties
Typical Size	.05 – 0.50Ha
Park Access & Connections	Usually via sidewalks
Built Environment	100%. Desired assets: benches, public art, grassy level area, lighting for safety. Optional assets: picnic tables, stage, play area
Typical Activities	No formal programming. Buskers, small concerts, Farmers Market, etc. Ex: Cenotaph
Natural Areas	Ext Conotapri
Purpose & Function	Established for the protection and stewardship of wildlife, habitat and other natural system support functions. Many are accessible for low impact use on designated trails. Larger sites may have small sections to serve a community park function.
Typical Characteristics	Tracts of undeveloped land including forests, meadows, riparian areas and wetlands.
Typical Size	Minimum of 1.0Ha and over
Park Access & Connections	May be bounded by arterial roads. Interior access on designated paths only. May provide parking for natural areas with more amenities
Built Environment	Minimal. Desired assets: none. Optional assets: benches, picnic tables, signage, learning
	center, trails, viewpoints

Ex: Unland	d Hts Ravine Dr Whisper Ridge Braeburn South & West McKergow Meadows
Greenways	This Ravine DF Whisper Ruge Draebarn South & West Prekergow Preadows
Purpose & Function	Usually established by council and defined as dedicated right-of-way in addition to being park land. Protected corridors for conservation & storm water retention. Shoreline riparian areas
Typical Characteristics	Boulevards, green streets, setback from waterways. Many times surrounded by residential development
Typical Size	Any
Park Access & Connections	Along arterial roads, utility rights-of-way, watercourses
Built Environment	25 – 100% Desired assets: designed landscape, safe improved pathways, lighting for safety. Optional assets: benches, flat grassy areas, viewpoints
Typical Activities	None. Provide safe pedestrian routes as well as recreation opportunities for joggers and bicycling
	Ex: Rail Trestle Postill Dr
Community Trails (hard & so	
Purpose & Function	Trails are important as recreation pathways and access points to ecological areas and recreation sites with many related to existing green spaces.
Typical Characteristics	This type of open space connects other types, and is a system in itself. It should be based on the environmental framework, and should link major nodes.
Typical Size	2.5 – 3M wide, length – any
Park Access & Connections	Community level trails should connect with other regional pathways, and/or other key destinations within the community, such as neighborhood parks, schools, recreational facilities, and commercial areas.
Built Environment	75-100% Desired assets: signage. Optional assets: bike racks, benches,
Typical Activities	Walking, bicycling, jogging, inline skating
	lston Rd College Way Braeburn South & West Whisper Ridge Brewer Rd
Special Use	
Purpose & Function	Stand alone parks that are designed to serve one particular use. Special uses generally fall into three categories: Historic/Culture/Social Sites.
Typical Characteristics	No accepted standards. Varies with respective site.
Typical Size	Any
Park Access & Connections	Varies with respective site and use.
Built Environment	25 - 100%
Typical Activities	Varies with respective site and use.
Ex: Westkal, Kinlo	ch, Kalavista Boat Launches Morphet Dog Park Mackie House Coldstream Cemetery
Waterfront	
Purpose & Function	The District includes several waterfront sites along with Kalamalka Lake Provincial Park, which establishes it as a waterfront community and creates interest in water-related recreation activities.
	Vary as per site location and size all have accessible beach front.
Typical Size	Varied. Majority seasonal use only.
Typical Size	Via arterial roads and/or trail connectors.
Typical Size Park Access & Connections	
Typical Characteristics Typical Size Park Access & Connections Built Environment Typical Activities	Via arterial roads and/or trail connectors. 40-100% Desired assets: public toilets, signage, buoyed swim area. Optional assets: bike



2500 M 2000







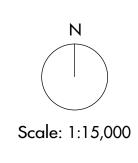


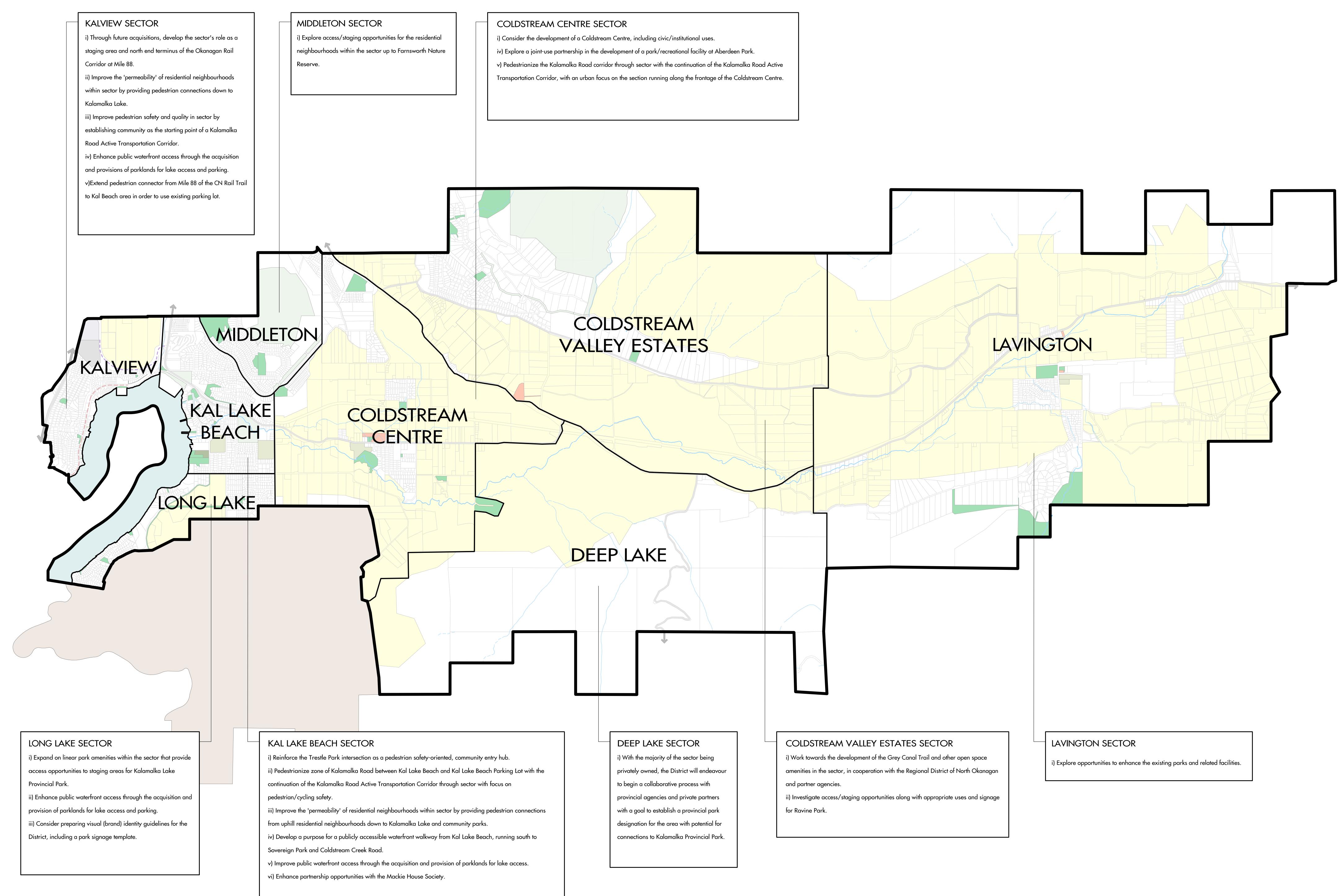


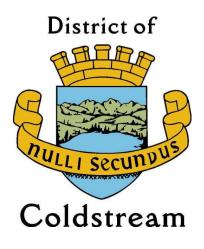
~~	RIBBONS OF GREEN TRAIL SOCIETY
~~~	CREEKS
	OKANAGAN RAIL CORRIDOR
	COLLEGE WAY MULTI-USE PATHWAY
	GREATER VERNON ATHLETICS FACILITY
	OKANAGAN COLLEGE
	SCHOOL DISTRICT 23 PROPERTIES
	MAJOR ROADWAYS
	PROJECT BOUNDARY

No.	NAME:	No.	NAME:
1	ABERDEEN PARK	23	LONG LAKE BEACH
2	BRAEBURN SOUTH	24	LONG LAKE ESTATES DRIVE
2	BRAEBURN WEST	25	MACKIE HOUSE
3	BREWER ROAD CONNECTOR	26	MCKERGOW MEADOWS
4	COLDSTREAM CENOTAPH	27	MEADOW ROAD PARK
5	COLDSTREAM CEMETERY	28	MIDDLETON MOUNTAIN
6	COLDSTREAM MEADOWS	29	MORPHET DOG PARK
7	COLDSTREAM VALLEY ESTATES	30	MUD LAKE PARK
8	COLDSTREAM PARK	31	PALFREY CONNECTOR
9	GREYSTONE DRIVE	32	POINTE SAGE PARK & TRAIL
10	JEFFERS PARK	33	POSTILL DRIVE PARK
11	JESTEF PARKLAND	34	PUMPHOUSE BEACH
12	KALAVISTA BEACH	35	RAVINE DRIVE
13	KALAVISTA PARK	36	SOVEREIGN PARK
14	KALAVISTA BOAT LAUNCH	37	STENQUIST PARK
15	KALAVISTA (LOG CABIN)	38	TEBO DRIVE PARK
16	KALVIEW PARK	39	RAIL TRESTLE PARK
17	KIDSTON MULTI-USE TRAIL	40	UPLAND HEIGHTS
18	KINLOCH BOAT LAUNCH	41	WEBSTER PARK
19	KIRKLAND BEACH	42	WEST KAL BOAT LAUNCH
20	LAVINGTON PARK	43	WEST KAL LAKE ACCESSES
21	LISHEEN BEACH	44	WHISPER RIDGE TRAIL
22	LOCHAVEN TOT LOT	45	WOMEN'S INSTITUTE HALL





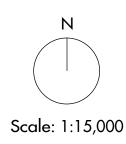






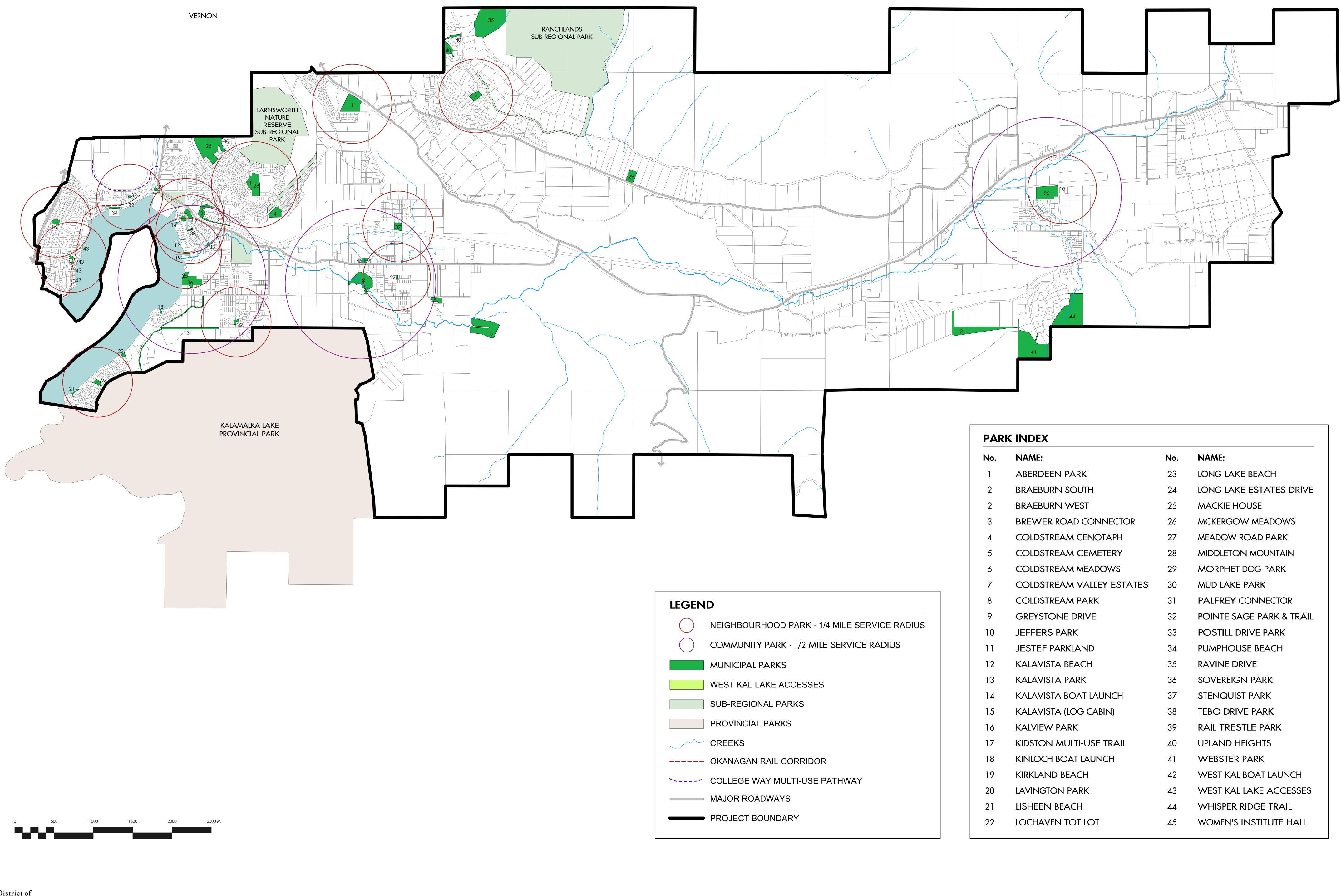
















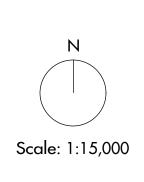




Appendix E - Map: Parks Service Area February 3, 2016

DRAFT FOR DISCUSSION







	No.	NAME:
<b>RK</b>	23	LONG LAKE BEACH
DUTH	24	LONG LAKE ESTATES DRIVE
EST	25	MACKIE HOUSE
D CONNECTOR	26	MCKERGOW MEADOWS
CENOTAPH	27	MEADOW ROAD PARK
CEMETERY	28	MIDDLETON MOUNTAIN
MEADOWS	29	MORPHET DOG PARK
VALLEY ESTATES	30	MUD LAKE PARK
PARK	31	PALFREY CONNECTOR
DRIVE	32	POINTE SAGE PARK & TRAIL
<	33	POSTILL DRIVE PARK
AND	34	PUMPHOUSE BEACH
ACH	35	RAVINE DRIVE
RK	36	SOVEREIGN PARK
DAT LAUNCH	37	STENQUIST PARK
DG CABIN)	38	TEBO DRIVE PARK
<	39	RAIL TRESTLE PARK
TI-USE TRAIL	40	UPLAND HEIGHTS
T LAUNCH	41	WEBSTER PARK
АCH	42	WEST KAL BOAT LAUNCH
ARK	43	WEST KAL LAKE ACCESSES
CH	44	WHISPER RIDGE TRAIL
DT LOT	45	WOMEN'S INSTITUTE HALL

## **Appendix F** - **Public Engagement Endorsements**

The following endorsements have been generated as a result of the public input during the parks master plan process and provide the District of Coldstream direction for the implementation of a sustainable interconnected system of parks, trails and open space, providing guidance in terms of engaging the public in parks, trails and open space issues.

Analysis of District of Coldstream residents, consistently indicate that Coldstream citizens place equal priority on both acquiring and preserving open space and on developing new and enhancing existing parks, trails and open spaces.

The Rail-to-Trail development is a reality – let's be ready! Decide what our niche markets are that we can promote to ensure the trail users have the opportunity to experience the unique facets of Coldstream in a safe and comfortable setting. (The document, Kalamalka Parkway by Mr. Jack Borden, addresses many of the key issues here and could potentially be used as a guiding paper in determining what level(s) of development the District of Coldstream is comfortable in, or willing and able, to undertake.)

Lands acquired for future park use are held in public ownership to ensure they are available when development and maintenance funding exist. When development is feasible and appropriate, a master plan for the park is prepared with community input.

Priority should be placed on acquiring land adjacent to existing parkland, along shorelines, environmentally sensitive areas, or linkages that provide connections between parks and open space areas and other parts of the community.

Develop a communications plan to ensure residents are fully engaged and informed related to parks, open space, and trails/pathways that affect their quality of life in Coldstream.

To the greatest extent possible, decisions to develop new parks or redevelop aging parks must consider providing for multiple uses by multiple user groups, integrating active and passive activities in all our parks and open spaces.

Partnerships with schools, businesses, developers, non-profit organizations, and neighborhood groups play an important role in developing the current parks, trails and open space system. These relationships must be continued and expanded to maximize these public investments and provide new and relevant recreational opportunities to Coldstream residents.

Working together with neighboring jurisdictions will help to identify each jurisdiction's role and responsibility in contributing to a greater variety of parks, trails and open space needs, avoiding duplication, and promoting the distribution of these facilities.

Ensure wildlife corridors and habitat areas are better protected and public access is designed to reduce impacts to natural areas.

Develop a strategy to creatively explore the linkages between the public trails and unique elements of Coldstream, including the waterfront and agriculture base.

Develop standards and informational signage for parks, open space and trail use and interpretive signage to educate/inform the residents in the safe use of these facilities.

Connect parks, neighborhoods, schools, and activity areas together through a coordinated system of trails and open spaces.

## Appendix F – Householder Survey

it starts in your parks

To better understand the park and open space needs of residents and participant/users in the District of Coldstream and in order to provide a high level of customer satisfaction we are asking your assistance in completing this brief survey. This data will assist to inform planning, budgeting and decision-making for your District parks and open spaces into the foreseeable future. Thank you for your time and input.

**Responses shown in red as % of total received for each question.** 1. Overall, how would you rate existing park facilities in Coldstream and the way they serve the community.

Great 27 Okay 46 Need help 17 Poor 7 Don't know 3

2. How often do you go to your municipal parks in the District of Coldstream?

Once/week 33 Once/month 19 More 21 Less 27

3. What activity do you typically use your municipal parks for?

Nature study 5 Picnicking 6 Walking 33 Cycling 8 Organized sports 7 Relaxation 16 Lake Access 17 Other 8

4. How are you able to access parks?

Walk 44 Bike 15 Transit .05 Own vehicle 40 Other .05

5. Are you easily able to access parks from where you live?

Yes 83 It's a challenge 9 No 8

6. How far would you walk to access a park or open space?

.5K 42 1K 29 1.5K 18 more 11

7. How far would you bicycle to access a park or open space?

1K 29 1.5K 14 2K 30 more 27

 Should the District of Coldstream acquire new park land to expand their existing system? Yes, definitely 58 No, we're okay now 34 Suppose so? 8

9. Should the District of Coldstream acquire new waterfront property to expand the existing system?
 Yes, definitely 63 No, we're okay now 28 Suppose so? 9

10. Should there be usable park space in all neighborhoods?

Yes, definitely 70 No, we're okay now 19 Suppose so? 11

11. Should the District attempt to link parks together for a unified system of public space? Example: a network of off-road multi-use trails.

### Yes 57 No 18 Uncertain 25

12. Areas that preserve the natural ecosystems and promote environmental awareness should be incorporated into the District of Coldstream parks and open space system.

Agree **90** Disagree **10** 

13. Parks and open spaces in the District of Coldstream should enhance the character of the community and promote the District as a destination for residents and visitors alike.

Agree **90** Disagree **10** 

14. Features such as culture, art, historic interpretation and events should be incorporated into the park system.

Agree **72** Disagree **28** 

15. Major athletic facilities should be concentrated in areas that do not impact surrounding land uses.

Agree **85** Disagree **15** 

16. Kalamalka Lake and its waterfront opportunities should be the District of Coldstream's defining icon.

Agree **81** Disagree **19** 



"It Starts In Your Parks" – Parks Master Plan 2016



Open House Survey Responses

- Over the next five years, what are the top two or three priorities you believe the District of Coldstream should focus on in order to improve the quality of its parks, trails and open spaces? (# of similar responses)
  - Linear trails and paths for non-motorized connectors throughout District (3)
  - Create fluid non-motorized connectivity with Rail Trail from within Coldstream and adjacent communities (2)
  - Upgrade Kal Beach, Creekside & Lavington Park with perimeter walking trails (2)
  - Increase Lake access (3)
  - Parking for Rail Trail
  - Trail along length of Coldstream Creek (2)
  - Make parks more user friendly (i.e. benches, bike locking structures, free parking)
  - Public spaces around 'downtown' Coldstream core
  - Ranchlands development
  - Increase park facilities for designated sport use (i.e. make Lavington a 25M pool)
  - Reinstatement/preservation of identified habitat areas with native plantings, etc.
  - Clear and consistent signage on roads, trails and parks along with a main sign and map at major facilities and parks in Coldstream (2)
  - Continue to provide parks and open spaces with a variety of uses both passive and active
- As the District continues to grow and develop, what should District of Coldstream do to protect and enhance its parks, trails and natural areas?
  - o Reclaim lake frontage from owners who have infringed on public property
  - Create a public walkway/access along Kalamalka Lake (3)
  - Ensure that new developments designate <u>usable</u> parkland for parks and trails, not simply land which cannot be used for the development (3)
  - Ensure that all parks, open space, trails and natural areas are zoned as parkland
  - Solicit assistance from other associated organizations (i.e. Naturalist Club)
  - Provide signage to educate people in order to "take possession" of <u>their</u> green spaces (3)
  - Work with Coldstream Ranch to designate trails and/or recreation use areas off of King Edward Rd., West Brewer Rd., Blue Nose and Noble Canyon Rd. to take pressure off Kalamalka Prov. Park
  - Remain 100% firm on ALR
  - Promote easy access to parks via trails and multi-use paths (3)
  - Protect natural areas (both public and private) from development and/or over-use (3)
  - More parks per capita
  - Develop feature areas (gardens, art, etc.) within some parks
  - New open space for development area between Aberdeen, Sarsons Rd. and Hwy 6a
  - By-law protecting green space and requiring new developments to have a certain amount of green space
  - As a 50 year plan, D of C should have a by-law whereas 3M of Kalamalka Lake should be made public (take a look at what Kelowna, Penticton, Kamloops, and others are doing)
- Please propose ways that the District of Coldstream can encourage community partnerships, donations and sponsorships in order to expand and improve its parks and open spaces.
  - Consider asking for volunteers to lead group activities in some parks. This may take some leadership and promotion but would get people into and using our parks

- District of Coldstream should meet regularly with the various organizations within Greater Vernon who are currently working to create parks, trails and open spaces (i.e. Naturalists Club, Rotary, Ribbons of Green)
- Form a group "Friends of Coldstream Parks" (perhaps start through the PAC groups at the local schools)
- If Lavington Pool were made into a 25M it can be user pay swim club like the Lumby Pool and lane swims for adult use
- Maintain good communication with Coldstream planner, RDNO, Vernon and associated community
- o Donation of memorial benches, garden areas and legacies to protect parks
- Promote the hosting of charity events in parks in order that the facilities are used and recognized
- Adopt-a-park program to enhance parks and assist in keeping them clean
- Trade-off with local groups (i.e. Habitat for Humanity) in assisting to build park amenities
- Conservation covenants and naming rights for donators
- Please suggest ways that the District of Coldstream can increase and/or improve on how it supports and encourages individuals and groups to get involved in the planning, design and operation of its parks and open spaces.
  - Used to have an event called 'Coldstream Days' at Coldstream Ranch. This could be reinstituted at one of our local parks for a day for residents to enjoy
  - Open house, surveys, attend meetings of other organizations (Mike Reiley attends RGTS meetings)
  - Create a District of Coldstream Parks Advisory Committee (2)
  - Designate a day in May (or any other month) as Coldstream Parks Day, inviting people to each park for clean-up and a picnic
  - Create a contact list of all individuals and groups interested in Coldstream parks and recreation plans and discussions. Please start a parks and recreation advisory council
  - Already great!
  - Send out information on all parks encouraging people to go out to the parks. Then have a planning open house
  - Encourage private landowners of agricultural land to allow public access to lands beyond for trails aiding in connecting the trail systems
  - School outreach programs

#### • Please write down your favorite outdoor space in the District of Coldstream and why.

- Kalamalka Provincial Park (not a District of Coldstream Park) (3)
- Creekside Park (2)
- Coldstream Park (3)
- Sovereign Park (2)
- Kal Beach(2)
- Middleton Mountain (great trails and views)[believe person referring to Nature Reserve]
- Lavington Park (as it is the hub of the community. Just requires something for the 5 18 group who are left out at present [skate park would be a great addition])
- Jeffers Park (well maintained and user friendly has gotten me through a lot!)
- Long Lake Beach (peaceful & quiet)



## APPENDIX TO THE DISTRICT OF COLDSTREAM PARKS MASTER PLAN

At the Regular Meeting of Council held May 25, 2020, Council passed a resolution "THAT staff be directed to append the report *Preservers of Nature, Protecting Natural Areas in the North Okanagan (May 2020)* prepared by the North Okanagan Naturalists' Club to the District of Coldstream Parks Master Plan".

# PRESERVERS OF NATURE

# **Protecting Natural Areas in the North Okanagan**





North Okanagan Naturalists' Club May 2020 This report was written in May 2020 on behalf of the North Okanagan Naturalists' Club with the goal of informing local government of the objectives of the club and its members with respect to the preservation and protection of natural areas in the region.

The goal is to see more of our signature ecological and geographical areas protected, in a natural state, for perpetuity.

The report's author was Harold Sellers, Past-President and Director of the North Okanagan Naturalists' Club and member of the Greater Vernon Trails and Natural Spaces Advisory Committee.

COVER PHOTO: A view of Commonage lands.

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# **EXECUTIVE SUMMARY**

The North Okanagan Naturalists' Club (NONC) envisions a robust network of natural areas as a key part of responsible land management and stewardship.

The Quality of Life Survey Results, a Report to Regional Growth Management Advisory Committee, 4 Nov 2013, revealed that citizens gave only a fair to good rating for the protection of our undisturbed and sensitive natural environment.

Working together we can give our citizens reason to feel better about this.

As this report shows, all municipal jurisdictions have made attempts, through publications such parks master plans, official community plans, and others, to describe specific properties as natural areas and even provide a definition of a natural area.

The recommendations made in this report centre upon two important facts: (1) current zoning bylaws and municipal policies do not adequately provide for natural area protection and (2) there is no consistent definition and description of "natural area", for all municipal jurisdictions in the North Okanagan.

A key component to that definition concerns the management of natural areas. This is a foundational purpose behind this report.

North Okanagan municipalities are lacking legal means to ensure a property can be protected to the degree advocated in their own policies and reports.

Natural areas in the North Okanagan are treated similar to parks, permitting a great range of community and recreational uses, to the detriment of the natural area as a preserver of nature. The inadequacies of municipal management can be seen by a review of existing zoning bylaws (page 33).

The North Okanagan Naturalists' Club is committed to working with our municipal partners in the North Okanagan to find a path to strong environmental management and stewardship for generations to come.

# **RECOMMENDATIONS**

The North Okanagan Naturalists' Club believes there is an urgent need and current opportunity to revitalize and accelerate natural area protection, building on existing efforts and assembling a network of natural areas before opportunities are lost.

NONC therefore makes the following recommendations to all municipalities in the North Okanagan.

- in consultation with stakeholders, determine the objectives for a "natural area" designation
- create a single definition and description of "natural area"
- update zoning bylaws to provide for natural area protection
- update the regional Natural Areas inventory
- protect large areas in provincially and regionally important ecosystems
- set goals for lands to be protected for ecological and geological purposes, with targets in hectares as well as number of properties in each municipal jurisdiction
- identify current properties and areas that should receive protection
- identify properties and areas for future designation, through acquisition or covenants
- institute a volunteer warden program, similar to the Ecological Reserves Wardens program of BC Parks
- expand the review of natural areas beyond Greater Vernon (City of Vernon, District of Coldstream, Electoral Areas B & C) to other jurisdictions

#### **POSITIONAL STATEMENT**

Having an area designated as a Natural Area provides the best opportunity for it being protected in its natural state. That designation should be supported by a clear definition and strong management.

# **PURPOSE**

The purpose for writing this report was to encourage a more dedicated, consistent and organized effort, by all municipal jurisdictions, to protect natural areas within the North Okanagan.

The report reviews definitions used, site and property lists, tools and methods available for protection, and recommendations made, in a number of publications and documents produced by local municipalities, the province and environmental organizations within recent decades.

The report looks at each natural area and suggests the natural features to be protected for each.

The North Okanagan Naturalists' Club believes that the natural areas of our region have not been adequately protected to conserve the ecosystems and landscapes that are valued by residents and visitors alike. In short, our actions have not matched our words.



The Coldstream Valley Range, with its southfacing grassland slopes, has <u>no</u> significant protected natural areas.

# **DEFINITIONS**

Natural Areas might also be referred to as Natural Spaces or Open Spaces.

The following are some definitional statements extracted from various local publications.

*Greater Vernon Natural Area/Features Inventory, November 1993* Natural areas and features are described as areas, which:

- provide habitat for a diversity of wildlife;
- have rare plant or animal species, or habitats,
- have unique landforms or geology, and/or
- represent elements of the natural Okanagan landscape.

#### Keeping Nature in Our Future

A Biodiversity Conservation Strategy for the Okanagan Region, 2014 Sensitive ecosystems refer to natural areas that are relatively unmodified, ecologically fragile, and/or recognized as being at risk in the provincial landscape, due to their limited natural occurrence, combined with loss or degradation from human activities.

#### RDNO Sub-regional Open Space and Trails Policy, 2018

A sub-regional open space is generally of a size and function between a municipal park and a provincial park and provide green space in urban, suburban and rural settings. Sub-regional open spaces protect regionally important natural areas for conservation, nature appreciation, and outdoor nature-based recreation.

Development Guidelines and Standard Specifications Landscape Construction, Greater Vernon Area, Regional District of North Okanagan July 2013 Natural Areas have been acquired by the GVPRC to protect environmentally significant areas and features in the form of environmental reserves as well as, where appropriate, to provide outdoor recreation opportunities. The natural areas include ponds, wetlands, riparian and forested areas, prominent slopes, and other natural features.

The Commonage is a very large area south of Vernon. Still mostly ranch lands and large private holdings. Despite its size, important history to the region and its acknowledged value as Okanagan grassland eco-system, it has surprisingly few natural areas that might be considered somewhat protected. The list is short: Rose's Pond, Allan Brooks Nature Centre and Carlson Park (Plantation Forest).

#### Regional Growth Strategy, 2011

...some of our most vulnerable ecosystems, our hillsides and our viewscapes... ...protection of ecological features and corridors, including floodplains, shorelines, stream and river systems, aquifers, wetlands and forested watersheds...

#### City of Vernon Parks Master Plan, 2015

The main purpose of Natural Area parks is to protect and preserve critical habitats while connecting Vernon residents to nature.

#### District of Coldstream Parks Master Plan, 2016

Open Space consisting of natural, undisturbed landscape set aside for the purpose of preservation or conservation of natural resources, natural features or scenic/ aesthetic values.

This classification may include: native vegetation, geological landforms, historic/ cultural sites, water bodies/wetlands/riparian areas, wildlife habitat, hillside slopes, ridgelines & view sheds, scenic buffer areas, agricultural & rangelands, trails.

#### Sensitive Ecosystem Inventory (SEI), Coldstream-Vernon, Volume 1, 2008

A systematic plan for prioritization and protection, and stewardship of local sensitive and other important ecosystems should be developed. Recognizing and protecting environmentally sensitive areas early in the

community planning process provides the best chance of protecting environmental values.

#### Management Recommendations

Avoid Direct and Indirect Impacts

 Manage access. All motorized vehicles should be restricted to existing roads. Mountain bikes should be restricted to existing or carefully planned trails that are free of invasive plants, and not subject to erosion; otherwise, these trails should be closed until invasive plant problems have been controlled. Trails can create erosion problems, disturb fragile vegetation, and spread or introduce invasive alien species. Existing trails with erosion problems need to be rehabilitated and restored.

Online research in the preparation of this report revealed this definition from the City of Edmonton. It could provide a model for the North Okanagan.

"We define a natural area as an area of land and/or water especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means. Areas such as groomed parks, recreational areas for sports, and schoolyards are not included in this definition." (City of Edmonton)



Middleton Mountain has a natural area on the summit as well as McGergow Meadows and Mud Lake on the west slope. However, the slopes are quickly being developed, dramatically changing the appearance and appeal this well-known natural landmark.

# NATURAL AREAS IN THE NORTH OKANAGAN

According to the varying definitions and classifications for natural areas, the following are lists of such areas and properties in the North Okanagan, as documented in the referenced publications.

Greater Vernon Natural Area/Features Inventory, November 1993 Thirty-two sites were documented in this inventory: Abbott Creek Woodland Adventure Bay Bluffs Bella Vista Range Black Rock **BX** Creek Coldstream Creek Commonage **Cools Pond** Deep Lake/Devils Gorge East Vernon Road Seepage **Glacial Erratic** Goose Lake and Range Grey Canal Road Hartnell Lane Herry Road Ravine Irish Creek Middleton Mountain North Arm, Okanagan Lake O'Keefe Pond Pottery Road Ravines Silver Star Foothills Swan Lake Tillicum North Face Turtle Mountain Vernon Arm, Okanagan Lake Cemetery property. Vernon Creek Vernon Creek Escarpment Vernon Heronry West Kalamalka Slopes

Wildwood Gully

Coldstream Creek is an important kokanee spawning stream, but there are very few natural areas along its course. Restrictive covenants exist on one or two private properties, but otherwise there is only the Coldstream RDNO considers the current inventory under the *Sub-regional Open Space and Trails Policy*, to be:

Swan Lake Nature Reserve, Ranchlands Open Space, Crane Road Open Space, Goose Lake Range, Rocky Ridge Open Space, BX Ranchlands Trail, and Middleton Mountain Open Space (i.e. Farnsworth Nature Reserve)

Development Guidelines and Standard Specifications Landscape Construction, Greater Vernon Area, Regional District of North Okanagan July 2013 11 parcels of land are classified as natural areas, and these are generally small for this type of land. Some examples are Becker Park, Black Rock, CEC Young, Cools Pond, McKergow Meadows, and Webster Park.

City of Vernon Master Parks Plan In the Plan the following are listed as Natural Areas: 33 Avenue Creek (Vernon Creek) **Airport Lands** Becker Park Bella Vista, Lot A Lot 11, 3097 Davison Rd BX Creek (under RDNO) CEC Young Clerke Nature Reserve **FB** Jacques Park Foothills Hitchcock Road Park Foothills Ravines/Park Grahame Park Grey Canal Trail (under RDNO) Kimura Tot Lot/Pottery Ravine Park, 1604 18 Ave. Kokanee Rd NE, 9235 Kokanee Rd. Kokanee Rd SW, 9312 Kokanee Rd. Laker's Clubhouse and property Waterfront Trail Park, Lot 4 Plan KAP58651 Marshall Wetlands Mt. Grady Park North Vernon Park Pleasant Valley Rd. Rocky Ridge Park (under RDNO) Tavistock Property, 9010 Tronson Rd. Park at 851 Mt. Ida Dr. Vernon Creek, Fulton rd. Anderson Ranch Property, 5975 Lefoy Rd.

Birdie Lake, Predator Ridge Crest Park, Predator Ridge Rise Park, Predator Ridge The Rise Village Meadows, Predator Ridge Vista View, Falcon Point Way, Predator Ridge

Electoral Areas B and C OCP, 2014 Pottery Road Ravines; Black Rock; East Vernon Road Wetland (seepage) near BX Ranch; Portions of Bate and Brookside Creeks above Dixon Dam Road; Wildwood Gully upslope from Hitchcock Road; Abbott Creek Woodlands from Rogers Road eastward; Cools Pond; Herry Road Ravine east of Pleasant Valley Road; Rose's Pond; Commonage Grasslands; particularly the slopes overlooking the west shore of Kalamalka Lake; Thompson [sic] (Thomson) Lake; and All wetlands not covered by Riparian Areas Regulation.

District of Coldstream Parks Master Plan, 2016 Aberdeen * Braeburn South & West Grey Canal Trail ** Glacial Erratic Rock Jestef Parkland * McKergow Meadows Mud Lake Ranchlands ** Ravine Drive Upland Heights Webster Whisper Ridge

* re-designated as Neighbourhood Park

** transferred to Regional District

# **TABLE 1:** Alphabetical List of Natural Areas (as listed above) withDescriptions

The following properties have been described as "Natural Area" in at least one of the publications listed above.

Natural Area Name	Location & Description	Protection Value
33 Avenue Creek	City of Vernon park, 33 Ave west of 34 St, known as Hidden Park, BX Creek flows thru	nil
Aberdeen	Coldstream, designated as Neighbourhood Park, located at Hwy 6 and Ab redden Rd, west of RDNO offices, includes ponds and marsh	Birds-Breeding & Migratory; Waterbody/ Wetland
Abbott Creek Woodland	Mid-elevation forest and creeks. Rogers Road area, off Silver Star Road, may be in area of Fairhaven Leadership Retreat Centre; private lands.	Forest; Riparian; Native Plants; Wildlife Habitat
Adventure Bay Bluffs	In City of Vernon. Hills and slopes located between the North and Vernon arms of Okanagan Lake. Grasslands, Ponderosa forest, rattlesnake habitat and other significant environmental importance. Adventure Bay residential neighbourhood has large P5 Private Park areas. Some hiking trails. Also see Tavistock site below.	Birds-Breeding & Migratory; Forests; Grassland; Hillsides & Steep Slopes; Native Plants; Wildlife Corridor; Wildlife Habitat
Airport Lands	Vernon Regional Airport	nil
Anderson Ranch	5975 Lefoy Road. Between Hwy 97 and Pleasant Valley Rd, south of Stickle Rd. Development underway. Hilltop on property will be a park.	unknown
Bate & Brookside Creeks	see Tillicum North Face	

Natural Area Name	Location & Description	Protection Value
Becker	Becker Park and Centennial Hill ridgeline. City of Vernon, main access from curling club parking lot off 39 Ave.	Wildlife Habitat; Native Plants; Hillsides & Slopes
Bella Vista	City of Vernon, 3097 Davison Road "Davison Rock", rocky hill, on Bella Vista Rd west of Davison Orchard. City of Vernon leases to Davison Orchard for fruit growing on part of property. Zoned as agricultural land.	Plants; Hillsides & Slopes
Bella Vista Range	Range of hills form Adventure Bay to Stepping Stones Estates. Extensive and quality grasslands on south and southeast facing slopes.	Birds-Breeding & Migratory; Grassland; Hillsides & Steep Slopes; Native Plants; Wildlife Corridor; Wildlife Habitat
Birdie Lake	Predator Ridge, City of Vernon. Small lake with two ponds and surrounding marsh. Trail and observation platform. P5 Private Park designation, same as golf course.	Birds-Breeding & Migratory; Waterbody/ Wetland
Black Rock	Electoral Area C park at 721 35th Ave.	Hillsides & Slopes; Historic/Cultural
Braeburn South	Coldstream, Zoned Residential Estate 2 but includes Middleton Mountain trails.	unknown
Braeburn West	Coldstream, Zoned Residential Estate 2 but includes Middleton Mountain trails.	unknown

Natural Area Name	Location & Description	Protection Value
BX Creek	Originating at Silver Star Mountain and ending at Swan Lake, BX Creek passes through five biogeoclimatic zones. Important wildlife corridor and recreational area. BX Creek flows through other areas mentioned in this report, e.g. North Vernon Park, Swan Lake Nature Reserve. The section most likely intended for consideration would have been between the waterfalls at Tillicum Road and Pleasant Valley Road.	Birds - Breeding & Migratory; Forests; Geological Landforms; Native Plants; Riparian; Waterbody/ Wetland; Water Management; Wildlife Corridor; Wildlife Habitat
BX Ranch Lands Trail	Electoral Area C. RDNO-acquired BX Ranch, specifically the severed trail corridor on three sides of property. Currently trail construction is pending.	Wildlife Habitat; Wildlife Corridor; Wetland; Grassland
CEC Young	City of Vernon natural area at 3909 Argyle Ave., west of 39 St. Wetland and creekside on Vernon Creek. An undeveloped site.	Wildlife Habitat; Riparian; Wetland; Water Management
Clerke Nature Reserve	City of Vernon, 3497 Alexis Park Dr. Conservation covenant held by Nature Conservancy of North Okaganan (NCNO). Zoned as residential.	Plants; Hillsides & Slopes
Coldstream Creek	Coldstream Creek is an important kokanee spawning watercourse.	see Coldstream Cemetery, Table 2
Commonage Grasslands	A very large area, comprised of several privately owned properties and included water bodies such as Rose's Pond, Tompson Lake and MacKay Reservoir	Grasslands; Wildlife Habitat; Wildlife Corridor; Birds - Breeding & Migratory; Native Plants; Waterbody/ Wetland; Hillsides & Slopes; Water Management; Historic/Cultural

Natural Area Name	Location & Description	Protection Value
Cools Pond	Electoral Area B, corner of L&A Road and Rimer Rd. Kettle pond, marsh and open field. Interpretive signage and observation area.	Wildlife Habitat; Birds - Breeding & Migratory; Waterbody/ Wetland
Crane Road	RDNO-acquired property on east shore of Swan Lake at north end of Crane Road. Former radio station site. Site development still pending.	Wildlife Habitat; Waterbody/ Wetland; Native Plants
Deep Lake/Devils Gorge	Small lake and wetlands, bounded by cliffs and steep slopes, in Coldstream Ranch property. Geography contributes to a particular micro-climate.	Geological Landforms; Hillsides & Steep Slopes; Wildlife Habitat; Wildlife Corridor; Native Plants; Forest; Riparian; Waterbody/ Wetland
East Vernon Road/East Vernon Road Seepages	Wetland and seepage area near BX Ranch, on East Vernon Road. Privately owned.	Wildlife Habitat; Waterbody/ Wetland; Native Plants
Farnsworth Nature Reserve	North half of Middleton Mountain parkland. Acquired from Farnsworth family. See Middleton Mountain below.	Wildlife Habitat; Birds - Breeding & Migratory; Grasslands; Native Plants; Hillsides & Slopes
FB Jacques	City of Vernon park. Rocky hill between Schubert Centre and Centennial Drive, west side of 35 St. Access was lost when Catherine Gardens residence was built.	Native Plants; Hillsides & Slopes
Foothills Ravines	Ravines in the Silver Star Foothills community. Some have pedestrian trails through them.	Wildlife Habitat; Wildlife Corridor; Native Plants; Hillsides & Slopes

Natural Area Name	Location & Description	Protection Value
Glacial Erratic Rock	Coldstream-owned property. Undeveloped. Accessed by laneway off Gray Road.	Geological Landforms; Native Plants
Goose Lake and Range	West side of lake is Indian Reserve. East side is privately owned. To the north a property was acquired between Goose Lake and Stepping Stones sub-division for future park and Grey Canal Trail development. No public access yet.	Wildlife Habitat; Wildlife Corridor; Native Plants; Hillsides & Slopes; Grasslands; Waterbody/ Wetland; Historic/ Cultural
Grahame	City of Vernon park area east of Fulton High School running from Vernon Creek to Okanagan Ave. Adjoins and forms part of the sports and athletic fields in Grahame Park.	Riparian; Waterbody/ Wetland; Wildlife Corridor; Wildlife Habitat
Grey Canal Road	no supporting documentation found	nil
Grey Canal Trail	Various sections in electoral areas and Coldstream. Managed by RDNO.	nil due to human activity in narrow corridors
Hartnell Lane	see Tillicum North Face	
Herry Road Gully	A forested gully or ditch parallel to Herry Rd as it runs east-west from its connection with Pleasant Valley Road. Ravine contains cottonwood trees and shrubs. Assumed to be partly private orchard property and partly road allowance.	Wildlife Habitat
Irish Creek	Originating west of Vernon and flowing into the North Arm of Okanagan Lake, the creek is an important riparian area, but also with significant forest and grassland areas.	Forest; Grasslands; Native Plants; Riparian; Waterbody/ Wetland; Wildlife Habitat; Wildlife Corridor
Kokanee Rd NE	9235 Kokanee Road Appears to be a residence. ???	unknown

Natural Area Name	Location & Description	Protection Value
Kokanee Rd SW	9312 Kokanee Road Private residence. ???	unknown
Lakers	Clubhouse and park. Includes ponds and wetlands which are designated to protect Spadefoot Toads.	Wildlife Habitat; Wildlife Corridor; Waterbody/ Wetland; Birds - Breeding & Migratory
Marshall Wetlands	Man-made wetlands between Okanagan Landing Road and sports fields. City of Vernon.	Water Management; Wildlife Habitat;Waterbody /Wetland
McGergow Meadows	Coldstream owned parkland. Between Middleton Way and Mt. Ida Drive. Includes trails.	Grasslands; Native Plants; Waterbody/ Wetlands; Birds - Breeding & Migratory; Hillsides & Slopes
Middleton Mountain	Hilltop park is managed by RDNO as a sub-regional park. Includes original south half and more recently added Farnsworth Nature Reserve. Walking trails and interpretive signage.	Wildlife Habitat; Birds - Breeding & Migratory; Grasslands; Native Plants; Hillsides & Slopes
Mt. Grady Road	City of Vernon park land. A small vegetated gully forming part of a natural corridor to/from Middleton Mountain parkland. Connects to Mt. Ida Drive natural space.	Wildlife Corridor; Wildlife Habitat
Mt. Ida Drive	City of Vernon park land. A small vegetated gully forming part of a natural corridor to/from Middleton Mountain parkland. Connects to Mt. Grady Road natural space.	Wildlife Corridor; Wildlife Habitat

Natural Area Name	Location & Description	Protection Value
Mud Lake	Part of McGergow Meadows.	Waterbody/ Wetlands; Birds - Breeding & Migratory
North Arm, Okanagan Lake	Shallowest section of Okanagan Lake. Important bird area. Extensive stands of Black Cottonwood trees.	Birds-Breeding & Migratory; Native Plants; Riparian; Waterbody/ Wetland; Wildlife Habitat
North Vernon	City of Vernon north of Deleenheer Rd and east of 20 St. Wetlands and BX Creek. Trail is part of RDNO- managed BX Creek Trail system.	Wildlife Habitat; Wildlife Corridor; Waterbody/ Wetland; Riparian; Water Management
O'Keefe Pond	Small kettle lake. Privately-owned. Also known as St. Anne's Pond. Located at Hwy 97 and St. Anne's Rd.	Birds - Breeding & Migratory; Wildlife Habitat; Waterbody/ Wetland
Park Crest	A park at Predator Ridge.	TBD
Park Rise	A park at Predator Ridge.	TBD
Pleasant Valley Road	might be same as Herry Road Ravine	TBD
Pottery Road Ravines	City of Vernon. Vegetated ravines from junction of Hwy 6 & Pottery Road to field east of 15 St. The ravine between Pottery Rd and 18 Ave. to the south is zoned Parks & Open Space and is undeveloped. Other ravines are in Rural Small Holdings zoning.	Wildlife Habitat

Natural Area Name	Location & Description	Protection Value
Ranchlands	In Coldstream, a sub-regional park managed by RDNO. Vernon hill slopes above Ravine Drive and Ranchlands Place. To east is rangeland used by Coldstream Ranch and to the north is Crown Land. Unsanctioned trails exist, but currently no recreational development approved.	Wildlife Habitat; Wildlife Corridor; Grasslands; Birds - Breeding & Migratory; Native Plants; Hillsides & Slopes
Ravine Drive	Coldstream owned park, adjacent to Ranchlands. Undeveloped.	Grasslands; Native Plants; Wildlife Habitat; Birds - Breeding & Migratory; Hillsides & Slopes
Rocky Ridge Park	On Turtle Mountain and in Vernon but managed as a sub-regional park by RDNO. Connected to Grey Canal Trail.	Native Plants; Hillsides & Slopes
Rose's Pond	Commonage Road opposite regional composting facility. Believe it is DND-owned land, leased to City of Vernon and sub-leased to RDNO. TBD. Large pond with an adjoining small, shallow pond.	Birds - Breeding & Migratory; Waterbody/ Wetland; Wildlife Habitat
Silver Star Foothills	Significant residential development has taken place, however, see Foothills Ravines and, in Table 3, Foothills Park.	Grassland; Hillsides & Steep Slopes; Native Plants; Wildlife Corridor; Wildlife Habitat

Natural Area Name	Location & Description	Protection Value
Swan Lake Nature Reserve	Located at south end of Swan Lake. Grasslands (west) area owned by RDNO. Marsh area owned by Ducks Unlimited Canada. RDNO manages entire property. NONC is a steward by agreement. Trails, interpretive signage. Important area for migratory and breeding birds. Swan Lake itself is now a Wildlife Management Area, but this includes only the lake and shoreline up to high water mark.	Wildlife Habitat; Wildlife Corridor; Birds - Breeding & Migratory; Native Plants; Grasslands; Waterbody/ Wetland; Riparian; Water Management
Tavistock	9010 Tronson Road. City of Vernon owned undeveloped parkland (zoned Pi) on west side of Tronson Rd and north from Tavistock Rd.	Forest; Hillsides & Slopes; Native Plants; Wildlife Habitat; Wildlife Corridor
The Rise	Part of the The Rise Golf Course. Small, undisturbed area of rock outcropping and trees, located between club facilities and pond.	Native Plants; Wildlife Habitat
Tompson Lake	Privately-owned property (Tompson family) with this small lake on Commonage Road, south of Predator Ridge. Located in Area B.	Wildlife Habitat; Birds - Breeding & Migratory; Waterbody/ Wetland
Tillicum North Face	Mid-elevation, transitional forest area with creeks. Includes Bates & Brookside creeks and Hartnell Lane (above). Mostly large private holdings, many with estate homes.	Forests; Native Plants; Riparian; Wildlife Corridor; Wildlife Habitat
Turtle Mountain	Much of this location is now residential housing, although some hilltops, slopes and ravines remain and could be preserved. Grey Canal Trail and Rocky Ridge Park are located here. P1 zoned parkland is the cliff face above the Grey Canal Trail, as well as the small ravine beside the parking lot on Turtle Man Blvd.	Geological Landforms; Grassland; Hillsides & Steep Slopes; Native Plants; Wildlife Corridor; Wildlife Habitat

Natural Area Name	Location & Description	Protection Value
Upland Heights	Coldstream-owned. Does not show on zoning map. Status TBD.	TBD
Vernon Arm, Okanagan Lake	Lake provides important habitat for many bird species, particularly in winter. Mouth of Vernon Creek also attracts numerous birds. Site includes beaches and lakefront parkland, as well as housing and seasonal camping. Some of the area is Indian Reserve. Remainder is City of Vernon, including Kin Beach Park and Lakeshore Park.	Birds-Breeding & Migratory; Riparian; Wildlife Habitat
Vernon Creek	A variety of habitats along this creek's course from Kalamalka Lake to Okanagan Lake. Other sites listed in this report cover specific protection targets. City of Vernon has secured some small riparian areas beside Vernon Creek. Most are not yet connected.	see other sites
Vernon Creek Escarpment	Land west of Vernon Creek, between Kalamalka Lake and Polson Park. Includes DND property, Kalamalka Forest and Seed Orchard and above Vernon Golf & Country Club.	nil mostly developed now
Vernon Creek, Fulton	This site is probably the same as Grahame.	-
Vernon Heronry	Great Blue Heron rookery in area of 24 St and 50 Ave. Covenant held by City of Vernon protects this as a bird sanctuary. Property is zoned A3 Rural Small Holdings.	Birds - Breeding & Migratory
Village Meadows	Predator Ridge park	TBD
Vista View	Falcon Point Way, Predator Ridge park	TBD

Natural Area Name	Location & Description	Protection Value
Waterfront Trail	Lot 4 Plan KAP58651. City of Vernon owned section of shoreline adjacent to The Strand residences. Part of future Waterfront Trail connecting Lakeshore Park and Paddlewheel Park. More land would need to be acquired to complete.	nil at this time
Webster	Coldstream parkland, south side of Middleton Way and south of Mt. Ida Dr intersection. Rocky hill and slopes. Middleton Mountain connector trail passes through.	Native Plants; Hillsides & Slopes; Grasslands
West Kalamalka Slopes	Part of the Commonage. Hill slopes and ravines on the west side of Kalamalka Lake between Kekuli Bay Provincial Park and the Lookout at the border with Coldstream.	Birds-Breeding & Migratory; Geological Landforms; Grassland; Hillsides & Steep Slopes; Native Plants; Wildlife Corridor; Wildlife Habitat
Whisper Ridge	Whisper Ridge strata development off Brewer Road. Includes Coldstream parkland, undeveloped, and Whisper Ridge Trail right-of- way.	Forest; Wildlife Habitat; Wildlife Corridor
Wildwood Gully	A gulley or ravine, thickly forested, between Silver Star Rd and the junction of Wildwood Road & Hitchcock Rd. Assumed to be privately owned.	Wildlife Habitat

Bella Vista Range is another very large area, stretching from the Adventure Bay hills to Turtle Mountain. Above the Grey Canal Trail and lower residential areas there are no protected natural areas of significance. Today, when we look at the area from the valley, we see The Rise estates and golf course and a new winery. There are still large private holdings that hold potential for protecting grasslands, wildlife habitats, and sagebrush-covered slopes.

## **TABLE 2: Other Properties Recommended for Status of Natural Areas**

The following properties were not listed in any of the publications used for Table 1, but are presented here as candidates for "Natural Space" designation. Some are located in Greater Vernon (Vernon, Coldstream, Areas B & C), while others are in other jurisdictions.

Name	Location & Description	
Allan Brooks Nature Centre	Allan Brooks Nature Centre, Mission Road, Vernon. Land owned by DND, leased by ABNC Society.	Grasslands; Birds - Breeding & Migratory; Wildlife Habitat; Wildlife Corridor; Native Plants; Historic/Cultural
Ann Tchvyl Conservation	Nature Conservancy of North Okanagan (NCNO) covenant. Private property. No public access.	Birds - Breeding & Migratory; Riparian; Wildlife Corridor; Wildlife Habitat
Bailey Road Pond	Private land at corner of Commonage Road and Bailey Road.	Birds - Breeding & Migratory; Waterbody/ Wetland
Bishop Wild Bird Sanctuary	Owned by Bishop Wild Bird Foundation. Coldstream Creek Road at Kalamalka Lake east shore.	Birds - Breeding & Migratory; Wildlife Habitat; Wildlife Corridor; Native Plants; Historic/Cultural
Carlson Park	a.k.a. Plantation Forest City of Vernon owned, on Benchrow Road. Forest and trails. Dog-walking park. Adjacent to Commonage grasslands (private lands).	Birds - Breeding & Migratory; Wildlife Habitat; Wildlife Corridor; Native Plants; Forest
Coldstream Cemetery	Coldstream-owned cemetery and adjacent riparian property. Coldstream Creek passes through. Wetland and forest.	Wildlife Habitat; Wildlife Corridor; Native Plants; Forest; Riparian

Name	Location & Description	
Foothills Park	Future sub-regional park site, when private properties are sold for development. Also known as "Jackass Hill".	Wildlife Habitat; Wildlife Corridor; Native Plants; Forest; Hillsides & Slopes
Hitchcock Road	City of Vernon park property west of Hitchcock Rd, north side of Silver Star Road. Not yet improved or open.	TBD
Kaminski	Land Trust of BC owned property on east shore of Swan Lake, north of Stickle Road and RV Park.	Wildlife Habitat; Wildlife Corridor; Native Plants; Riparian; Waterbody/ Wetland
Longacre	City of Vernon owned- property including trail. Off Longacre Drive in Okanagan Landing area. Grassland.	Wildlife Habitat; Wildlife Corridor; Native Plants; Grassland
MacKay Reservoir	City of Vernon wastewater reservoir located in the Commonage area.	Birds - Breeding & Migratory; Waterbody/ Wetland; Water Management; Wildlife Habitat
North Commonage	In early 2010 decade RDNO acquired land south of landfill for future landfill expansion, but also including area to be set aside for preservation and possible recreational trails. Not yet developed.	Wildlife Habitat; Wildlife Corridor; Native Plants; Grassland
Otter Lake	Privately-owned shorelines. One public access via privately- maintained park at north end. Important migratory bird area.	Birds - Breeding & Migratory; Waterbody/ Wetland; Riparian

Name	Location & Description	
Phina Tassie Conservation Area	Nature Conservancy of North Okanagan (NCNO) covenant. Private property. No public access.	Birds - Breeding & Migratory; Riparian; Wildlife Habitat
Pottery Road Landfill	Decommissioned landfill site acquired for park, off French Road, east of hydro sub-station. Not yet developed.	TBD
Thomas Hayes Ecological Park	Provincial owned land in Spallumcheen Township, managed by Township. Armstrong Spallumcheen Trail Society have a stewardship arrangement. Trails. Forest ecosystems, meadow.	Wildlife Habitat; Wildlife Corridor; Birds - Breeding & Migratory; Native Plants; Forest
Windfalls Nature Conservancy	Nature Conservancy of North Okanagan (NCNO) covenant. Private property. No public access.	Forest; Birds - Breeding & Migratory; Native Plants; Wildlife Habitat; Wildlife Corridor
Woodland Haven Bird Sanctuary	Nature Conservancy of North Okanagan (NCNO) covenant. Private property. No public access.	Forest; Birds - Breeding & Migratory; Wildlife Habitat

Turtle Mountain is another geological landmark known to everyone in the North Okanagan. Most of the non-agricultural area has been developed for housing. There are no protected natural areas preserving eco-systems on this volcanic vista.

# TABLE 3: Natural Areas and Their Significant Natural Assets

text in black = sites from Table 1 text in pink = sites from Table 2

Natural Asset	Properties from Tables 1 and 2
Birds - Breeding & Migratory	Aberdeen Adventure Bay Bluffs Bella Vista Range Birdie Lake BX Creek Commonage Grasslands Cools Pond Farnsworth Nature Reserve Laker's McGergow Meadows Middleton Mountain Mud Lake North Arm, Okanagan Lake O'Keefe Pond Ranchlands Ravine Drive Rose's Pond Swan Lake Nature Reserve Tompson Lake Vernon Arm, Okanagan Lake Vernon Heronry Allan Brooks Ann Tchvyl Conservation Bailey Road Pond Bishop Wild Bird Sanctuary Carlson Park MacKay Reservoir Otter Lake Phina Tassie Conservation Area Thomas Hayes Ecological Park Windfalls Nature Conservancy Woodland Haven Bird Sanctuary

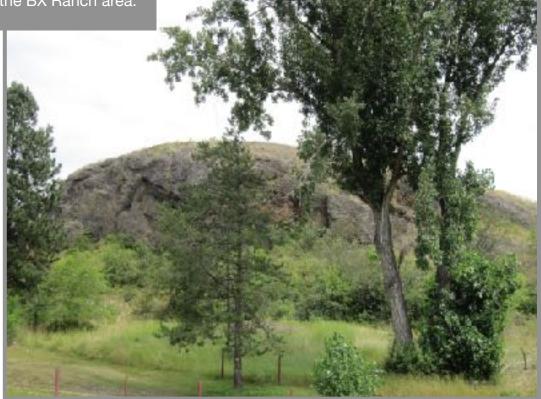
Natural Asset	Properties from Tables 1 and 2
Forest	Abbott Creek Woodland Adventure Bay Bluffs BX Creek Deep Lake/Devils Gorge Irish Creek Tavistock Tillicum North Face Whisper Ridge Carlson Park Coldstream Cemetery Foothills Park Thomas Hayes Ecological Park Windfalls Nature Conservancy Woodland Haven Bird Sanctuary
Geological Landforms	BX Creek Deep Lake/Devils Gorge Glacial Erratic Rock Turtle Mountain West Kalamalka Slopes
Grassland	Adventure Bay Bluffs Bella Vista Range BX Ranch Lands Trail Commonage Grasslands Farnsworth Nature Reserve Goose Lake Range Irish Creek McGergow Meadows Middleton Mountain Ranchlands Ravine Drive Swan Lake Nature Reserve Turtle Mountain Webster West Kalamalka Slopes Allan Brooks Longacre North Commonage

Natural Asset	Properties from Tables 1 and 2
Hillsides & Steep Slopes	Adventure Bay Bluffs Becker Bella Vista "Davison Rock" Bella Vista Range Black Rock Clerke Nature Reserve Commonage Grasslands Deep Lake/Devils Gorge Farnsworth Nature Reserve FB Jacques Foothills Ravines Goose Lake Range McGergow Meadows Middleton Mountain Ranchlands Ravine Drive Rocky Ridge Park Tavistock Turtle Mountain Webster West Kalamalka Slopes Allan Brooks Foothills Park
Historic/Cultural	Black Rock Commonage Grasslands Goose Lake Range Bishop Wild Bird Sanctuary

Natural Asset	Properties from Tables 1 and 2
Native Plants	Abbott Creek Woodland Adventure Bay Bluffs Becker Bella Vista "Davison Rock" Bella Vista Range BX Creek Clerke Nature Reserve Commonage Grasslands Crane Road Deep Lake/Devils Gorge East Vernon Road Farnsworth Nature Reserve FB Jacques Foothills Ravines Glacial Erratic Rock Goose Lake Range Irish Creek McGergow Meadows Middleton Mountain North Arm, Okanagan Lake Ranchlands Ravine Drive Rocky Ridge Park Swan Lake Nature Reserve Tavistock The Rise Tillicum North Face Turtle Mountain Webster West Kalamalka Slopes Allan Brooks Bishop Wild Bird Sanctuary Carlson Park Coldstream Cemetery Foothills Park Kaminski Longacre North Commonage Thomas Hayes Ecological Park Windfalls Nature Conservancy

Natural Asset	Properties from Tables 1 and 2
Riparian	Abbott Creek Woodland BX Creek CEC Young Deep Lake/Devils Gorge Grahame Irish Creek North Arm, Okanagan Lake North Vernon Swan Lake Nature Reserve Tillicum North Face Vernon Arm, Okanagan Lake Ann Tchvyl Conservation Coldstream Cemetery Kaminski
	Otter Lake Phina Tassie Conservation Area

Black Rock is a volcanic mound in the BX Ranch area.



Natural Asset	Properties from Tables 1 and 2
Waterbody/Wetland	Aberdeen Birdie Lake BX Creek BX Ranch Lands Trail CEC Young Commonage Grasslands Cools Pond Crane Road Deep Lake/Devils Gorge East Vernon Road Goose Lake Range Grahame Irish Creek Laker's Marshall Wetlands McGergow Meadows Mud Lake North Arm, Okanagan Lake North Vernon O'Keefe Pond Rose's Pond Swan Lake Nature Reserve Tompson Lake Bailey Road Pond Kaminski MacKay Reservoir Otter Lake
Water Management	BX Creek CEC Young Commonage Grasslands Marshall Wetlands North Vernon Swan Lake Nature Reserve MacKay Reservoir

Wildlife Corridor Adventure Bay Bluffs Bella Vista Range BX Creek
BX Ranch Lands Trail Commonage Grasslands Deep Lake/Devils Gorge Foothills Ravines Goose Lake Range Grahame Irish Creek Lakers Mt. Grady Road Mt. Ida Drive North Vernon Ranchlands Swan Lake Nature Reserve Tavistock Tillicum North Face Turtle Mountain West Kalamalka Slopes Whisper Ridge Ann Tchvyl Conservation Bishop Wild Bird Sanctuary Carlson Park Coldstream Cemetery Foothills Park Kaminski Longacre North Commonage Thomas Hayes Ecological Park Windfalls Nature Conservancy

Natural Asset	Properties from Tables 1 and 2
Wildlife Habitat	Abbott Creek Woodland Adventure Bay Bluffs Becker Bella Vista Range BX Creek BX Ranch Lands Trail CEC Young Commonage Grasslands Cools Pond Crane Road Deep Lake/Devils Gorge East Vernon Road Farnsworth Nature Reserve Foothills Ravines Goose Lake Range Grahame Herry Road Gully Irish Creek Laker's Marshall Wetlands Middleton Mountain Mt. Grady Road Mt. Ida Drive North Arm, Okanagan Lake North Vernon O'Keefe Pond Pottery Road Ravines Ranchlands Ravine Drive Rose's Pond Tavistock The Rise Tompson Lake Tillicum North Face Turtle Mountain Vernon Arm, Okanagan Lake West Kalamalka Slopes Whisper Ridge Wildwood Gully Allan Brooks Ann Tchvyl Conservation Bishop Wild Bird Sanctuary

Natural Asset	Properties from Tables 1 and 2
Wildlife Habitat continued	Carlson Park Coldstream Cemetery Foothills Park Kaminski Longacre MacKay Reservoir North Commonage Phina Tassie Conservation Area Thomas Hayes Ecological Park Windfalls Nature Conservancy Woodland Haven Bird Sanctuary

Coldstream's glacial erratic rock, located north of Highway 6, west of Gray Road



# **ZONING**

A review of the zoning bylaws for the City of Vernon, the District of Coldstream and Regional District North Okanagan found that none of these jurisdictions have a zoning designation for natural areas.

In the City of Vernon there are two park zonings: P1 Public Park (or Parks & Open Spaces) and P5 Private Park. P1 zoning is a catch-all for all types of parks and natural spaces. There is no zoning or bylaw that would protect a natural area from excessive or inappropriate human intrusion.

In the District of Coldstream the P2 Parks and Open Space Zone is the only designation available. As with Vernon, it is a catch-all for all types of parks and natural spaces. There is no zoning or bylaw that would protect a natural area from excessive or inappropriate human intrusion.

In the Regional District North Okanagan there is again a single zoning: S3 Community Parks and Public Use. This designation covers cultural and recreational buildings and facilities, golf courses, schools, libraries, and parks. RDNO has no zoning that specifically mentions "natural area".

# **REFERENCES**

Extracts from relevant publications are presented below.

# **REFERENCE** — A

*Greater Vernon Natural Area/Features Inventory, November 1993* Debbie Clarke, Malcolm Martin, Chris Siddle, were three of the four authors Credit was also given to the NONC Land for Nature Program

An inventory of the Greater Vernon area has shown that there are many natural areas and features which posses special ecological, recreational, and aesthetic values, including grassland slopes, shrubby ravines, watercourses, large and small lakes, wetland areas, forests, and prominent landform features. The primary focus of this inventory is ecologically important areas, or those areas which support plant or animal species which are rare, threatened, sensitive and/or vulnerable; provide

habitat for a wide diversity of species; or represent elements of the natural Okanagan landscape. Areas which contain unique landforms or geology are also included.

Thirty natural areas or sites received an on-site inventory, and files on each site have been provided to G.V.P.R.D. Based on the information gathered in the inventory, the sites were assessed for their relative importance, using established criteria, in order to establish priorities for management action. Sites which rated of greatest importance in general had high or moderate significance for rare species or communities, and level of urgency for protection (were immediately threatened by actions which would destroy, degrade or seriously compromise the long-term viability of a site). Other assessment criteria which were considered included diversity of species/habitats, ecological viability, significance of physical features, community values, and management urgency.

To manage for the important natural values of these areas, a broad spectrum of strategies are proposed ranging from new philosophies for planning and growth management to site-specific recommendations. Key recommendations are:

- Increased involvement of provincial agencies where areas or features are of provincial importance.
- Proactive green space planning in a broad and long-term framework.
- Evolution of a G.V.P.R.D. mandate and philosophy for management of nature parks.
- Use of a hierarchy of protection, including parks and nature preserves, planning designations such as Development Permit Areas and Natural Areas, Conservation Covenants, and means to encourage private land stewardship.
- Implementation of effective, well-defined planning designations and preparation of detailed site-specific guidelines for development around environmentally sensitive areas.
- Allowance for creativity and flexibility in applying management tools for conservation objectives.
- Encouragement of community support and involvement for management of natural areas and features.
- Provision and encouragement of opportunities for public education and awareness.
- The primary purpose of this inventory is to provide an information base to assist in planning for future growth and development. In no way does this report propose to preserve all areas studied.

1.2 What is a Natural Feature or Area?

"Natural areas" and "natural features" have different meanings to everyone, both in the way they interpret the description, and how they appreciate the resource.

For the purpose of this study, natural areas and features are described as areas, which:

- provide habitat for a diversity of wildlife;
- have rare plant or animal species, or habitats,
- have unique landforms or geology, and/or
- represent elements of the natural Okanagan landscape.

Other values, such as recreation, aesthetics, cultural heritage, education and research are also considered.

# **REFERENCE** — **B**

*Keeping Nature in Our Future A Biodiversity Conservation Strategy for the Okanagan Region* by Okanagan Conservation Collaborative Program, 2014

The Okanagan region is an exceptional place with some of the greatest concentrations of species and ecosystems in Canada. Many are found nowhere elsewhere in the country and in some cases the world. Wildlife and natural areas in the Okanagan region are in trouble because of impacts from our towns and cities, agriculture, and other human activities on the land and water. By investing in "Keeping Nature in our Future", we can help to protect our rich natural assets as a legacy for future generations. As the region's population continues to grow, this strategy provides the necessary information to ensure that stewardship of the natural environment is considered in all decisions on urban, suburban, resource, recreational, and rural development.

A conservation strategy for the future, Keeping Nature in Our Future identifies

why we should conserve and restore natural areas, which natural areas should be protected and restored, who can contribute, how and when conservation and enhancement of these natural areas can be achieved, and the role of natural areas in protecting regional biodiversity. The strategy provides a "big-picture" view of the region and a framework for considering

...protect our rich natural assets as a legacy for future generations...

conservation options for ecosystems, watersheds and all land tenures. Our vision for the Okanagan region is an area rich in biodiversity that provides valuable habitat for plants and animals. Healthy ecosystems and networks of natural areas are valued and conserved by decision-makers, communities and citizens.

# **Guiding Principles**

**Protect representative core habitat areas.** Large natural areas as well as a variety of other habitat patches (habitat reservoirs and habitat refuges) are essential to species and ecosystems in our region. Habitat areas closer together are better than areas that are far apart.

**Protect habitats that are characteristic of our region.** The Okanagan region is one of the most biologically diverse regions in Canada. Habitats including key species like Antelope-brush, that occur nowhere else in Canada, are vitally important to the survival of species at risk. Slowly but surely, local landscapes are changing and these habitats are disappearing. Seniors and elders remember what used to be here. There are historical pictures, but if remaining natural landscapes are not protected, the unusual biodiversity of the Okanagan will be lost.

**Connect habitat areas.** Connect parks and conservation lands by conserving or protecting linear corridors between them. Watercourses, riparian areas, and other greenways offer good opportunities for wildlife to travel between areas needed for their survival, such as seasonal ranges. They also allow healthy populations of animals and plants to move and be distributed among various habitat areas, thereby improving the viability and resilience of the ecosystems they inhabit.

**Maintain a matrix of lands outside of core areas and corridors.** Retaining natural areas is a critical part of biodiversity conservation, but areas modified by human use can also provide habitat for some species. Backyards, old fields, greenways, and other vegetated areas can also be important to biodiversity. Matrix lands can contribute to the overall health of ecosystems.

**Maintain diversity of ecosystems, species, and genetics.** The diversity of an ecosystem generally depends on the characteristics of the physical environment, the diversity of species present, and the interactions of these species with the environment and each other. Maintaining wildlife populations and a variety of landscapes at different stages of their lifecycles, improves long-term biodiversity and helps ecosystems to withstand and adapt to natural, or human caused disturbances.

**Look at biodiversity from a regional perspective.** Consideration of human influences on biodiversity is often limited to identifying site-level impacts from specific development activities and devising mitigation measures to address them.

However, the cumulative or "snowball" effects of numerous activities may eventually hurt ecosystem health and limit its capacity to provide ecosystem services. Looking at impacts and effects on a larger scale (e.g. region or subregion) helps provide perspective about what problems are particularly significant and found throughout the region, For example, habitat loss and fragmentation is easier to see at a regional level.

#### **Sensitive Ecosystems**

'Sensitive ecosystems' refer to natural areas that are relatively unmodified, ecologically fragile, and/or recognized as being at risk in the provincial landscape, due to their limited natural occurrence, combined with loss or degradation from human activities.

Sensitive ecosystems were categorized into groupings of ecosystems that share

similar characteristics, such as vegetation and soils. These include:

- Wetlands including marshes, swamps and wet meadows
- Riparian areas occurring beside streams and rivers, as well as floodplains, gullies and beaches
- Old forest, broadleaf woodlands, and coniferous forests including large old coniferous trees, aspen copses, and opens stands of Douglas-fir or ponderosa pine
- Antelope-brush and sagebrush shrub lands
- Grasslands
- Sparsely vegetated lands with rock, talus and cliffs
- High-elevation alpine areas of dwarf shrubs, grasses, herbs and parkland/ clumped forests
- Other ecosystems that are important include mature forests and seasonally flooded fields that are cultivated but may flood part of the year and provide important habitat.

The Okanagan region contains more than 225,000 ha of conservation lands (10.4%) and more than 39,000 ha of dedicated open space (1.8%). Conservation lands in the region are dominated by provincial parks and protected areas. These lands are concentrated in the South Okanagan-Similkameen. The land management analysis also identifies the extent to which Class 1 and 2 lands overlap or protect high conservation ranked lands. Collectively, conservation lands and dedicated open space help conserve approximately 14.9% of the region's very high and high biodiversity habitats. The percentage of conservation lands and dedicated open space is highest in the South Okanagan (18.9% or 116,476 ha). Not all parks are dedicated to biodiversity. Some are focused on recreation (playgrounds and sports

fields), and set aside areas for parking, facilities and ornamental landscaping. Class 2 (dedicated open space) captures these modified but protected landscapes.

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## REFERENCE — C

#### RDNO Sub-regional Open Space and Trails Policy, 2018

#### **Regional Open Space Definition and Types**

A sub-regional open space is generally of a size and function between a municipal park and a provincial park and provide green space in urban, suburban and rural settings. Sub-regional open spaces protect regionally important natural areas for conservation, nature appreciation, and outdoor nature-based recreation.

The following are the proposed types of sub-regional open space under the jurisdiction of the RDNO:

#### **Conservation Area**

Managed for the protection or enhancement of important ecosystems and landscapes. Low-impact recreation may occur but is subordinate to habitat values. Natural processes may take their course, and management practices may occur save when hazards are created to adjoining properties. Restoration activities and management practices may occur with potential for partnerships with local conservation groups.

Size Variable +/- 40 ha or 100 ac

#### **Natural Open Space**

Managed for the preservation conservation, protection, or enhancement of sensitive ecosystems and ecologically valuable lands / landscapes. The focus is on conservation and protection of natural values. This could include areas such as steep slopes that provide aesthetic value. Outdoor activities and experiences may

occur, along with opportunities for increasing awareness and knowledge of the natural environment.

Size Variable +/- 40 ha or 100 ac

#### Greenway

Greenways are linear corridors with the primary purpose of supporting trails and associated infrastructure while providing a major spine for The focus is on conservation and protection of natural values.

municipal or local trails to connect with. The trails governed by the RDNO are

long connector trails that often pass through multiple jurisdictions or trails that are regional in nature.

Generally greenways are comprised of a 15m wide corridor to accommodate for buffering and amenities and are flexible to reflect topographical constraints. Greenways can also be associated with pockets of conservation and natural areas, and play a role as a wildlife/nature corridor. They are also essential in protecting the long term integrity of natural area.

Current Inventory: Swan Lake Nature Reserve, Ranchlands Open Space, Crane Road Open Space, Goose Lake Range, Rocky Ridge Open Space, BX Ranchlands Trail, and Middleton Mountain Open Space.

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## REFERENCE — D

Development Guidelines and Standard Specifications Landscape Construction, Greater Vernon Area, Regional District of North Okanagan July 2013

Natural Areas have been acquired by the GVPRC to protect environmentally significant areas and features in the form of environmental reserves as well as, where appropriate, to provide outdoor recreation opportunities. The natural areas include ponds, wetlands, riparian and forested areas, prominent slopes, and other natural features. There is no standard for acquisition of these areas. 11 parcels of land are classified as natural areas, and these are generally small for this type of land. Some examples are Becker Park, Black Rock, CEC Young, Cools Pond, McKergow Meadows, and Webster Park.

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## REFERENCE — E

Regional Growth Strategy, 2011

The North Okanagan is home to many diverse ecosystems, including wetlands, forests, lakes, rivers and grasslands. These ecosystems and the features they contain are valuable in their own right. They also provide important benefits. In addition to filtering pollutants, preventing erosion and controlling crop pests, many natural areas provide habitat for our plant and animal species. Open spaces and the

natural environment make possible the many recreational activities and opportunities our citizen enjoy, the success of the tourism industry and the quality of life of residents. Growth over the last 20 years has impacted some of our most vulnerable ecosystems, our hillsides and our viewscapes. Healthy landscapes and watersheds protect the quality and quantity of our water supplies, aquatic

ecosystems and our recreational opportunities. The natural environment is one of the reasons that the North Okanagan is such a popular destination. When we asked the public what was the most important thing they valued about the North Okanagan, the overwhelming response was 'the natural environment and landscape, and the lifestyle and opportunities it provides' Local and regional governments have tremendous opportunities for environmental stewardship and providing a park

Growth over the last 20 years has impacted some of our most vulnerable ecosystems, our hillsides and our viewscapes.

system that is the best in British Columbia. However, the need to coordinate local and regional environmental initiatives and parks planning in the face of strong growth presents many challenges.

# The communities of the North Okanagan agree to work as partners and individually to:

**ENV-1.1:** develop consistent, integrated environmental policy that will protect water ecosystem function, our drinking water sources and conserve and enhance biodiversity and ecological services through the protection of ecological features and corridors, including floodplains, shorelines, stream and river systems, aquifers, wetlands and forested watersheds.

**ENV-2.1:** in collaboration with the appropriate agencies and organizations, identify, prioritize and map all ecosystems and important habitat features in the North Okanagan and ensure this information is used in local, regional and provincial land use processes

**ENV-2.2:** expand sensitive ecosystem mapping to complete a regionally consistent North Okanagan ecosystem inventory.

**ENV-2.3:** support data sharing, mapping, and consolidation of existing information into an inventory of Southern Interior ecologically sensitive areas and biodiversity values.

**ENV-2.4:** identify a system of linked wildlife corridors and areas of habitat connectivity, in partnership with the province and relevant parties, which will inform planning decisions with the goal of avoiding further fragmentation.

**ENV-2.5:** develop a regionally consistent policy approach to ecosystem and species protection.

ENV-2.6: encourage the sustainable management of parks and natural areas.

**ENV-2.7:** engage the community through stewardship and education to improve environmental awareness.

**ENV-2.8:** coordinate on the establishment of regionally significant open space networks and linkages across jurisdictional boundaries that will compliment local parks planning.

**ENV-2.9:** support opportunities and partnerships that promote environmental conservation and ecosystem protection.

**ENV-2.10:** designate and protect significant open spaces and environmentally sensitive areas in Official Community Plans and through other planning mechanisms.

**ENV-2.11:** explore funding mechanisms to support regionally significant open space and parkland acquisitions.

**ENV-2-12:** consider supporting partnership initiatives that would undertake the development a regional biodiversity strategy.

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## **REFERENCE** — F

*"It Starts in Your Parks" District of Coldstream Parks Master Plan, 2016* 

There are two classifications of Open Space :

- Natural Open Space
- Developed Open Space

Natural Open Space:

Open Space consisting of natural, undisturbed landscape set aside for the purpose of preservation or conservation of natural resources, natural features or scenic/ aesthetic values. This classification may include:

- native vegetation
- geological landforms
- historic/cultural sites
- water bodies/wetlands/riparian areas
- wildlife habitat
- hillside slopes

- ridgelines & view sheds
- scenic buffer areas
- agricultural & rangelands
- trails

Developed Open Space:

Open Space consisting of enhanced or developed landscape set aside for the purpose of active or passive recreation. This classification requires improvements necessary to accommodate and promote higher levels of use.

Park sites in the District of Coldstream classified as Natural Areas include:

- Aberdeen *
- Braeburn South & West
- Grey Canal Trail *
- Glacial Erratic Rock
- Jestef Parkland *
- McKergow Meadows
- Mud Lake
- Ranchlands **
- Ravine Drive
- Upland Heights
- Webster
- Whisper Ridge
- * re-designated as Neighbourhood Park
- ** transferred to Regional District

# REFERENCE — G

#### City of Vernon Parks Master Plan, 2015

Natural Areas and Open Space: 41% of existing supply (85 hectares) Parks contribute to the protection and connection of natural areas, sensitive ecosystems and wetlands. The system should aim to protect and enhance biodiversity. The main purpose of Natural Area parks is to protect and preserve critical habitats while connecting Vernon residents to nature. These parks contribute to the ecological resilience of the community, preserve the natural environment and protect natural ecosystem functions. Though all parks should have an ecological function, the main purpose of these parks is to contribute to the natural health of the environment and the community. Natural Areas and Open Space make up the largest category in the parks supply; however, the existing inventory categorizes lands in their existing state, and many are natural areas with minimal improvements except trails. Some natural areas may lend themselves to additional improvements, where appropriate, to facilitate new uses and user groups. Connectivity is perhaps the most important aspect of habitat protection and preservation, something many parks currently lack. To better achieve connectivity, Natural Area parks should ideally be integrated with privately protected land to protect sensitive ecosystems and habitat, riparian areas along waterways and provide wildlife corridors. During the development process, the Official Community Plan and the Environment Management Areas Strategy aim to provide and facilitate protection measures, such as covenants, for sensitive areas.

## New Parks

## Grassland Park

The O'Keefe rangelands and the Commonage have been identified specifically as two of the top priority preservation areas by the public. To support the protection of sensitive and rare Okanagan grasslands through the creation of a park, the City would need to work in partnership with other organizations and agencies, including RDNO and other levels of government. A park of this nature would benefit the entire region economically, socially and environmentally and the land area required for such a park would likely require sub-regional involvement. Park uses would focus on limiting public access to protect sensitive areas, with trail systems provided for recreational use.

Natural Areas and Open Space:

General Recommendations:

Encourage environmental protection in natural areas through park design, management and monitoring

Continue to work with local environmental organizations on park stewardship initiatives

Enhance community awareness about the natural environment through interpretive signage

Protect natural drainage systems and wetland areas to enhance ecological and wildlife habitat throughout the community

Continue to work collaboratively with other levels of government to protect sensitive areas and endangered species, such as establishing environmental stewardship on City owned lands where protection measures are desired Continue to work with the Okanagan Collaborative Conservation Program (OCCP) to share information and expertise that leads to further preservation of sensitive areas

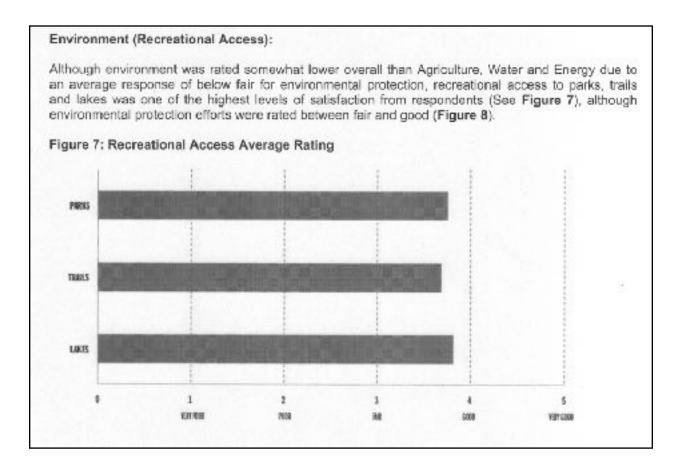
Continue to strive to protect and connect sensitive areas through parkland acquisition and private land protection mechanisms

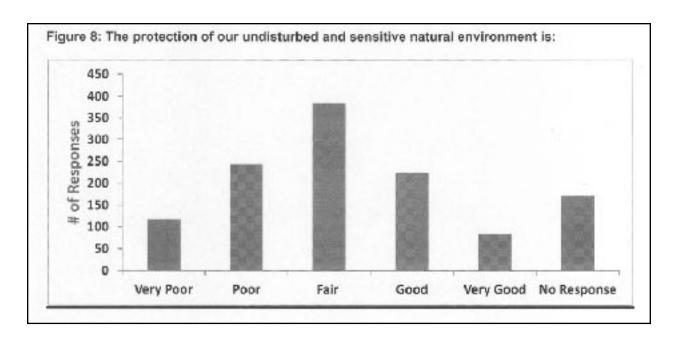
Lakers Park is considered a Natural Park due to the sensitive habitats that are located on the property. Currently, the amenities that can be found at this park are natural walking trails, wetlands, ponds, Lakers Clubhouse, a small playground, and a parking lot.

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#### **REFERENCE** — H

#### Quality of Life Survey Results Report to Regional Growth Management Advisory Committee, 4 Nov 2013





## REFERENCE — I

Electoral Areas B and C OCP, 2014

## 11.1 ENVIRONMENT AND NATURAL AREA OBJECTIVES ENVIRONMENTAL VALUES AND HABITATS

Electoral Area "B" and "C" contain a rich source of wildlife due to the diverse landscape and ecosystem structure. This aspect of the local wilderness can sometimes cause conflicts. The increasing popularity of this region for relocation has required settlement expansion and development. This pressure has

unfortunately contributed to the degradation and often the loss of habitat for some of our native flora and fauna as well as increasing the susceptibility of the land to invasive species. The Vernon Forest District contains a number of rare, endangered or threatened species as well as rare plant associations which are found in either the Ponderosa Pine Bunchgrass zone or the Interior Douglas fir zone. This data suggests that the local environment in the North Okanagan is in a fragile state and

...the local environment in the North Okanagan is in a fragile state and should be carefully considered in the planning and decision-making process to ensure its beauty and biodiversity are maintained.

should be carefully considered in the planning and decision-making process to ensure its beauty and biodiversity are maintained.

The Province of British Columbia has introduced legislation that requires local governments and Regional Districts, to protect streams and their associated riparian areas. Refer to Section 16.2 for the Riparian Area Development Permit Area Guidelines.

## SENSITIVE ECOSYSTEM INVENTORIES

In recent years, the Regional District, Alan Brookes Nature Centre, provincial, and federal agencies have conducted inventories of rare ecosystems in Vernon and Electoral Areas "B" and "C", in part to determine the range of rare and endangered species and to manage for the health of these populations. There has been habitat loss from urban settlement and uses, agriculture, forestry, and the introduction of plants and animals not native to the Okanagan.

The Vernon Commonage, Bella Vista – Goose Lake Range and Coldstream-Vernon Sensitive Ecosystem Inventories (SEI) are intended to provide a summary overview of rare and fragile ecosystems within Vernon and Electoral Areas "B" and "C". The SEI information is derived from aerial photography, biogeoclimatic data and supported by selective field checking of the data. SEI is a tool that provides scientific information for policy development that supports the efforts of local government and other organizations that work toward the protection of rare and unique ecosystems and maintain biodiversity. This information provides a useful basis for private land stewardship and land use planning, forming the basis for Development Permit Areas.

# NATURAL AREA POLICIES

- 11.2.1 Land within the Environmentally Sensitive Land Development Permit Areas as designated on Schedule 'C' shall not be altered or developed, or subdivision approval granted, unless a Development Permit is issued in accordance with the guidelines in this plan.
- 11.2.2 Continue to collaborate on the inventorying, mapping, and conservation of sensitive ecosystems with other levels of government, non-governmental organizations and adjacent municipalities.
- 11.2.3 All development within the Regional District shall be undertaken in compliance with the provincial *Riparian Areas Regulation*.
- 11.2.4 Wetlands must remain free of development.
- 11.2.5 The Regional District supports additional groundwater mapping and monitoring that will assist in planning within neighbourhoods that experience potable water quality or quantity challenges.
- 11.2.6 Encourage the voluntary protection of natural features.

- 11.2.7 Encourage the protection, preservation, enhancement and management of sensitive ecosystems or land contiguous to sensitive ecosystems of private lands through the following methods:
- a. Donation of areas to the Regional District or provincial government;
- b. Donation of areas to a Land Trust or conservation organization;

c. Creation of conservation covenants in favour of municipal, provincial government, private conservation organizations;

d. Establishment of statutory right of ways under the *Land Title Act* for affected areas;

e. Establishment of long-term leases for sensitive areas;

f. Land stewardship and participation in conservation initiatives by the private landowner;

g. Consideration of alternative development standards, such as clustering.

- 11.2.8 Areas with a high capability rating as wildlife habitat should remain in as large a parcel as possible to protect these habitat areas.
- 11.2.9 Areas with a high capability rating as waterfowl habitat should be protected by retaining the foreshore in its natural state.
- 11.2.10 The Regional District supports and will encourage and participate in new planning initiatives by the Province of British Columbia to consider the possible designation of Swan Lake as a 'Wildlife Management Area'.
- 11.2.11The following locations within the Plan area are considered as *Natural Areas* as identified in the *"Greater Vernon Natural Areas and Features Inventory"* (Greater Vernon Parks and Recreation District, 1993) and the Regional District considers that these areas are environmentally sensitive to development and the Regional District will have due regard for the significance of these locations when reviewing a land development proposal in their general vicinity:
- a. Pottery Road Ravines;
- b. Black Rock;
- c. East Vernon Road Wetland (seepage) near BX Ranch;
- d. portions of Bate and Brookside Creeks above Dixon Dam Road;
- e. Wildwood Gully upslope from Hitchcock Road;
- f. Abbott Creek Woodlands from Rogers Road eastward;
- g. Cools Pond;
- h. Herry Road Ravine east of Pleasant Valley Road;
- i. Rose's Pond;
- j. Commonage Grasslands; particularly the slopes overlooking the west shore of Kalamalka Lake;
- k. Thomson Lake; and
- 1. all wetlands not covered by Riparian Areas Regulation.

# **11.3 STEEP SLOPES**

Hillsides are important, visually dominant features in Electoral Areas "B" and "C", especially within the BX, Commonage and Westside. Hillside locations can be subject to hazards and adverse impacts from land clearing, alteration, subdivision, construction and road building. It is important that future subdivision or proposed major changes in the topography of steep slopes be undertaken sensitively, in consideration of environmental and visual impact, slope stability and natural hazards. Development on hillsides should also consider the potential impact on neighbouring properties.

Hillside development is more difficult to construct on and can have more prominent environmental, physical and visual impacts than on flatter areas. All these factors mean that hillside development must be carefully designed and sensitive to its location.

## **STEEP SLOPE POLICIES**

11.3.1 Development on slopes greater than 30% carry inherent geotechnical risks, access and safety concerns and therefore it is recommended that if possible development is accommodated elsewhere on the site and steep slopes are encouraged to be left as natural or open spaces.

11.3.2 The Regional District may require a geotechnical site evaluation for development on steep slopes. The assessment should take into consideration site design as it relates to substrates, natural contours, natural gradients and ensure site stability for the subject and neighbouring properties. The recommendations of this evaluation may be required to be incorporated into a Section 219 Restrictive Covenant.

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## **REFERENCE** — J

A Protected Areas Strategy for British Columbia Resource and Recreation Use Guidelines for Protected Areas Province of British Columbia, August 1995 BC Parks

Wherever possible, protected areas should combine natural, cultural heritage and recreational values. Where it is not possible to combine these in a common area, they may be represented separately. Where it is not possible to represent all values, the natural values will be given priority.

Many protected areas will be set aside primarily to protect rare or vulnerable features. Others will combine protection with giving people the opportunity to appreciate and enjoy the intrinsic values of the areas. Others will be protected to attract people to experience and appreciate their natural or cultural heritage.

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## REFERENCE — K

Sensitive Ecosystem Inventory (SEI), Coldstream-Vernon, Volume 1, 2008

City of Vernon, District of Coldstream and North Okanagan Regional District Planning

Develop a 'Local Ecosystems Plan'

A systematic plan for prioritization and protection, and stewardship of local sensitive and other important ecosystems should be developed. The conservation analysis provides priorities for conservation. The local ecosystems plan should consider known gaps in the system of provincial and regional protected areas, and be integrated across the study area, and within the City of Vernon, Regional District of North Okanagan, and District of Lake Country to ensure landscape level connectivity.

Recognizing and protecting environmentally sensitive areas early in the community planning process provides the best chance of protecting environmental values.

• Highly threatened: Grasslands commonly occur on sites that are very amenable to development – both for agriculture and housing – and many grasslands have already been lost to agricultural or urban development. Overuse by domestic livestock and invasive plants also threaten remaining grasslands. Grasslands are recognised as one of British Columbia's most threatened ecosystems. Only 8% of the grasslands in the province are protected.

Grassland ecosystems covered 12% (2582 hectares) of the study area. The majority of these were disturbed grasslands (1660 ha), with some grasslands (691 ha) and a smaller area of shrublands (230 ha).

All grassland ecosystems are a high priority for conservation considering that many have been lost to agricultural and urban settlement.

Management Recommendations

General management recommendations for all sensitive ecosystems are found in Section 7.4

(page 33). Below are additional management recommendations specific to grassland ecosystems.

Avoid Direct and Indirect Impacts

- Manage access. All motorized vehicles should be restricted to existing roads. Mountain bikes should be restricted to existing or carefully planned trails that are free of invasive plants, and not subject to erosion; otherwise, these trails should be closed until invasive plant problems have been controlled. Trails can create erosion problems, disturb fragile vegetation, and spread or introduce invasive alien species. Existing trails with erosion problems need to be rehabilitated and restored.
- Protect large old trees and snags. Scattered trees or snags are extremely important for wildlife in grassland areas. These trees can be isolated structures in grassland areas.
- Manage livestock use. Livestock grazing needs to be carefully managed to ensure that ecological values associated with grassland ecosystems are maintained. Bunchgrasses are damaged by season-long grazing. Careful monitoring should be implemented to ensure that grazing levels and timing meet management objectives for the site.
- Remove encroaching trees. Large old trees are important habitat features that should be protected where they occur in grassland areas, but young trees should be removed by cutting, or other mechanical means. Prescribed fire can also be used to remove encroachment, but it must be planned and conducted by a qualified professional and requires careful management of invasive plant species to prevent their spread.

## NATURAL AREA OPPORTUNITIES

The North Okanagan Naturalists' Club proposes the following.

#### CURRENT NATURAL AREAS in PUBLIC OWNERSHIP that should be given INCREASED PROTECTION

Adventure Bay Crane Road Middleton Mountain Goose Lake Ranchlands Park

#### SIGNATURE ECO-SYSTEMS and LANDSCAPES that should have OPPORTUNITIES PURSUED

Bella Vista Range BX Creek Coldstream Valley Commonage Goose Lake Range Okanagan Lake North Arm Silver Star Foothills West Kalamalka Slopes