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# **Community Appreciation**

We would like to thank the community members who attended the open houses and who provided responses to the questionnaires. This plan is based on your valuable insights and preferences.



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# **Executive Summary**

The Fairwinds Lakes District Neighbourhood Plan area is located on Nanoose Bay Peninsula, on the east coast of central Vancouver Island, within the Regional District of Nanaimo (RDN), Electoral Area 'E'. The area encompasses roughly 287 hectares (ha) of undeveloped and privately-owned land within the Fairwinds Resort Community, which will be subdivided and developed within six separate phases over an anticipated period of 20 years.

Approximately 100 ha of regional parkland, including over 16 km of trails, will be dedicated to the RDN over the course of subdivision and neighbourhood build-out. Park dedication is determined by zoning amendments and the Phased Development Agreement (PDA), which were formally adopted in 2014. The PDA is a legally binding agreement between the RDN and the developer that outlines in detail the development phasing and provision of community amenities.



Wetland



Arbutus Forest



Garry Oak Meadow



Enos Lake

This document represents the first management plan for the future Regional Park within the Fairwinds Lakes District Neighbourhood Plan area. The main purpose of the management plan is twofold:

- 1. To provide a summary of the Phased Development Agreement (PDA)— including all relevant documents incorporated within the PDA—as it pertains to Regional Park dedication and development.
- 2. To provide an overview of anticipated management issues, costs and strategies as they pertain to the future Regional Park following amenity construction and land transfer.

The preparation of this management plan was accomplished through a comprehensive design and public engagement process that involved public open houses, stakeholder interviews, and staff and advisory committee reviews. Public input helped to establish an understanding of current and desired park uses, and provided feedback on the vision, objectives, management issues and naming of the regional park.

The vision statement establishes the overall direction for planning, design and management of the Regional Park:

This Regional Park protects the functional integrity of regionally significant ecosystems and prominent natural features that define the landscape character of the Nanoose Bay Peninsula. It is the "green heart" of the Nanoose Bay Peninsula with interconnected open spaces and corridors that provide links for wildlife and access to nature for humans. The park provides recreational opportunities that are enjoyed by Regional District residents and visitors. It is a place where the cultural heritage and spiritual values of the land to First Nations are recognized, celebrated and protected.

The following objectives guide management recommendations and actions:

- Protect and enhance areas with high habitat and ecosystem values.
- Encourage and support environmental appreciation, education, interpretation and stewardship.
- Acquire and provide information about the history and culture of the region to park visitors.
- Support low-impact outdoor recreation.
- Plan the park to maximize safety, security, accessibility and ease of navigation.
- Encourage visitors to be responsible and respectful while enjoying the park.
- Construct and maintain park amenities per regional standards.

- Manage commercial activities in the park to respect the environmental and cultural resources.
- Work with partners, volunteers, First Nations and visitors on park stewardship.

Management of the future Regional Park will follow standard park guidelines and practices as outlined in the RDN Park Use Bylaw 1399 (2004), the RDN Parks and Trails Guidelines (2013), and the RDN Regional Parks and Trails Plan (2005-2015). This includes general maintenance procedures (garbage collection, inspections, repairs, etc.), safety measures (hazard tree removal, fencing, public notices, etc.), and provisions for accessible amenities. This management plan only addresses management issues, policies and actions that are unique to the future Regional Park. The recommendations for park management are summarized in the tables below:

PARK DEVELOPMENT					
Plan Section	Issue		Recommendation	Who	When
3.2	Amenity Implementation	а	Determine final park boundaries through survey work and staking.	Developer; RDN Parks; RDN Planning	Subdivision; Development
		b	Design and site all amenities in accordance with the Park Masterplan guidelines, the PDA and RDN Parks standards.	Developer; RDN Parks	Subdivision; Development
		С	Ensure that quantities, materials and designs are adequate and sustainable in terms of site and visitor requirements and long-term staff and budget constraints.	Developer; RDN Parks	Subdivision; Development
3.4.2	'Notch Summit' Dedication and Access	а	Continue stat right-of-way to ensure trail and service vehicle access to the 'Notch Summit' if completion of Sub-Phase 4C does not occur pursuant to the 20-year term of the PDA.	Developer; RDN Planning; RDN Parks	At PDA expiry (2034)
3.4.3	Option to Purchase Lands	а	Commit the estimated \$1.1 million total for both Option to Purchase Lands within the Five-year Financial Plan for Regional Parks.	RDN Parks	2015-2020
		b	Pursue acquisition of the Notch Option to Purchase Lands within five years of first subdivision registration, subject to Board approval.	RDN Parks	Within 5 years of Phase 1A subdivision
		С	Pursue acquisition of the Lookout Option to Purchase Lands within three years of Phase 1E subdivision, subject to Board approval.	RDN Parks	Within 3 years of Phase 1E subdivision
3.4.4	Parkland Dedication Amendment	а	Implement any parkland dedication amendments—including reduced park size and altered boundaries—in accordance with conservation objectives as per Lakes District Neighbourhood Plan, PDA, and all associated documents.	Developer; RDN Planning; RDN Parks; MOTI	Subdivision

PARK I	PARK MANAGEMENT: INFRASTRUCTURE AND ENCUMBRANCES				
Plan Section	Issue		Recommendation	Who	When
4.2.1	Joint Sanitary Sewer Right-of- Way and Trail	а	Coordinate service schedules and protocols for joint use of SRW as infrastructure and trail.	RDN Parks; RDN Wastewater Services	Phase 2A subdivision
4.2.2	Stormwater Mitigation	а	Coordinate maintenance and monitoring responsibilities for stormwater mitigation features between RDN Parks and RDN Water & Utility Services.	RDN Parks; RDN Water & Utility Services	Phase 1B subdivision
		b	Support Watershed Performance Indicator reviews every five years, as directed by the ISMP.	RDN Parks; RDN Water & Utility Services	Every 5 years after Phase 1B
4.2.3	Easement for Golf Course Irrigation	а	Manage general park operations and public use in and around Enos Lake in accordance with the terms of the water withdrawal license and the irrigation easement, both held by the Developer.	RDN Parks; Developer	Ongoing after Phase 2C
		b	Support water level monitoring in Enos Lake by the Developer, as per the Integrated Stormwater Management Plan.	RDN Parks; Developer; RDN Water & Utility Services	Ongoing after Phase 2C
4.2.4	Lake House Dock License	а	Manage general park operations and public use of the Lake House Dock on Enos Lake in accordance with the License for Commercial Dock (PDA Schedule O).	Developer; RDN Parks	Ongoing after Phase 2C

PARK MANAGEMENT: ECOLOGICAL PROTECTION					
Plan Section	Issue		Recommendation	Who	When
4.3.1	General Conservation Management	а	Complete environmental assessments for each separate section or phase of Regional Park, following land transfer and amenity construction, to establish updated conditions and management procedures.	RDN Parks; Consultant	After each phase of development
		b	Review the developer's Home Owner's Manual (PDA Section D.3) following each phase of development for possible updates to environmental education initiatives.	Developer; RDN Parks	After each phase of development
4.3.2	Forest Carbon Sequestration	а	Prepare a forest carbon management plan that will quantify the carbon stored in the Regional Park and provide recommendations on appropriate forest management.	RDN Parks; RDN Sustain- ability	Following Phase 1A de- velopment
4.3.3	Enos Lake Protection and Monitoring	а	Support the management and monitoring of Enos Lake by the Developer according to the Enos Lake Protection and Monitoring Program.	Developer; RDN Parks; RDN Water & Utility Services	Ongoing after Phase 2C
4.3.4	Garry Oak Meadows Management	а	Support the management of the Garry Oak ecosystem within the future Regional Park by the Developer and stewardship groups according to the Garry Oak Meadows Management Plan.	Developer; RDN Parks; Stewardship groups	Ongoing after Phase 1A

PARK MANAGEMENT: LOW-IMPACT RECREATION					
Plan Section	Issue	Recommendation		Who	When
4.4.1	Equestrian Use	а	Prohibit equestrian use within the future Regional Park	RDN Parks	Ongoing after Phase 1A
4.4.2	Cycling	а	Permit cycling / mountain biking in the future Regional Park on Multi-Use Trail (Trail Type I).	RDN Parks	Ongoing after Phase 1A
4.4.3	Dog-walking	а	Permit controlled dog-use (either on-leash or off-leash), on all park trails without posted restrictions.	RDN Parks	After each phase of development
		b	Complete environmental assessments for each separate section or phase of Regional Park (as in Section 4.3.1) to assess the need for restricted dog use in sensitive areas.	RDN Parks; Consultant	Ongoing after Phase 1A
4.4.4	Enos Lake Use	а	Permit swimming and non-motorized boating in all unrestricted areas of Enos Lake, unless otherwise posted.	RDN Parks	Ongoing after Phase 2C
		b	Prohibit swimming and non-motorized boating within 5m of "Irrigation Works", as described in the Easement for Golf Course Irrigation (PDA Schedule N).	RDN Parks	Ongoing after Phase 2C
		С	Manage public water access from the Lake House Dock so as not to interfere with private dock use, as described in the Lake House Dock License (PDA Schedule O).	RDN Parks	Ongoing after Phase 2C
4.4.5	Fire Management	а	Prepare a wildfire management plan that addresses fuel management and service access routes and provides strategies that are compatible with conservation management objectives.	RDN Parks; Fire Department	Phase 1A development

PARK MANAGEMENT: COLLABORATIVE STEWARDSHIP					
Plan Section	Issue		Recommendation	Who	When
4.5.1	First Nations Partnership	а	Collaborate with Snaw-naw-as to determine the need for protection of cultural areas during Regional park development.	RDN Parks; Snaw-naw-as; Developer	Development
		b	Provide opportunities for amenity design or artwork by Snaw-naw-as community members during Regional Park development.	RDN Parks; Snaw-naw-as; Developer	Development
		С	Collaborate with Snaw-naw-as on the production of educational park signage pertaining to Snaw-naw-as history and culture.	RDN Parks; Snaw-naw-as; Developer	Development
		d	Support ongoing Snaw-naw-as participation in ecological stewardship and cultural programing in the future park.	RDN Parks; Snaw-naw-as	Ongoing after Phase 1A
4.5.2	Volunteers	a	Implement a Volunteer Park Warden program for general monitoring of park and trail conditions, as needed.	RDN Parks; Volunteers	Ongoing after Phase 1A
4.5.2	Stewardship Groups	а	Solicit help from local stewardship groups for invasive weed management and restoration work in Gary Oak Meadows.	Developer; RDN Parks; Steward groups	Ongoing after Phase 1A

The annual park maintenance cost for the future Regional Park, which is based on per hectare maintenance costs for all existing Regional Parks and includes items such as incidental repairs, vegetation management and contract services, is estimated at \$4,500 to \$7,500 for each of the six main development phases (or \$27,000 to \$45,000 after full build-out).





# 1.0 Project Overview

# 1.1 Project Context

The Fairwinds Lakes District Neighbourhood Plan area is located on Nanoose Bay Peninsula, on the east coast of central Vancouver Island, within the Regional District of Nanaimo (RDN), Electoral Area 'E'. It is framed by the existing Dolphin Beach neighbourhood to the north, the existing Fairwinds neighbourhood to the east, the Department of National Defence to the south, and by rural crown lands to the west (Figure 1.1).

The area encompasses roughly 287 hectares (ha) of undeveloped and privately-owned land within the Fairwinds Resort Community, which will be subdivided and developed within six separate phases over an anticipated period of 20 years. Approximately 100 ha of regional parkland, including over 16 km of trails, will be dedicated to the RDN over the course of subdivision and neighbourhood build-out (Figure 1.2) Regional park dedication will help to protect the site's natural features while providing opportunities for diverse outdoor recreation activities.



Figure 1.1: Lakes District Air Photo, 2014 (Lakes District outlined in red)

The rezoning of the Lakes District was completed in July 2014 with the formal adoption of the zoning bylaws and the Phased Development Agreement (PDA). The PDA is a legally binding agreement between the RDN and the developer that outlines in detail the development phasing and provision of community amenities as envisioned in the Lakes District Neighbourhood Plan (LDNP) of 2011. Planning for the LDNP began in 2008 and involved extensive environmental assessment and community consultation with the goal of creating a sustainable neighbourhood plan predicated on ecological protection and sensitive development.



Figure 1.2: Regional Park Dedication (over a 20-year period and 6 development phases)

North End of Enos Lake



Existing Path

## 1.2 Management Plan Purpose

This document represents the first management plan for the future Regional Park within the Fairwinds Lakes District Neighbourhood Plan area. The plan is to be reviewed in five years (2020) and updated formally in ten-year intervals.

The Regional Park will be dedicated in six development phases, over approximately 20 years. The private developer is responsible for constructing all future park amenities during phased subdivision and build-out, as outlined in the PDA and associated documents. Once the development and construction of parkland amenities is complete, the land will be transferred to the RDN. The RDN will then assume the responsibility for the long-term operations and maintenance of the Regional Park.

The main purpose of the management plan is twofold:

- 1. To provide a summary of the Phased Development Agreement (PDA)—including all relevant documents incorporated within the PDA—as it pertains to Regional Park dedication and development.
- 2. To provide an overview of anticipated management issues, costs and strategies as they pertain to the future Regional Park following amenity construction and land transfer.

# 1.3 Management Plan Organization

The plan is organized into the following five sections:

- 1. Project Overview: project background, purpose and process
- 2. Site Overview: site description, site inventory and history
- Park Development: a summary of planning processes, reference documents, and obligations of the developer and the RDN as they pertain to parkland dedication and development
- 4. Park Management: a summary of park management issues with discussion and recommendations based on ecological assessments, public, staff and stakeholder consultation
- 5. Summary of Recommendations: recommended actions for park development and management

# **1.4 Project Process**

The preparation of this management plan was accomplished through a comprehensive design and public engagement process that involved the following steps:

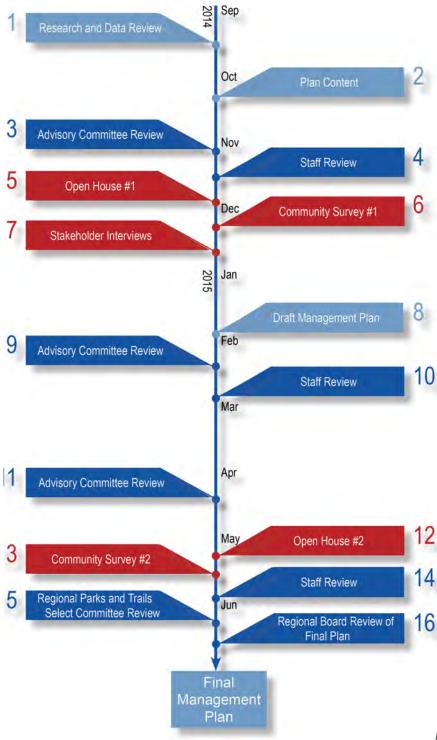


Figure 1.3: Project Process

Open House



Management Recommendations
Panels

## 1.5 Public and Stakeholder Consultation

The public consultation process for the Regional Park Management Plan involved two Open House events and two on-line surveys held in November 2014 and May 2015 respectively. Public consultation findings are summarized below and provided in detail as **Appendix A**.

Key stakeholders, including neighbouring First Nations, the Province, Nanaimo and Area Land Trust (NALT), and the Nanoose Volunteer Fire Department, were contacted following both Open House events. Feedback received is referenced throughout this document. Collaboration with project partners, including Fairwinds and Snaw-naw-as First Nation, was continuous throughout plan development.

## First Open House and Survey

The first Open house was held on November 18, 2014 to share information and answer questions about future Regional Park dedication, development and management. A survey was available in hard-copy at the open house and online at the project website from November to December 2014. With over 120 survey responses, the engagement helped to establish the key management preferences of RDN residents, which include the following:

- Provide education on the nature and history of the park area
- Include programing that does not negatively affect the park's ecosystem
- Promote and plan for responsible dog management
- Limit cycling access
- Establish barriers to protect ecologically sensitive areas
- Allow low-impact recreation on Enos Lake

### **Second Open House and Survey**

The second Open House was held on May 13, 2015 to receive public feedback on the draft Management Plan. Draft plans were posted on the project website from May 1, 2015 to May 22, 2015 along with the second survey. A total of 25 survey responses were received both online and in hard-copy at the Open House. Survey respondents were asked to identify their level of support for the draft plan on a 5-point rating scale with "1" denoting strong opposition and "5" denoting strong support. Responses are summarized in the table on the following page.

Level of Support (1-5)	Percentage of Total Responses	Number of Responses
1 - strongly opposed	0%	0
2	29%	6
3	24%	5
4	14%	3
5 - strongly support	33%	7

Fifteen respondents also provided comments to elaborate on their level of support or opposition. The comments were varied but mainly supportive. Opposition to the plan was based largely on issues of environmental protection and stewardship related to neighbourhood development in general. A few respondents expressed individual concerns for future park uses (dog walking, cycling, swimming, park amenity design and quantities).

### **Park Naming**

Suggested names for the future Regional Park were solicited from participants of the first Public Open House and Survey. A total of 35 names were received. Although the suggestions varied, nearly half the respondents suggested including "Nanoose" in the name, with several respondents suggesting reference to First Nations or naming by First Nations. All nominations are included in Appendix A. The following top five nominations, in order of popularity, were made by multiple respondents:

- Nanoose Regional Park
- Nanoose Bay Regional Park
- Nanoose Peninsula Regional Park
- Qwiyulass Regional Park
- Snaw-naw-as Regional Park

The RDN Parks Naming Bylaw C1.3 states that in general Regional Parks should be named after any significant and defining geographical features, followed by the words "Regional Park". Examples include Benson Creek Falls Regional Park, Mount Benson Regional Park, Descanso Bay Regional Park, and Englishman River Regional Park.

The name for the future Regional Park will be determined following the second public Open House through consultation with First Nations and the Advisory Committee, and approval by the Regional Board.

## 1.6 Vision and Objectives

The vision and objectives for the Regional Park were interpreted from visioning exercises and public input during the planning process for the Lakes District Neighbourhood Plan and confirmed through the public consultation process for the Regional Park management plan.

### Vision

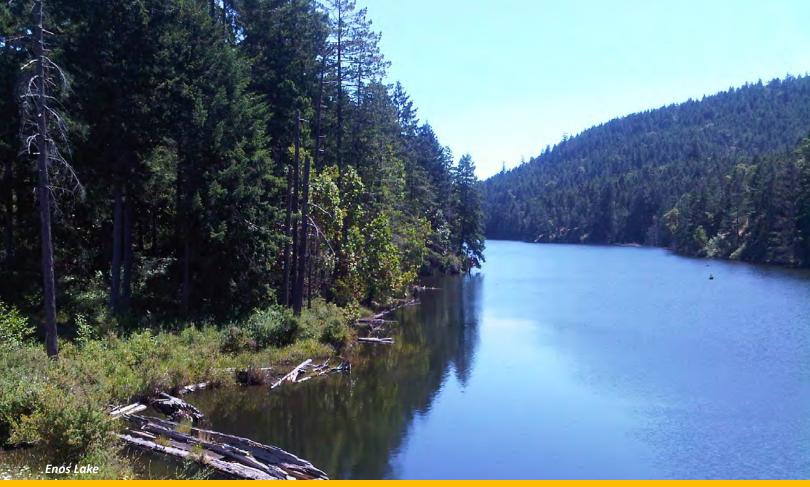
The following vision statement establishes the overall direction for planning, design and management of the Regional Park:

This Regional Park protects the functional integrity of regionally significant ecosystems and prominent natural features that define the landscape character of the Nanoose Bay Peninsula. It is the "green heart" of the Nanoose Bay Peninsula with interconnected open spaces and corridors that provide links for wildlife and access to nature for humans. The park provides recreational opportunities that are enjoyed by Regional District residents and visitors. It is a place where the cultural heritage and spiritual values of the land to First Nations are recognized, celebrated and protected.

### **Objectives**

The following objectives, based on the vision, guide management recommendation and actions:

- Protect and enhance areas with high habitat and ecosystem values.
- Encourage and support environmental appreciation, education, interpretation and stewardship.
- Acquire and provide information about the history and culture of the region to park visitors.
- Support low-impact outdoor recreation.
- Plan the park to maximize safety, security, accessibility and ease of navigation.
- Encourage visitors to be responsible and respectful while enjoying the park.
- Construct and maintain park amenities per regional standards.
- Manage commercial activities in the park to respect the environmental and cultural resources.
- Work with partners, stakeholders, volunteers, First Nations and visitors on park stewardship.



# 2.0 Site Overview

# 2.1 Site History

The Nanoose Peninsula has a long history of settlement, beginning with the Snaw-Naw-As First Nation (see Section 4.5). Europeans brought changes in land use and resource development and by the early 1900s the area featured manufacturing facilities for cordite and various types of dynamite, a brick plant, and the Esquimalt & Nanaimo Railway.

In the 1980s, planning began for a 548 ha community known as Fairwinds Community and Resort. Today the community includes more than 700 homes, an 18-hole golf course, clubhouse, and neighbourhood recreation facility (Fairwinds Centre). The Lakes District Neighbourhood Plan was adopted in 2011 as a means to update the 1983 community master plan for the remaining undeveloped Fairwinds lands in a manner more consistent with present values and standards of conservation and efficient land use.

The rezoning of the Lakes District was completed in July 2014. Subdivision and full neighbourhood build-out are anticipated in six development phases over the next 20 years.

# 2.2 Site Description

The terrain of the Lakes District is characterized by two defining hilltops: The Notch (traditionally referred to as "Qwiyulass" by Snaw-naw-as but known colloquially as "the Notch" due to an indentation at the summit) and the Lookout. The Notch/Qwiyulass rises more than 250 m above sea level and is a regionally recognizable feature that forms the north shore ridgeline of Nanoose Bay. The Lookout is the pinnacle of the central ridge of the Lakes District.

Enos Lake, located between the Notch/Qwiyulass and the Lookout, is the site's central feature. Its drainage basin is characterized by steep forested slopes, and an interconnected system of wetlands and streams. Dolphin Lake, which lies just outside of the Lakes District area, is an integral feature in terms of wildlife habitat and site drainage.

## **The Regional Park**

Over 40% of the Lakes District will be designated and protected as Regional Park. The park will encompass the Notch/Qwiyulass, the Lookout and Enos Lake, along with significant wildlife corridors (between Enos and Dolphin Lakes), sensitive slopes, rocky outcrops, and Garry Oak and wetland ecosystems that constitute the complex and diverse ecological make-up of the area.

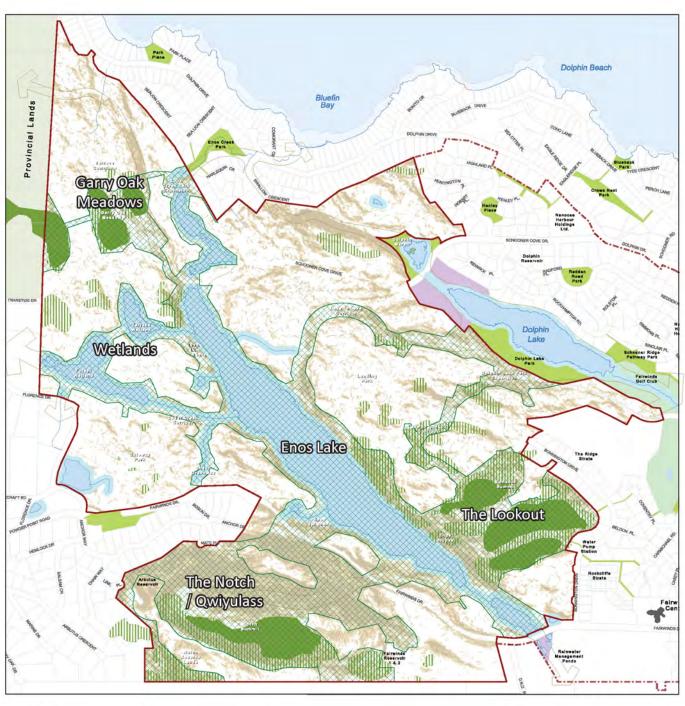
Land use designation in the Lakes District is based on a central framework of conservation. A Conservation Map (**Figure 2.1**), produced during the Lakes District neighbourhood planning process as a culmination of extensive ecological inventories, mapping, and community consultation, outlines the significant ecological features captured within Regional Park dedication.



The Notch / Qwiyulass



Enos Lake





Lakes District Boundary

Conservation Framework

Garry oak Eccosystem

Environmentally Sensitive Areas

Extreme Slopes (+40%)

Steep Slopes (30 - 40%)

Figure 2.1: Conservation Plan

Open Water Wetland



Wetland



Garry Oak Meadow

## 2.3 Site Inventory

The following studies, completed during the planning process for the Lakes District Neighbourhood Plan, informed the conservation framework that guided land use designation, housing type, circulation and parkland dedication in the Lakes District, as outlined in the Phased Development Agreement:

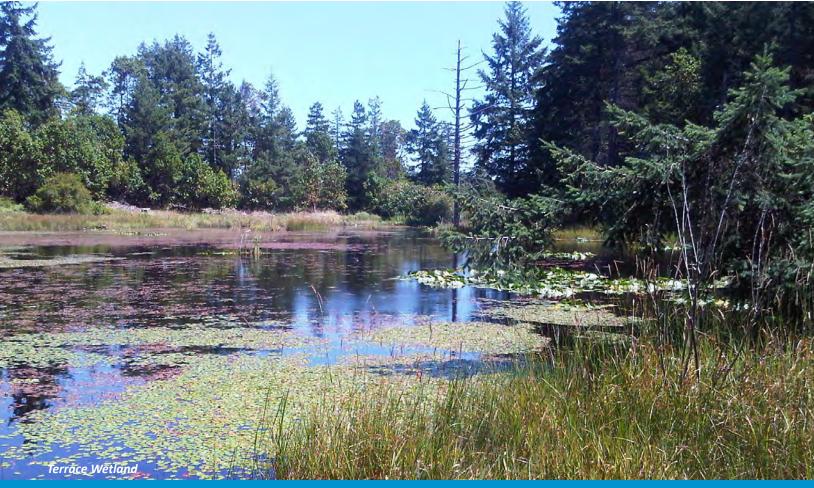
- Archaeological Overview Assessment; Lakes District and Schooner Cove Neighbourhood Plan Areas, Nanoose Bay, BC (I.R. Wilson Consultants Ltd., 2008)
- Preliminary Geotechnical Terrain Assessment for Proposed
   Subdivision Fairwinds Neighbourhood 2 Nanoose Bay, BC (Trow Associates Inc., 2008)
- Lakes District Study Area; Fairwinds Development Detailed Biophysical Assessment (Cascadia Biological Services, 2009)
- Environmental Impact Assessment; Fairwinds' The Lakes District and Schooner Cove Neighbourhood Plans (Pottinger Gaherty Environmental Consultants Ltd., 2010)
- The Lakes District and Schooner Cove Integrated Stormwater
   Management Plan (Kerr Wood Leidal Consulting Engineers, 2013)

These studies also provide support for future management recommendations outlined in Section 4 of this report. The full reports are posted on the RDN Parks website at <a href="https://www.rdn.bc.ca/Fairwinds">www.rdn.bc.ca/Fairwinds</a>; a summary of each report is included in **Appendix B**.

The following environmental management plans provide detailed recommendation on conservation management for two significant ecosystems within the future Regional Park:

- Enos Lake Protection & Monitoring Plan Draft (Pottinger Gaherty Environmental Consultants, 2015)
- Garry Oak Meadows Management Plan (Pottinger Gaherty Environmental Consultants, 2015)

An overview of monitoring and management recommendations from each plan is provided in Section 4 of this report. The Garry Oak Meadows Management Plan is included as **Appendix F**. The Enos Lake Protection & Monitoring Plan will be included as **Appendix E** upon completion.



# 3.0 Park Development

This section summarizes planning processes, reference documents, obligations of the developer, and recommendations for the RDN pertaining to parkland dedication and development.

# 3.1 Lakes District Neighbourhood Plan (2011)

The planning process for regional parkland designation began in 2008 with the preparation of the Lakes District Neighbourhood Plan. The process involved an in-depth review of regional planning directives, detailed analysis of the land's biophysical constraints and opportunities, and identification of best management practices (BMPs) for environmental management and sustainable community planning and design. Community values were considered through an extensive public engagement process that included open houses and design workshops, advisory group meetings, a Public Hearing, and reviews with Regional District departments, Snaw-Naw-As First Nation and external agencies.

The Neighbourhood Plan provides for the phased development of a sustainable neighbourhood containing a diversity of housing forms integrated within a network of regionally significant park and trails. It was adopted in 2011 as OCP Amendment Bylaw No.1400.03.

### **RDN Planning Documents and Planning For Background Studies Policies Future Regional Park** A Parks and Open Space Plan for Lakes District Neighbourhood Plan Preliminary Geotechnical Terrain Nanoose Bay, 2001 Background Summary, 2010 Assessment for Proposed Subdivision Regional Growth Strategy, 2003 Lakes District Neighbourhood Plan, Fairwinds Neighbourhood 2 Nanoose RDN Park Use Regulations Bylaw No. 2011 Bay, BC, 2008 1399, 2004 Lakes District Regional Park Archaeological Overview Assessment: Nanoose Bay Official Community Masterplan and Development Lakes District and Schooner Cove Plan, 2005 Guidelines, 2014 Neighbourhood Plan Areas Nanoose RDN Regional Parks & Trails Plan, Bay, BC, 2008 Lakes District Study Area; Fairwinds 2005 RDN Parks and Trails Guidelines, 2013 Development Detailed Biophysical Community Parks & Trails Strategic Assessment, 2009 Plan Electoral Areas E, F, G & H, 2014 Environmental Impact Assessment; Fairwinds' The Lakes District and Lakes District and Schooner Cove Schooner Cove Neighbourhood Plans, Phased Development Agreement, The Lakes District and Schooner Cove Integrated Stormwater Management Plan, 2013 **Enos Lake Protection & Monitoring** Plan, 2015 Comprehensive Zoning Amendment, Garry Oak Meadows Management 2014 Plan, 2015 Regional Park Management Plan for the Fairwinds Lakes District, 2015 Lakes District Development and Park Land Transfer to RDN in **Phases**

Figure 3.1: Planning Process and Document Summary

# 3.2 The Lakes District Regional Park Masterplan and Development Guidelines (2014)

The Lakes District Regional Park Masterplan and Development Guidelines (The Park Masterplan) provides a framework for implementing the park vision adopted in the Lakes District Neighbourhood Plan. It outlines objectives for environmental conservation and passive recreation, and includes a site plan showing the regional parkland and trail network (Figure 3.1), as well as guidelines for park amenities, trail classifications with cross-sectional drawings, and construction standards.

The Park Masterplan was submitted as part of the Zoning Amendment Application, which was approved in 2014. It is incorporated within the Phased Development Agreement as Schedule F, attached to this report as **Appendix D,** and summarized on Page 16.

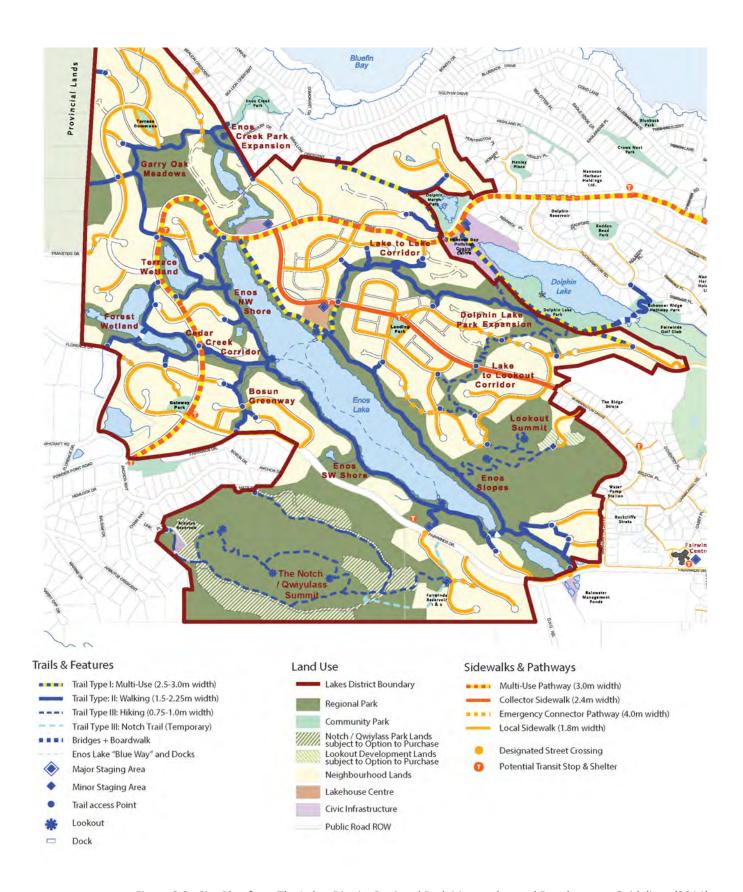


Figure 3.2: Site Plan from The Lakes District Regional Park Masterplan and Development Guidelines (2014)

### **Park Amenities**

In addition to providing a conceptual layout for the regional park network (which constitutes approximately 40% of the Lakes District, or 100 ha), the Park Masterplan enumerates the future park amenities and works that will be completed by the developer prior to parkland transfer to the RDN.

The following is a list of park amenities (quantities provided in the Park Masterplan are included):

- Multi-use trails for walking and cycling (2.5-3m wide) 2.17km total
- Walking trails (1.5-2.25m wide) 8.9 km total
- Hiking trails (1m wide) 5.10 km total
- Boardwalk and Bridges for wetland and riparian crossings 0.24 km total
- Minor Docks for the Enos Lake "Blue Way" 2 total
- Lake House Dock (4mx7m), on Enos Lake at Lake House Community Centre— 1 total
- Stairs for steep sections of trail
- Structures, such as picnic shelters, where deemed appropriate
- Benches at rest areas and lookouts
- Trail Signage for way finding and education
- Entrance Signage at all trail access points 45 total
- Major Staging Areas (including parking for 10-15 vehicles, park sign or kiosk, vehicle barriers, bike racks, garbage receptacles; possibly picnic facilities and washrooms) – 4 total
- Minor Staging Areas (include parking for 4-6 vehicles, park sign, and vehicle barriers; possibly bike racks and garbage receptacles) – 1 total
- Access barriers, including bollards and gates to restrict vehicle and pedestrian access
- Fences for park delineation and to protect sensitive vegetation and habitat
- Retaining Walls to prevent soil erosion as required
- Safety treatments for street crossings between park entrances 15 crossings total
- Native planting for buffers and restoration work as required
- Drainage culverts as required
- Rainwater Creeks to convey stormwater to appropriate retention areas –
   14 total
- Regional Rain Gardens to store and filter run-off water 4 total
- Sanitary Sewer Right-of-Way along portion of trail east side of Enos Lake
   1 km total



Bridges



**Parking** 



Signage



Retaining Wall

### **Design and Construction Standards**

The Masterplan provides conceptual plans for park boundaries, trails, boardwalks, bridges, docks and stairs, as well as general guidelines for construction and siting to minimize impact on the environment and maximize visitor safety, accessibility and enjoyment. Design, quantities and siting will therefore need to be finalized for each amenity during implementation.

## **Recommendations for Park and Amenity Implementation**

Because the Park Masterplan is largely conceptual, the RDN and the developer will work collaboratively at the time of subdivision and during park development to:

- Determine final park boundaries through survey work and staking.
- Design and site all amenities in accordance with the Park Masterplan guidelines and RDN Parks standards.
- Ensure that quantities, materials and designs are adequate and sustainable in terms of site and visitor requirements and long-term staffing and budgetary constraints.

# 3.3 Comprehensive Zoning Amendment (2014)

Following adoption of the Lakes District Neighbourhood Plan, a Comprehensive Zoning Amendment Application was submitted to the RDN by the developer in July 2013. The Phased Development Agreement was submitted in conjunction with the application as a legal mechanism to support the commitments and terms of the zoning amendment, including park phasing, land dedication and park improvements.

Further public engagement was conducted as part of the zoning amendment process, including extensive consultation with RDN staff and the Fairwinds Community Association, a community Public Open House, a Public Information Meeting and a Public Hearing. The Comprehensive Zoning Amendment (Bylaw 500.384) and the Phased Development Agreement (Bylaw 1692) were reviewed and adopted in tandem in July 2014.

# 3.4 Phased Development Agreement (2014)

The Phased Development Agreement (PDA) is a legally binding, 20-year agreement between the RDN and the developer that outlines in detail the land uses, development phasing and provision of community amenities as envisioned in both the Lakes District Neighbourhood Plan and the Schooner Cove Neighborhood Plan. The agreement outlines 82 items, organized into roughly 20 sections, addressing both neighbourhoods.



Boardwalk Detail from Masterplan

Thirty documents are annexed to the agreements as schedules. They include the following schedules that pertain to Regional Park dedication and development in the Lakes District:

Schedule D: Park Phasing Plan

Schedule E: Park Improvement Phasing Plan

Schedule F: Regional Park Masterplan and Development Guidelines

Schedule L: Statutory Right of Way for Public Access (to Notch/

**Qwiyulass Summit)** 

Schedule N: Easement for Golf Course Irrigation (Enos Lake)

Schedule O: Licence for Commercial Dock (on Enos Lake)

Schedule P: Notch Option to Purchase

Schedule Q: Lookout Option to Purchase

Schedule R: Section 219 Covenant over Option to Purchase Lands (for

Notch and Lookout)

Schedule S: Construction Covenant

Schedule Z: Regional Park Management Plan –Terms of Reference

Schedule AA: Garry Oaks Meadows Management Plan – Terms of

Reference

Schedule BB: Enos Lake Protection and Monitoring Program – Terms of

Reference

The full PDA (including all schedules) is posted on the RDN website under the Current Planning section at <a href="www.rdn.bc.ca">www.rdn.bc.ca</a>. Items that pertain to the future Regional Park are discussed below and summarized in **Appendix C**.

### 3.4.1 Phasing Overview (PDA Sections B.1 and C.2 + Schedules E and F)

In accordance with the PDA, the future Regional Park will be transferred to the RDN in sections, and in conjunction with the subdivision of six major development phases: Phases 1 through 4 (which are to proceed consecutively), and Independent Phases I and II (which may proceed in either order, and at any time, irrespective of Phases 1 to 4). Each of the phases is further divided into sub-phases, which may proceed concurrently and in any order within a given phase. Development of all sub-phases must be completed—or security must be provided—before the next major phase can begin.

Regional Park land will be transferred to the RDN at the time of subdivision registration for each sub-phase. The developer must construct the park amenities within one year of the transfer of the parkland in accordance with PDA commitments and RDN Parks standards.

The Park Land Phasing Plan from PDA Schedule D (**Figure 3.4**) illustrates phased parkland dedication by area while the chart below (**Figure 3.3**) depicts the sequence of phased dedication and associated implementation requirements.

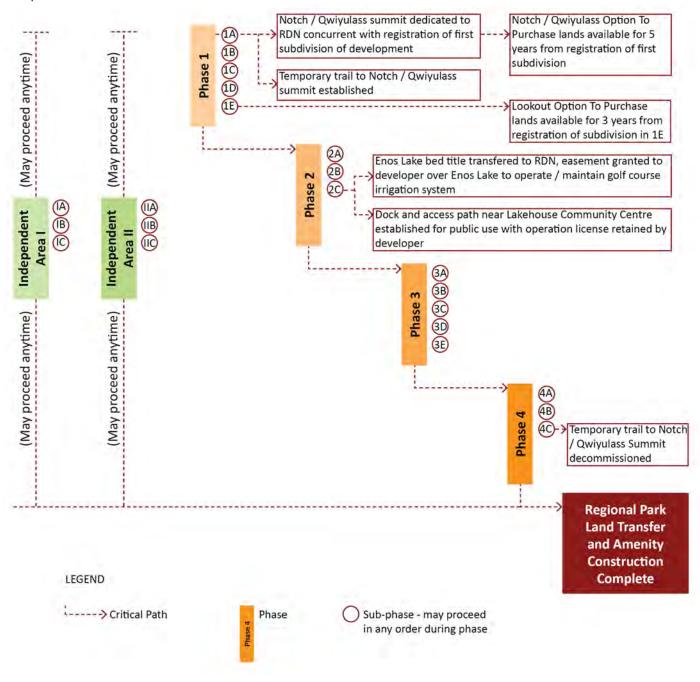


Figure 3.3: Park Land Phasing Sequence



### 3.4.2 Notch Summit / Qwiyulass (PDA Sections C.1 and C.2 + Schedule L)

The lands on the Notch/Qwiyulass identified in the PDA as 'Notch Summit' will be transferred to the RDN with registration of the first subdivision of the Lakes District land (Phase 1A). A temporary statutory right-of-way for trail access to the summit will be provided by the developer until the permanent trail is completed in Sub-Phase 4C.

Although the PDA commits approximately 40% of the lands within the Lakes District for Regional Park use, parkland dedication requirements for subdivision are fulfilled in the first phase of development by transfer of the 'Notch Summit' (Phase 1A), which is 20 ha in size and roughly 5% of Lakes District Neighbourhood Plan Area. Because Regional Park dedication and amenity implementation is driven by the development approval process, it is possible that only a portion of the Regional Park will be dedicated and transferred to the RDN before the PDA expires in 20 years.

### **Recommendation for 'Notch Summit' Dedication and Access**

Continue statutory right-of-way to ensure trail and service vehicle access to the 'Notch Summit' if completion of Sub-Phase 4C does not occur pursuant to the 20-year term of the PDA.

The Notch / Qwiyulass Trail

## 3.4.3 Option to Purchase Lands (PDA Section C.4 + Schedules D,P,Q and R)

Two parcels of developable land—located on the Notch/Qwiyulass and the Lookout—are designated in the PDA as "Option to Purchase Lands." The RDN has the option to purchase these lands from the developer for Regional Park use at the time of subdivision.

The Notch Park Lands Subject to Option to Purchase, as identified in the Parks Phasing Map (PDA Schedule D), will be available for purchase by the RDN for five years from the date of registration of the first subdivision in Phase 1A. The subject land, which is roughly 10 ha (25 acres) in size, or 1/3 of the total area of the Notch/Qwiyulass, is zoned as Regional Park (PR1), and is also protected from development in perpetuity by a No Build Covenant (CA3917284) between the owner and the RDN. The zoning and covenant do not, however, ensure public access or management of the Option to Purchase lands for Regional Park use.

The Lookout Development Lands Subject to Option to Purchase will be available for purchase by the RDN for three years from the date of the registration of subdivision in Phase 1E. The land—which is approximately 0.8 ha (2 acres) in size and part of the main access route to the Lookout Summit from Bonnington Drive— is zoned for Multiple Dwelling Residential (RMD), and is subject to development if not purchased by the RDN by the end of the three-year term.

A legal survey and appraisal will need to be completed at the first phase of subdivision to determine accurate boundaries, size and value for the Option to Purchase Lands. However, an estimated value of \$1 million for the Notch/Qwiyulass and \$100,000 for the Lookout has been provided by the developer for budgeting purposes.



The Notch / Qwiyulass Trail

### **Recommendation for Option to Purchase Lands:**

In order to ensure public access, uniform management and ecological stewardship of the Notch lands, as well as preservation of the forested slope and trail access to the Lookout, the RDN will:

- Commit the estimated \$1.1 million total for both Option to Purchase Lands within the Five Year Financial Plan for Regional Parks.
- Pursue acquisition of the Notch Option to Purchase Lands within five years of first subdivision registration, subject to Board approval.
- Pursue acquisition of the Lookout Option to Purchase Lands within three years of Phase 1E subdivision, subject to Board approval.

### 3.4.4 Parkland Dedication Amendment (PDA Section D.1 and Schedule T)

Section D.1.48 of the PDA states that the dedication or transfer of parkland in the Lakes District is calculated on the basis of the assumed road right-of-way areas within each sub-phase (as set out in PDA Schedule T). If road right-of-way dedication increases at the time of subdivision registration for any given sub-phase, as per BC Ministry of Transportation and Infrastructure (MOTI) requirements, the park area transfer or dedication within that given sub-phase may be reduced by the amount of road right-of-way increase, up to a maximum reduction of 5%.

### **Recommendation for Parkland Dedication Amendment**

If, during the subdivision registration of any given sub-phase, the parkland dedication will be reduced due to an increase in road right-of-way area as required by MOTI, the RDN and the developer will work in partnership to:

 Implement any parkland dedication amendments—including reduced park size and altered boundaries—in accordance with conservation objectives envisioned in the Lakes District Neighbourhood Plan and set out in the Phased Development Agreement and all associated documents and studies.



# 4.0 Park Management

This section outlines park management issues, recommended strategies and estimated costs as they pertain to the future Regional Park, following land transfer and amenity construction. Discussion and recommendations are based on ecological assessments and public and stakeholder consultation completed during the planning processes for the Lakes District Neighbourhood Plan, the Comprehensive Zoning Amendment, and this Management Plan.

## 4.1 Management Overview

The Regional District of Nanaimo (RDN) manages approximately 2,026 ha of regional park, trail and conservation lands along with another 584 ha of neighbourhood and community parks and trails.

All regional parkland is managed for both environmental protection and low-impact human use. The RDN Parks Department strives to maintain this balance through regular ecological monitoring and restoration work, partnerships with First Nations and community stewardship groups, and general public communication through park signage, guidebooks and recreation programming. These practices are consistent with the management objectives set out for the future Regional Park in the Lakes District Neighbourhood Plan (see Section 1.6).

Management of the future Regional Park will, in general, follow standard park guidelines and practices as outlined in the RDN Park Use Bylaw 1399 (2004), the RDN Parks and Trails Guidelines (2013), and the RDN Regional Parks and Trails Plan (2005-2015). This includes general maintenance procedures (garbage collection, inspections, repairs, etc.), safety measures (hazard tree removal, fencing, public notices, etc.), and provisions for accessible amenities.

The following sections of this report (Sections 4.2-4.5) will only address management issues, policies and actions that are unique to the future Regional Park.

### 4.1.1 Estimated Costs

The annual park maintenance cost for the future Regional Park—which is based on per hectare maintenance costs for all existing Regional Parks and includes items such as incidental repairs, vegetation management and contract services—is estimated at \$4,500 to \$7,500 for each of the six main development phases (or \$27,000 to \$45,000 after full build-out).

Estimated replacement and repair costs for all future park amenities based on typical 2015 construction costs—are outlined in the following schedule (Figure 4.1).

Amenity	Unit	Independent Area I	Independent Area II	Phase 1	Phase 2	Phase 3	Phase 4	TOTAL	Major Repair or Replacement	Replacement Unit Cost (2015)	TOTAL COST
Trail Type I: Multi-use Trail (2.5-3.0m)	lin m	0	0	1099	575	0	0	1674	Resurfacing every 20 years	\$ 30	\$ 50,220
Trail Type II: Walking Trail (1.5-2.25m)	lin m	1231	90	1482	1407	2562	1715	8487	Resurfacing every 20 years	\$ 20	\$ 169,740
Trail Type III: Hiking Trail (0.75-1.0m)	lin m	173	0	4323	61	0	540	5097	Resurfacing every 20 years	\$ 10	\$ 50,970
Trail Type III: Notch Trail (Temporary)	lin m	281	0	0	0	0	0	281	Resurfacing every 20 years	\$ 20	\$ 5,620
Boardwalk/ bridges	lin m	78	0	99	21	25	49	272	Decking replaced after 20 years	\$ 1,000	\$ 272,000
Lookouts	ea.	1	0	5	2	2	0	10	Decking replaced after 20 years	\$ 2,000	\$ 20,000
Major Staging Areas	ea.	2	0	0	2	0	0	4	Resurface every 5-7 years	\$ 5,000	\$ 20,000
Minor Staging Areas	ea.	1	0	0	0	0	0	1	Resurface every 5-7 years	\$ 2,000	\$ 2,000
Trail Access Points	ea.	4	2	13	3	10	8	40	N/A	\$ -	\$ -
Docks	ea.	0	0	0	2	0	0	2	Decking replaced after 10 years	\$ 20,000	\$ 40,000
Stairs*	lin m	25	0	50	100	25	0	200	Replacement after 30 years	\$ 500	\$ 100,000
Retaining Walls*	lin m	100	0	0	500	50	350	1000	Replacement after 50 years	\$ 100	\$ 100,000
Culverts*	ea.	1	0	0	1	1	1	4	Replace after 50 years	\$ 2,000	\$ 8,000
Rainwater Creeks*	ea.	1	0	1	0	2	2	6	N/A	\$ -	\$ -
Small Entrance Signs*	ea.	4	2	13	3	10	8	40	Replace after 10 years	\$ 300	\$ 12,000
Large Entrance Signs*	ea.	3	0	0	2	0	0	5	Replace after 20 years	\$ 2,500	\$ 12,500
Interpretive/ wayfinding signs*	ea.	10	0	15	10	20	10	65	Replace after 10 years	\$ 1,000	\$ 65,000
Maps*	ea.	4	2	13	3	10	8	40	Replace after 10 years	\$ 1,000	\$ 40,000
Kiosks*	ea.	3	0	0	2	0	0	5	Replace after 50 years	\$ 18,000	\$ 90,000
Bike racks*	ea.	3	0	0	2	0	0	5	Replace after 20 years	\$ 600	\$ 3,000
Garbage receptacles*	ea.	3	0	0	2	0	0	5	Replace after 20 years	\$ 600	\$ 3,000
Fencing*	lin m	50	0	450	40	1020	450	2010	Replace after 10 years	\$ 80	\$ 160,800
Safety railings*	lin m	150	0	0	350	200	0	700	Replace after 10 years	\$ 100	\$ 70,000
Bollards*	ea.	7	2	13	5	10	8	45	Replace after 30 years	\$ 400	\$ 18,000
Benches*	ea.	4	0	19	6	7	5	41	Replace after 20 years	\$ 2,500	\$ 102,695
Picnic Tables*	ea.	2	0	0	2	0	0	4	Replace after 20 years	\$ 2,500	\$ 10,000
Washrooms (Porta potty with surround)*	ea.	2	0	0	2	0	0	4	Replace after 30 years	\$ 4,000	\$ 16,000

 $<sup>{}^{*}</sup>$ Quantities estimated based on descriptions in Park Masterplan

Figure 4.1: Amenity Replacement Schedule and Costs

### 4.2 Infrastructure and Encumbrances

The Phased Development Agreement identifies several easements and licences that allow for public infrastructure and private uses within the future Regional Park. Associated long-term implications for park management and operations are discussed below.

#### 4.2.1 Sanitary Sewer Right-of-Way (SRW)

To maximize efficiency in the sanitary sewer system and to minimize longterm infrastructure maintenance costs, a sanitary trunk main is proposed within the Regional Park for a 1 km stretch along the east side of Enos Lake.

The Sanitary Sewer Right-of-Way (SRW) is planned to be paired with a portion of the Multi-use Trail (2.5-3.0 m wide) for a distance of 450 m between Schooner Cove Drive and the proposed Lake House Community Centre. Southeast from the Lake House, the SRW continues along a portion of Walking Trail (1.5-2.25 m wide) for a distance of 650 m. The SRW is illustrated in the Park Master Plan (PDA Schedule F) and the Infrastructure Phasing Plan (PDA Schedule G).

## **Management Recommendation:**

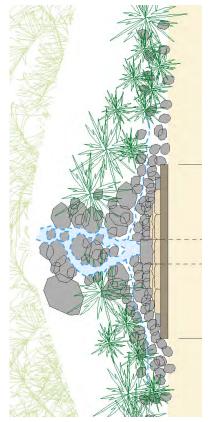
RDN Parks will work collaboratively with RDN Wastewater Services to:

• Coordinate service schedules and protocols for joint use of the SRW as park trail and infrastructure.

#### 4.2.2 Stormwater Mitigation

As a Best Management Practice in stormwater management, 12 to 14 rainwater creeks and two to four regional rain gardens will be constructed within the Regional Park to convey and filter stormwater run-off from development areas into Enos Lake, as directed by the Integrated Stormwater Management Plan or ISMP (PDA Schedule DD). The proposed location of these stormwater mitigation features is illustrated in the Infrastructure Phasing Plan (PDA Schedule G).

The rainwater creeks, built of rocks and gravel, will follow natural contours with pools and cascading sections to aerate run-off water. The vegetated rain gardens will be engineered to filter and mitigate run-off. Over time, with proper monitoring and maintenance, these engineered features will naturalize and provide habitat value for the Regional Park.



Rainwater Creek Detail from Masterplan

#### **Management Recommendations:**

RDN Parks will work collaboratively with RDN Water & Utility Services in order to:

- Coordinate maintenance and monitoring responsibilities for stormwater mitigation features within the Regional Park.
- Support Watershed Performance Indicator reviews every five years, as directed by the ISMP.

#### 4.2.3 Easement for Golf Course Irrigation (Enos Lake)

An existing water license on Enos Lake allows for the withdrawal of up to 173,000 cubic metres of water by the owners of Fairwinds for irrigation of the Fairwinds Golf Course. According to the Integrated Stormwater Management Plan (PDA Schedule DD), current withdrawals are approximately 56% of the amount allowed by the active water license.

Water is currently withdrawn from Enos Lake from a submerged intake and overland pipe (which will be buried during development) to Dolphin Lake. The "Irrigation Works" (as described in PDA Schedule N) include a pump house on the west side of Enos Lake, as well as a dam, outlet and weir. The ISMP recommends long-term water level and water quality monitoring, which are addressed in part by the Enos Lake Monitoring and Protection Program (attached to this report as **Appendix E** and discussed in Section 4.3).

The RDN will grant the Fairwinds owner an easement (PDA Section C.1.9 and Schedule N) to operate, maintain, upgrade and replace the irrigation system for the Fairwinds Golf Course at the time of transfer of the Enos Lake bed title to the RDN (Phase 2C). The RDN may call upon the Fairwinds owner to provide a release of the easement in the event the water license for golf course irrigation is canceled.

#### **Management Recommendations:**

Following easement registration (and easement area designation) at the time of the title transfer of the Enos Lake bed, the RDN Parks will work in collaboration with RDN Water & Utility Services to:

- Manage general park operations and public use in and around Enos
   Lake in accordance with the terms of the water withdrawal license and
   the irrigation easement, both held by the developer.
- Support water level monitoring in Enos Lake by the developer, as per the Integrated Stormwater Management Plan.



Enos Lake

#### 4.2.4 Lake House Dock License

The developer will build a 4 m by 7 m dock for boat access on Enos Lake, as well as a 1.75 m wide access trail, in the vicinity of the proposed Lake House Community Centre within one year of Phase 2C subdivision (PDA Sections C.1 and C.5). The RDN will grant a license to the developer—concurrent with the transfer of the Enos Lake Bed title to the RDN—to maintain, upgrade and replace the dock and access path (as necessary and at the developer's expense) and to utilize up to one-half of the dock for rental and storage of kayaks, canoes and other non-motorized watercraft. Public access to the dock is to be ensured at all times. Long-term public and private access and use of the dock is outlined in detail in the License for Commercial Dock (PDA Schedule O).

#### **Management Recommendation:**

Following construction of the Lake House Dock on Enos Lake, transfer of the Enos Lake bed title to the RDN and issuing of the Lake House Dock license to the developer, the RDN Parks department will:

 Manage general park operations and public use of the Lake House Dock on Enos Lake in accordance with the License for Commercial Dock (PDA Schedule O).

# 4.3 Ecological Protection

Land use and park dedication in the Lakes District Neighbourhood area is based on a framework of environmental conservation. Approximately 40% of the land in the Lakes District will be protected through Regional Park designation. The future park includes key landscape features such as the Notch/Qwiyulass, the Lookout and Enos Lake, and is intended to protect the site's vulnerable ecosystems such as Garry Oak Meadows, wetlands and steep forested slopes (see **Figure 4.2**).

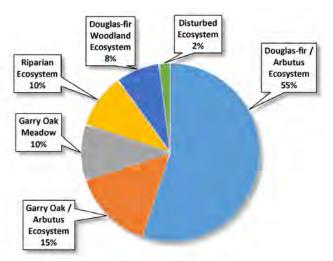


Figure 4.2 Ecosystem Distribution in the Future Regional Park

#### 4.3.1 General Conservation Management

The RDN Parks department will endeavour to protect, restore and enhance the natural environment within the future Regional Park, in accordance with established RDN conservation practices, as well as the vision and objectives established through the Lakes District Neighbourhood Plan (Section 1.6) and subsequent public and stakeholder consultation (Section 1.5).

Park operations procedures for all RDN Regional Parks include conservation efforts such as invasive species monitoring and removal, ecological restoration using native plants and materials, protection of plant communities and habitat through fencing, trail siting and education, and minimal use of amenities (that are built from natural materials when possible).

The future Regional Park is, however, conceptual, and the completion of a Park Management Plan prior to park dedication (as required by the PDA) is unprecedented for the RDN. Although the PDA commits a generous portion of undeveloped land for Regional Park dedication, that land will be affected in the future by adjacent development and increased human use, both inside and outside the Regional Park boundary.

Because management recommendations in this report are based largely on current environmental conditions (and conceptual projections), the RDN Parks Department will need to reassess each portion of the future Regional Park as it becomes developed and transferred in phases.

#### **Management Recommendations:**

Following phased subdivision, development and parkland transfer, and in accordance with established management objectives for ecological protection and enhancement of the future Regional Park, the RDN Parks department will:

- Complete environmental assessments for each separate section or phase of Regional Park to establish updated conditions and management procedures.
- Review the developer's Home Owner's Manual (PDA Section D.3) following each phase of development for possible updates to environmental education initiatives.
- Collaborate with the developer, First Nations, stewardship groups, volunteers and other RDN departments to implement ongoing monitoring and management directives as outlined in the PDA and any subsequent assessments and studies.



Garry Oak Meadow



Wetlands



**Arbutus Forest** 

## 4.3.2 Forest Carbon Sequestration



Forest Around Enos Lake

The RDN has committed to making progress towards carbon-neutral operations by investing in local projects to the greatest extent possible. Because the PDA protects forested lands previously slated for development (i.e., prior to the Lakes District Neighbourhood Plan), the future Regional Park provides an opportunity for the RDN to quantify and manage stored carbon as a means of mitigating greenhouse gas emissions.

## **Management Recommendation:**

Following the first phase of subdivision, development and land transfer, the RDN Parks Department will work collaboratively with the RDN Sustainability Department to:

 Prepare a forest carbon management plan that will quantify the carbon sequestered in the Regional Park and provide recommendations on appropriate forest management practices.

#### 4.3.3 Enos Lake Protection and Monitoring Program (ELPMP)

Enos Lake is a small lake (18 ha) in a mostly undeveloped area of the Fairwinds Community within a watershed area of 235 ha. Approximately 86 ha of the watershed will be developed in phases per the Phased Development Agreement. The Enos Lake Protection and Monitoring Program (ELPMP) was developed in accordance with the PDA (Schedule BB) and per the Integrated Stormwater Management Plan or ISMP (PDA Schedule DD).

Whereas the ISMP proposes mitigation of possible effects of future development on Enos Lake through stormwater management design, the ELPMP provides a long-term monitoring framework for those potential effects. It includes: baseline water quality monitoring and assessment; support in the development of site specific Water Quality objectives based on Ministry of Environment (MoE) protocols; and guidelines for invasive species management practices.

Enos Lake monitoring and invasive species management is to be completed by a Qualified Environmental Professional (QEP) on behalf of the developer during phased development and one year post development (within the 20-year term of the Phased Development Agreement). Monitoring results will be provided to the RDN and all relevant stakeholders annually; an engineer's report on ISMP performance based on ELPMP results will be submitted to the RDN by the developer for each subdivision application. Should ELPMP data indicate that water quality objectives are not being met, a third-party assessment by a QEP will be completed to identify actions that could be applicable to future development phases.

The ELPMP is attached to this report as Appendix E.

## **Management Recommendation:**

The RDN will work collaboratively with the developer at the time of subdivision and development to:

 Support the management of Enos Lake according to the Enos Lake Protection & Monitoring Plan.

#### 4.3.4 Garry Oak Meadows Management Plan (GOMMP)

The future Regional Park has seven Garry oak ecosystem areas, with a total extent of approximately 15 ha. Within the local context of Nanaimo/Nanoose, this area represents approximately 5% of the remaining coverage of this ecosystem type. The future Regional Park lies within the northernmost tip of the native Garry oak range. This sensitive habitat hosts a mix of vegetation consisting primarily of Garry oak, Arbutus, Ocean-spray, Common camas, mosses and lichens.

The need for a Garry Oak Meadows Management Plan (GOMMP) was identified in a 2010 Environmental Impact Assessment completed for the Lakes District Neighbourhood Plan. The GOMMP was completed in May 2015 in accordance with the PDA (Schedule AA) and includes invasive species management practices and a monitoring program linked to an adaptive management decision framework.

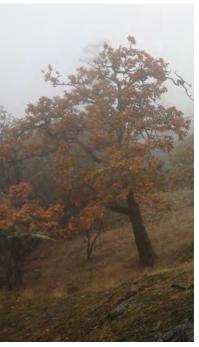
Garry oak meadows monitoring and invasive species management in the future Regional Park is to be completed by a Qualified Environmental Professional (QEP) on behalf of the developer during phased development and up to three years post development (within the 20-year term of the Phased Development Agreement). Seasonal monitoring reports will be submitted to the RDN for review.

The GOMMP is attached to this report as **Appendix F**.

#### **Management Recommendation:**

The RDN will work collaboratively with the developer at the time of subdivision and development to:

• Support the management of the Garry oak ecosystem within the future Regional Park according to the Garry Oak Meadows Management Plan.



Garry Oak Meadow

## 4.4 Low-impact Recreation

Recreational uses within the future Regional Park are, for the most part, directed by conservation initiatives outlined in the PDA, as well as trail classification and amenity design in the Park Masterplan (PDA Schedule F). The RDN Parks Department will manage the future Regional Park in accordance with PDA requirements and RDN Park Use Bylaw 1399 regulations.

Sensitive ecosystems in the park will be protected through fencing and appropriate trail siting at the time of park development. Park amenities—which include multi-use and hiking trails, benches, picnic tables, information kiosks and docks—will accommodate low-impact activities such as hiking, cycling on multi-use trails, swimming nature appreciation and education. These uses are generally consistent with public desires for the future Regional Park, per the input from the first Open House and Public Survey completed for this Management Plan (Section 1.5 and **Appendix A**).

Several suggested park uses—based on Open House and Survey feedback—were either contentious among RDN residents, incompatible with conservation objectives and amenities set out in the PDA, or unaddressed by the PDA. These include equestrian use, mountain biking, dog walking, swimming and watercraft use in Enos Lake, and ATV use. Whereas the use of motorized vehicles, including motorbikes and ATVs, is prohibited in all RDN Parks (Bylaw 1399), the other listed uses are permissible but regulated by separate park management directives for each park.

#### 4.4.1 Equestrian Use

Although horse-back riding has not been observed nor reported as a current recreation activity within the Lakes District Neighbourhood Plan area, approximately 10% of the Public Survey respondents (14 out of 126) listed "equestrian use" as a desirable recreation activity in the future Regional Park. RDN Park Use Bylaw 1399 does permit horses on designated trails, but generally prohibits any equestrian use that may damage natural site features or amenities.

Trails within the future Regional Park are not intended for equestrian use. The 2km stretch of Multi-use trail (Trail Type 1), which connects two major roadways along a narrow corridor on the east side of Enos Lake, is designated for walking, cycling and wheel-chair access only. Other trails in the future Regional Park (Types II and III) are narrow trails through natural areas that are intended for walking and hiking.

#### **Management Recommendation:**

Following phased subdivision, development and parkland transfer, the RDN Parks department will:

Prohibit equestrian use within the future Regional Park.

#### 4.4.2 Mountain Biking / Cycling

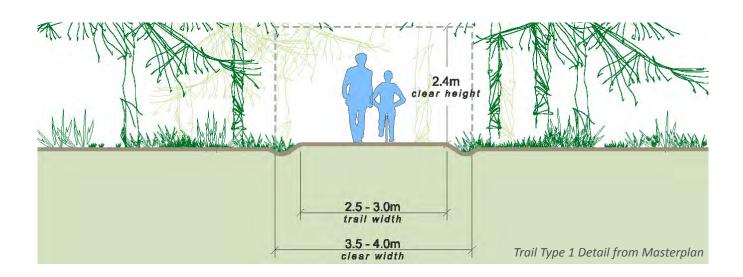
Mountain biking currently takes place in the Lakes District area, including the summit of the Notch/Qwiyulass where damage from bike use is evident. Approximately 30% of Public Survey participants (42 out of 126) also listed "mountain biking" as a desirable recreation activity in the future Regional Park. RDN Parks Bylaw 1399, however, prohibits any biking activity that may damage natural site features, and permits cycling / mountain biking on designated trails only.

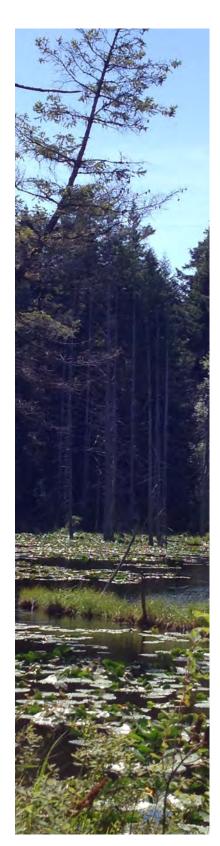
Due to the sensitive nature of the ecosystems found throughout the future Regional Park—particularly the Garry oak meadows and steep rocky slopes at Enos Lake—mountain biking, and cycling in general, will be permitted on the Multi-Use Trail (Trail Type I), located along the east shore of Enos Lake. Other trails will be evaluated for biking suitability at the time of Regional Park development.

#### **Management Recommendation:**

Following phased subdivision, development and parkland transfer, the RDN Parks department will:

 Permit cycling / mountain biking in the future Regional Park on Multi-Use Trail (Trail Type I).





Wetland

#### 4.4.3 Dog Management

Based on feedback from the first Open House and Public Survey, dogwalking is one of the most contentious topics for recreation management in the future Regional Park: 38% of survey respondents requested on-leash dog walking; 26% requested off-leash dog walking; and another 6% requested that dogs be prohibited from the park.

RDN Park Use Bylaw 1399 generally allows for off-leash dog-walking as long as the dog is effectively controlled and not allowed to run or roam at large, cause annoyance or injury to wild animals or park visitors, or damage natural park features and common facilities. A leash must be used if the dog cannot be effectively controlled along designated trails.

The Park Use Bylaw also allows for special restrictions on dog use as regulated by posted signage. This is typically employed in conservation areas with sensitive habitat, as directed by ecological assessments. Areas within the future Regional Park that may require such restrictions include Garry oak meadows, wetlands, the Notch / Qwiyulass summit and the Lookout summit. Until further detailed assessment is completed following development and land transfer, the RDN will permit controlled dog-walking, either on-leash or off-leash, on park trails only.

#### **Management Recommendations:**

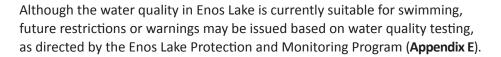
Following phased subdivision, development and parkland transfer, the RDN Parks Department will:

- Permit controlled dog use (either on-leash or off-leash), on all park trails without posted restrictions, as outlined in Section 5.9 of RDN Park Use Bylaw 1399.
- Complete environmental assessments for each separate portion of Regional Park to assess the need to restrict dog use on trails within sensitive areas.

#### 4.4.4 Enos Lake Use

More than half the Public Survey respondents listed swimming and non-motorized boating as a desired recreation activities in the future Regional Park. Swimming and non-motorized boating are generally permitted in all Regional Parks, unless otherwise posted. The RDN parks department does not, however, provide lifeguard supervision so park visitors must assume their own risk.

The same general policy will apply for Enos Lake after the title of the lake shore and lake bed are transferred to the RDN over four development phases. Areas off limits to swimming and boating will include a 5 m buffer around existing "Irrigation Works" (pump house, dam, weir and outlet) on the west and north sides of the lake, as per the irrigation easement (PDA Schedule N). Public access restrictions will also apply to the portion of the future Lake House Dock designated for private use, as per the Lake House Dock license (PDA Schedule O).





Enos Lake

## **Management Recommendations:**

Following phased subdivision, development and parkland transfer, the RDN Parks department will:

- Permit swimming and non-motorized boating in all unrestricted areas of Enos Lake, without lifeguard supervision, and unless otherwise posted.
- Prohibit swimming and non-motorized boating within 5m of "Irrigation Works", as described in the Easement for Golf Course Irrigation.
- Manage public water access from the Lake House Dock so as not to interfere with private dock use, as described in the Lake House Dock License.



Wildflowers near Enos Lake



Forest on the Notch / Qwiyulass

#### 4.4.5 Fire Risk Management and Services

Campfires will be prohibited at the future Regional Park in accordance with Park Use Bylaw 1399. Wildfire risks in the future Regional Park will, however, increase with neighbourhood development, increased human activity, and climate change. The Nanoose Volunteer Fire Department (NVFD) anticipates the need for future fire protection services in the Lakes District—as outlined in the NVFD Fire Protection Services Study (PDA Section C.3.34)—and is eager to work with the RDN Parks Department on a fire management and services strategy for the future Regional Park.

## **Management Recommendation:**

Following the first phase of subdivision registration and parkland dedication, the RDN Parks Department will work in partnership with the Nanoose Volunteer Fire Department to:

 Prepare a wildfire management plan that addresses fuel management and service access routes and provides strategies that are compatible with conservation management objectives.

# 4.5 Collaborative Stewardship

Public and stakeholder consultation processes for the Lakes District Neighbourhood Plan and this management plan have shown that Nanoose residents and the larger RDN community care deeply about protecting the natural environmental in the Lakes District. Their commitment and determination have shaped land use designations for the Lakes District and they will continue to play an important role in the stewardship of the future Regional Park.

#### 4.5.1 First Nations Partnership

The Lakes District Neighbourhood Plan area is located within the traditional territory of the Snaw-naw-as First Nation. Before European settlement, the area was used by Snaw-naw-as for hunting, plant gathering, and watching for approaching enemies—Qwiyulass (the Snaw-naw-as name for the Notch) is a hul'qumi'num term that means "the watch."

The land within the future Regional Park, especially the Notch/Qwiyulass, has significant cultural meaning for the Snaw-naw-as community. It is a sacred area where traditional teachings and rituals continue to be practiced, and it will be protected accordingly through the ongoing partnership between Snaw-naw-as and the RDN.

During the planning processes for the Lakes District Neighbourhood Plan and the Zoning Amendment Application, the Snaw-naw-as First Nation played a pivotal role in the protection of the Notch/Qwiyulass summit within the future Regional Park through zoning and a No Build Covenant (CA3917284). Chief David Bob and Elders Anne and Jim Bob also provided valuable input during the preparation of this management plan. The RDN will continue to work collaboratively with Snaw-naw-as on future park initiatives including historical recognition, cultural protection and ecological stewardship.

#### **Management Recommendations:**

During subdivision, development, land transfer and long-term Regional Park management, the RDN will:

- Collaborate with Snaw-naw-as to determine the need for protection of cultural areas during Regional Park development.
- Provide opportunities for amenity design or artwork by Snaw-naw-as community members during Regional Park development.
- Collaborate with Snaw-naw-as on the production of interpretive park signage pertaining to Snaw-naw-as history and culture.
- Support ongoing Snaw-naw-as participation in ecological stewardship and cultural programing in the future Regional Park.

## 4.5.2 Stewardship Groups and Volunteers

Due to limited staff resources, the RDN Parks Department relies on support from individual volunteers and stewardship groups for general park monitoring and ecological initiatives. Examples include wildlife monitoring by Ducks Unlimited at the Little Qualicum River Estuary Regional Conservation Area, and native plant restoration work by the Nanaimo and Area Land Trust at Mount Benson Regional Park. A Volunteer Park Warden Program for Regional Parks was initiated in 2011 with volunteer wardens currently stationed at Englishman River Regional Park and the Arrowsmith CPR Regional Trail. Park warden tasks include monitoring trail conditions and light litter removal.



Existing Path

Approximately half of the open house and public survey participants (Section 1.5) expressed an interest in helping with park stewardship. Because of the size and complex layout of the future Regional Park in the Lakes District, the RDN Parks Department will consider extending the Volunteer Park Warden program into this Regional Park for monitoring of park and trail conditions. There is also a significant need for involvement from local stewardship groups for the rehabilitation work in conjunction with the management of Garry Oak meadows.

#### **Management Recommendations:**

Following phased development and parkland transfer, the RDN Parks department will:

- Solicit help from local stewardship groups for invasive weed management and restoration work in Garry Oak Meadows, as directed by the Gary Oak Meadows Management Plan (Appendix E).
- Implement a Volunteer Parks Warden program for general monitoring and reporting of park and trail conditions, as needed.



# 5.0 Summary of Recommendations

This section summarizes all recommended actions and policies for park development and management, discussed in previous sections of this plan (Sections 3 and 4), in the following five tables:

PARK DEVELOPMENT								
Plan Section	Issue		Recommendation	Who	When			
3.2	Amenity Implementation	а	Determine final park boundaries through survey work and staking.	Developer; RDN Parks; RDN Plan- ning	Subdivision; Development			
		b	Design and site all amenities in accordance with the Park Masterplan guidelines, the PDA and RDN Parks standards.	Developer; RDN Parks	Subdivision; Development			
		С	Ensure that quantities, materials and designs are adequate and sustainable in terms of site and visitor requirements and long-term staff and budget constraints.	Developer; RDN Parks	Subdivision; Development			
3.4.2	'Notch Summit' Dedication and Access	а	Continue stat right-of-way to ensure trail and service vehicle access to the 'Notch Summit' if completion of Sub-Phase 4C does not occur pursuant to the 20-year term of the PDA.	Developer; RDN Plan- ning; RDN Parks	At PDA expiry (2034)			
3.4.3	Option to Purchase Lands	а	Commit the estimated \$1.1 million total for both Option to Purchase Lands within the Five-year Financial Plan for Regional Parks.	RDN Parks	2015-2020			
		b	Pursue acquisition of the Notch Option to Purchase Lands within five years of first subdivision registration, subject to Board approval.	RDN Parks	Within 5 years of Phase 1A subdivision			
		С	Pursue acquisition of the Lookout Option to Purchase Lands within three years of Phase 1E subdivision, subject to Board approval.	RDN Parks	Within 3 years of Phase 1E subdivision			
3.4.4	Parkland Dedication Amendment	а	Implement any parkland dedication amendments—including reduced park size and altered boundaries—in accordance with conservation objectives as per Lakes District Neighbourhood Plan, PDA, and all associated documents.	Developer; RDN Plan- ning; RDN Parks; MOTI	Subdivision			

Plan Section	Issue		Recommendation	Who	When
4.2.1	Joint Sanitary Sewer Right-of- Way and Trail	а	Coordinate service schedules and protocols for joint use of SRW as infrastructure and trail.	RDN Parks; RDN Wastewater Services	Phase 2A subdivision
4.2.2	Stormwater Mitigation	а	Coordinate maintenance and monitoring responsibilities for stormwater mitigation features between RDN Parks and RDN Water & Utility Services.	RDN Parks; RDN Water & Utility Services	Phase 1B subdivision
		b	Support Watershed Performance Indicator reviews every five years, as directed by the ISMP.	RDN Parks; RDN Water & Utility Services	Every 5 years after Phase 1B
4.2.3	Easement for Golf Course Irrigation	а	Manage general park operations and public use in and around Enos Lake in accordance with the terms of the water withdrawal license and the irrigation easement, both held by the Developer.	RDN Parks; Developer	Ongoing after Phase 2C
		b	Support water level monitoring in Enos Lake by the Developer, as per the Integrated Stormwater Management Plan.	RDN Parks; Developer; RDN Water & Utility Services	Ongoing after Phase 2C
4.2.4	Lake House Dock License	а	Manage general park operations and public use of the Lake House Dock on Enos Lake in accordance with the License for Commercial Dock (PDA Schedule O).	Developer; RDN Parks	Ongoing after Phase 2C

PARK MANAGEMENT: ECOLOGICAL PROTECTION								
Plan Section	Issue		Recommendation	Who	When			
4.3.1	.1 General Conservation Management		Complete environmental assessments for each separate section or phase of Regional Park, following land transfer and amenity construction, to establish updated conditions and management procedures.	RDN Parks; Consultant	After each phase of development			
		b	Review the developer's Home Owner's Manual (PDA Section D.3) following each phase of development for possible updates to environmental education initiatives.	Developer; RDN Parks	After each phase of development			
4.3.2	Forest Carbon Sequestration	а	Prepare a forest carbon management plan that will quantify the carbon stored in the Regional Park and provide recommendations on appropriate forest management.	RDN Parks; RDN Sustain- ability	Following Phase 1A development			
4.3.3	Enos Lake Protection and Monitoring	а	Support the management and monitoring of Enos Lake by the Developer according to the Enos Lake Protection and Monitoring Program.	Developer; RDN Parks; RDN Water & Utility Services	Ongoing after Phase 2C			
4.3.4	Garry Oak Meadows Management	а	Support the management of the Garry Oak ecosystem within the future Regional Park by the Developer and stewardship groups according to the Garry Oak Meadows Management Plan.	Developer; RDN Parks; Stewardship groups	Ongoing after Phase 1A			

PARK MANAGEMENT: LOW-IMPACT RECREATION									
Plan Section	Issue		Recommendation	Who	When				
4.4.1	Equestrian Use	а	Prohibit equestrian use within the future Regional Park	RDN Parks	Ongoing after Phase 1A				
4.4.2	Cycling	а	Permit cycling / mountain biking in the future Regional Park on Multi-Use Trail (Trail Type I).	RDN Parks	Ongoing after Phase 1A				
4.4.3 Dog-walking		а	Permit controlled dog-use (either on-leash or off-leash), on all park trails without posted restrictions.	RDN Parks	After each phase of development				
		b	Complete environmental assessments for each separate section or phase of Regional Park (as in Section 4.3.1) to assess the need for restricted dog use in sensitive areas.	RDN Parks; Consultant	Ongoing after Phase 1A				
4.4.4	Enos Lake Use	а	Permit swimming and non-motorized boating in all unrestricted areas of Enos Lake, unless otherwise posted.	RDN Parks	Ongoing after Phase 2C				
		b	Prohibit swimming and non-motorized boating within 5m of "Irrigation Works", as described in the Easement for Golf Course Irrigation (PDA Schedule N).	RDN Parks	Ongoing after Phase 2C				
		С	Manage public water access from the Lake House Dock so as not to interfere with private dock use, as described in the Lake House Dock License (PDA Schedule O).	RDN Parks	Ongoing after Phase 2C				
4.4.5	Fire Management	а	Prepare a wildfire management plan that addresses fuel management and service access routes and provides strategies that are compatible with conservation management objectives.	RDN Parks; Fire Depart- ment	Phase 1A development				

PARK MANAGEMENT: COLLABORATIVE STEWARDSHIP									
Plan Section	Issue		Recommendation	Who	When				
4.5.1	First Nations Partnership	а	Collaborate with Snaw-naw-as to determine the need for protection of cultural areas during Regional park development.	RDN Parks; Snaw-naw-as; Developer	Development				
		b	Provide opportunities for amenity design or artwork by Snaw-naw-as community members during Regional Park development.	RDN Parks; Snaw-naw-as; Developer	Development				
		С	Collaborate with Snaw-naw-as on the production of educational park signage pertaining to Snaw-naw-as history and culture.	RDN Parks; Snaw-naw-as; Developer	Development				
		d	Support ongoing Snaw-naw-as participation in ecological stewardship and cultural programing in the future park.	RDN Parks; Snaw-naw-as	Ongoing after Phase 1A				
4.5.2	Volunteers	а	Implement a Volunteer Park Warden program for general monitoring of park and trail conditions, as needed.	RDN Parks; Volunteers	Ongoing after Phase 1A				
4.5.2	Stewardship Groups	а	Solicit help from local stewardship groups for invasive weed management and restoration work in Gary Oak Meadows.	Developer; RDN Parks; Steward groups	Ongoing after Phase 1A				