REGIONAL DISTRICT of CENTRAL OKANAGAN

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RURAL WESTSIDE OFFICIAL COMMUNITY PLAN

Bylaw No. 1274
Adopted: December 13, 2010
REVISED April 28, 2014

REGIONAL DISTRICT OF CENTRAL OKANAGAN

BYLAW NO. 1274, 2010

A Bylaw to adopt the

RURAL WESTSIDE OFFICIAL COMMUNITY PLAN

WHEREAS the Regional Board of the Regional District of Central Okanagan wishes to adopt an official community plan under the provisions of the Local Government Act;

AND WHEREAS the Regional Board may adopt an official community plan by bylaw and each reading of the bylaw must receive an affirmative vote of a majority of all members of the Board;

AND WHEREAS after first reading of the bylaw the Regional Board shall, in sequence, examine the official community plan in conjunction with its financial plan, growth management strategy, waste management plan or economic strategy plan that is applicable in the Regional District to ensure consistency between them;

AND WHEREAS if the official community plan applies to land in an agricultural land reserve established under the Agricultural Land Commission Act, the Regional Board shall refer the official community plan to the provincial Agricultural Land Commission for comment;

AND WHEREAS the official community plan has been prepared in consultation with District of Peachland, District of West Kelowna, Okanagan Indian Band, Westbank First Nation, Ministry of Transportation and Infrastructure and applicable school district, irrigation districts and Provincial agencies;

AND WHEREAS before the Regional Board gives third reading to the bylaw, the Regional Board shall hold a public hearing on the proposed official community plan in accordance with the Local Government Act;

AND WHEREAS the Regional Board of the Regional District of Central Okanagan has complied with all requirements of the Local Government Act prior to adoption of this official community plan bylaw including all of the foregoing;

AND WHEREAS after the bylaw adopting the official community plan has received final reading; the plan is an official community plan of the Regional District of Central Okanagan;

NOW THEREFORE the Regional Board of the Regional District of Central Okanagan, in an open meeting enacts as follows:

1. Rural Westside Official Community Plan attached hereto as Schedule ‘A’ and forming part of this bylaw is adopted as an Official Community Plan of the Regional District and this bylaw may be cited as Rural Westside Official Community Plan Bylaw No. 1274, 2010.

2. The bylaw shall apply only to that portion of the Regional District of Central Okanagan as outlined on the attached Official Community Plan Boundaries Map of this bylaw.

3. If any statement, section, sub-section, clause, sub-clause or phrase of this bylaw is for any reason held invalid by a decision of a court of competent jurisdiction, the decision shall not affect the validity of the remaining portions of the bylaw and official community plan.

4. North Westside Official Community Plan Bylaw No. 785, 1999, together with all amendments is hereby repealed.

5. Westside Official Community Plan Bylaw No. 1050, 2005, together with all amendments is hereby repealed.

READ A FIRST TIME this 26th day of April 2010

PUBLIC HEARING HELD PURSUANT TO THE LOCAL GOVERNMENT ACT this 28th day of June 2010

READ A SECOND TIME this 28th day of June 2010

READ A THIRD TIME this 28th day of June 2010

APPROVED BY THE MINISTER OF COMMUNITY AND RURAL DEVELOPMENT this 23rd day of November, 2010

RECONSIDERED AND ADOPTED this 13th day of December, 2010

Chairman

Director of Corporate Services

I hereby certify the foregoing to be a true and correct copy of Rural Westside Official Community Plan Bylaw No. 1274, 2010 as read a third time by the Regional District of Central Okanagan the 28th day of June 2010

Dated at Kelowna, this 30th day of June 2010

Director of Corporate Services

I hereby certify the foregoing to be a true and correct copy of Rural Westside Official Community Plan Bylaw No. 1274, 2010, which was Reconsidered and Adopted by the Regional District of Central Okanagan on the 13th day of December , 2010

Dated at Kelowna, this 15th day of December, 2010

Director of Corporate Services

REGIONAL DISTRICT of CENTRAL OKANAGAN

REGIONAL DISTRICT OF CENTRAL OKANAGAN

RURAL WESTSIDE OFFICIAL COMMUNITY PLAN

Schedule 'A'

Bylaw No. 1274

Adopted: December 13, 2010

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Chapter 1

Introduction

1.1 Plan Area Context

The Rural Westside Official Community Plan area extends along the western shoreline of Okanagan Lake within part of the Central Okanagan West Electoral area north from Bear Creek Provincial Park to Westshore Estates, including Crystal Mountain Ski Resort area. The Official Community Plan Boundaries map illustrates the exact boundaries of the plan.

The plan area is generally limited to privately held lands, and includes Provincial and Regional District park sites.

Where is the North Westside Plan Area?

The topography of the area is comprised of moderate and steep treed slopes interrupted by pockets of gentle terrain and deltas.

The shoreline is dotted with a number of small settlement areas or communities. The predominant communities are Trader's Cove, Wilson's Landing, Fintry, Valley of the Sun, Ewing, Killney, and Westshore. Many of the communities in the plan area have historical roots dating back to the early settlement of the Okanagan Valley. During the initial settlement of this area boats connected the landings. Today all the communities in the area are linked by Westside Road, a single road running parallel to Okanagan Lake. The sketch below identifies the communities within the plan area and the Regional District.

1.2 Regional Context

The North Westside area is located in the northern portion of the Central Okanagan West Electoral area of the Regional District of Central Okanagan. The Regional District extends from just north of Oyama, and just South of Peachland.

How does the North Westside area fit into the Region's "Big Picture"?

The tremendous growth which has been experienced throughout the Central Okanagan has resulted in a regional population increase from 73,346 in 1976, to 143,200 in 1996. In contrast, the North Westside area has not experienced tremendous growth and today continues to represent a relatively small portion of the regional population base, 1,205 persons or less than 1% overall. The Regional Board and its

member municipalities (e.g. Kelowna, Lake Country, Peachland) have adopted Official Community Plans which identify a number of town centres and smaller community centres or urban village centres where urban growth and higher densities will be directed in order to encourage more sustainable communities within a regional context.

This plan recognizes that the North Westside area will continue to remain a rural area with limited community services and infrastructure. The plan also acknowledges that this area continues to maintain a large inventory of vacant lots in all zoning categories. The existing vacant lot inventory and the zoned parcels are adequate to meet the housing needs of the North Westside area for the time horizon of this Official Community Plan. This plan, subsequently, has established objectives and policies which recognize the present limited services, lot inventories and the public's desire to retain the area's rural character, and thereby direct significant urban growth to other parts of the region where services and infrastructure are available.

The Regional District is preparing a Regional Growth Management Strategy. The Rural Westside Official Community Plan will be re-evaluated in context of that strategy when the Regional Growth Management Strategy is approved by the Board.

1.3 Historical Overview

The historical records of the plan area date back to 1821 with establishment of the Hudson's Bay Fur Brigade trail. The trail represented a fur trading supply route through the Okanagan Valley north to Kamloops. With the United States and Canada boundary settlement in 1847, alternative trails were developed from Kamloops through the Fraser Canyon to Fort Langley. The last brigade took the trail in 1847.

Links to our past provide direction to our future community development.

Settlement in the plan area began in the 1880's and 1890's. During this period several of the settlements known today were established (e.g. Fintry, Bruce's Landing, and Caesar's Landing). Due to the absence of a public roadway system connecting the early settlements, the stern wheeler played an important role transporting supplies to residents, and agricultural produces to rail heads at the three Okanagan Valley centres.

The following provides a brief summary of the primary historical settlements in the plan area:

Killiney Beach

Killiney Beach was settled in 1903 by Harry Percy Hodges. It was named after his home in Ireland. Killiney at one time was called "Sprouls Landing".

Ewing's Landing

Ewing's Landing was at one time referred to as Morden's Landing. The name was changed to Ewing's Landing in 1889 after Robert Leckie-Ewing, the first postmaster

for the area. During the early 20th Century Ewing's Landing was a dominant settlement in the area. This dominance was marked by the opening of the post office in 1903, and the subsequent moving of post offices from Short's Point (Fintry) and Bruce's Landing to Ewing's Landing in 1907 and 1902 respectively.

Bruce's Landing

Formerly on the upper west side of Okanagan Lake, between Short's Point (Fintry) and Ewing's Landing, it was settled by James Baxter Bruce in 1890. A quirk of James Bruce's religious belief was to write letters and post them on the boat without stamps, generally asking the purser to put stamps on them and the Lord would bless him. Bruce's Landing was also referred to as "Wood Station" because James provided cut firewood for the lake steamers.

Fintry

Captain Short settled the site in 1883, and established a fleet of freight boats to serve the valley.

After Captain Short's ownership, the property sold and resold several times until 1909 when it was purchased by James Cameron Dunwaters. The property assumed the name of Fintry under Mr. Dunwaters' ownership, having ancestral links to a family estate in Scotland called Fintry. It was during Dunwaters' ownership that many of the buildings were constructed. The manor house, field house, gate house, and most of the farm buildings were constructed during the first 10 years. The manor house was destroyed by fire in 1924 during renovations, but was later reconstructed. During that period, Dunwaters also cleared much of the delta land for agricultural expansion, built a hydropower generating station on Shorts Creek, and an elaborate irrigation system. Included on the delta was a 40 acre orchard and areas devoted to vegetable production along with several acres of pasture land for supporting both dairy and beef herds.

Following Dunwaters' death in 1939 the property was sold to Fairbridge Farms Schools who operated the estate as a British boarding school. The estate then passed through a number of other owners until in 1960 Mr. Bailey purchased the site and established an inn and a cabaret in the old packing house. The packing house constructed during Dunwaters' era is there today, but in poor condition. In 1996 the property was purchased by the Province and Regional District for a provincial park.

Nahun

Howard Bruce Kennard, the first postmaster (1905), named the area after Nahun Wenox, "child of the rock". Nahun Wenox was a native legend that believe the little rock island on the opposite side of the lake was once part of the big rock just north of Nahun Wharf. During the days of the Hudson's Bay Fur Brigade Trail, poachers referred to the area as "The Golden Gate", and used to put a barricade here and camp behind it so their horses could not stray.

Caesar's Landing

The Landing was first settled in 1893 by Northcote Henry Caesar. In the 1890's he built a small steam launch with which he hauled booms of logs to the saw mill at Kelowna, and ore from Morning Glory Mine to the mill near Okanagan Landing. The government wharf at Nahun was constructed at what was formerly called Caesar's Landing.

Wilson's Landing

Wilson's Landing was first settled by Harold Fitz-Harding Wilson in the 1900's. During the great depression in 1932-33 a relief camp was built at Wilson's Landing. The camp housed able bodied men who worked on improving the narrow and generally unsafe portion of the Westside Road between Wilson's Landing and what was referred to as "Newby's Cove" (now Trader's Cove). The relief camp later became the Anglican Church camp.

1.4 The North Westside Area Today

The North Westside area today reflects a land use policy direction established almost 20 years ago. The dominant land use and zoning in the North Westside plan area can be described as rural (e.g. rural residential, country residential and small holdings), with pockets of single family residential and recreation commercial areas. The single family residential areas are generally located in the vicinity of the well established communities (e.g. Trader's Cove, Wilson's Landing, Caesar's Landing, Fintry, Ewing's Landing and Westshores Estates).

The Zoning Bylaw is one of the primary "tools" used to implement the North Westside OCP

The commercial areas are generally limited to tourist resorts such as Okanagan Resort, or proposed development areas such as Caesar's Landing In the Fintry area, the large recreation commercial area has now been acquired for Provincial park purposes.

Despite much of the rural zoning located in this area, there are in place four Land Use Contracts (LUC's) whose development potential supersede any official community plan or zoning bylaw requirements. All of these Land Use Contracts date back prior to the *Official Community Plan Bylaw. #370*. Land Use Contracts can not be amended or changed unless agreed to by both parties. Many of the LUC's are undeveloped today, the exception is LUC #225 (Lake Okanagan Resort) which is in place, and LUC #258 which has initiated construction The Land Use Contracts' uses and number of units are summarized below:

1. LUC #249

Property Description: Lot 146, District Lot 2922, Plan 20608, ODYD

Allowed Uses:

- one lodge building
- one washroom building
- one sani-station
- recreational accommodation
    - tents
    - tent trailers
    - travel trailers
    - motor homes
    - vans
    - campers
    - recreation vehicles

Max. number of units allowed: 150 campsites

2. LUC # 194

Property Description: Lot F, District Lot 4499, ODYD, Plan 24697

Allowed Uses:

- residential single family dwelling (one)
- tourist residential rentals
- dining lounge
- restaurant
- convention hall
- commercial recreation - restricted to boat launching and any form of recreation carried on in the Lodge or out of doors and for the use of resident guests of the development
- grocery store - for the use of resident tenants and other persons residing within District Lot 4499 or persons using any of the outdoor recreation facilities provided by the resort development

Max. number of units allowed: 72

3. LUC #258

Property Description: Lots A, B, and C, Plan 34400, District Lots 3546 & 4499, ODYD

Allowed Uses:

- one recreation centre building

- retreat building designed to accommodate up to 100 persons
- swimming pool building
- one lodge with staff accommodation
- one sani-station
- one maintenance building
- boat docking facilities and man-made beach

Max. number of units allowed: 463 recreational vehicle sites and 42 vacation homes

4. LUC # 225 (Lake Okanagan Resort)

Property Description: Lots 1, 2, 3, 4, and 5, District Lot 2547, ODYD, Plan 30301

Allowed Uses:

- recreational country club and resort hotel
- club house
- swimming pools and whirlpools
- tennis courts
- beaches
- marina
- nine hole golf course
- residential accommodation (including not more than 18 housekeeping units, 10 guest units and 5 summer recreational chalets)
- residential accommodation for maintenance staff
- single family residential accommodation for club manager
- garage and maintenance building
- boat launch
- restaurant (at the marina)
- golf cart storage and locker room building

Max. number of units allowed: 500 rental units

1.5 Legislative Requirements

The contents within the Rural Westside Official Community Plan are governed by provincial legislation known as the *Local Government Act.* Part 26, Division 2 of the *Local Government Act* describes to the Regional District government what requirements must be in an official community plan.

What governs an Official Community Plan?

The Rural Westside Official Community Plan must consider such items as:

- the approximate location, amount, type and density of residential development required to meet anticipated housing needs over a period of at least 5 years;
- the approximate location, amount and type of present and proposed commercial, industrial, institutional, agricultural, recreational and public utility land uses;
- the approximate location and area of sand and gravel deposits that are suitable for future sand and gravel extraction;
- restrictions on the use of land that is subject to hazardous conditions or that is environmentally sensitive to development;
- the approximate location and phasing of any major road, sewer and water systems;
- the approximate location and type of present and proposed public facilities, including schools, parks and waste treatment and disposal sites; and
- housing policies of the Regional District respecting affordable housing, rental housing and special needs housing.

The Rural Westside Official Community Plan may include the following:

- policies of the Regional District relating to social needs, social well-being and social development;
- a regional context statement consistent with a regional growth strategy;
- policies respecting the maintenance and enhancement of farming;
- the establishment of development permits to protect the natural environment; development from hazardous conditions; protect farming; and guidelines for commercial, industrial and multiple family residential development;
- temporary commercial and industrial uses; and
- heritage conservation areas.

If the Regional District proposes to include matters in the official community plan which are not within the jurisdictions of the Regional District, then they may only be stated as broad objectives of the Regional District.

While the Rural Westside Official Community Plan does not commit or authorize the Regional District Board to proceed with a project specified in the plan, any subsequent bylaws passed by the Regional District must be consistent with the plan, or move towards compliance with the plan.

1.6 Public Consultation

1. Community Survey
2. Focus Group Session
3. Open House/Workshop
4. Open House/Presentation
5. Open House

A comprehensive public consultation program was designed and implemented to prepare an accurate profile of public opinion and issue identification with the North Westside area. The first phase of the program included a newsletter/community survey, to inform residents of the process and obtain initial public opinion. The second phase of the program included two focus group sessions with the public to identify issues and confirm the accuracy of the initial survey. Phase three of the program included an open house and workshop where the public discussed the key issues to obtain general consensus on the issues and initial policy direction. The fourth phase of the public consultation process included an open house and presentation of the draft community plan. During this phase the public were able to review the plan and ask questions regarding the draft plan. During the final phase of the process, public consultation was obtained at a final open house.

The initial public consultation is summarized in the following key statements:

- Continue efforts to make Westside Road safer;
- Ensure improvements to Westside Road do not alter the rural character, or encourage the road to become a by-pass route;
- Preserve the rural character of the North Westside area;
- Direct major residential development to other areas of the Region where urban services and infrastructure are available;
- Mitigate the impacts of previously approved Land Use Contracts., or encourage renegotiation of the contracts to more appropriate land uses;
- Ensure any new development provides adequate utility services (e.g. sewage disposal, water supply, fire protection, and storm drainage); and
- Reduce the visual and physical impacts on the natural environment.

Chapter 2

A Vision for the North Westside

What is important to the resident of the North Westside Plan area?

During the initial focus group sessions residents were encouraged to provide their thoughts on a number of issues, and future directions for the North Westside planning area. The information gathered from the focus groups and the earlier newsletter survey were used to prepare a preliminary vision statement which was then reviewed and discussed by the community during the open house and workshop.

A vision for the North Westside area.

A vision for the future of the Rural Westside Official Community Plan area may be described in the following statements:

1. Residents feel strongly that Westside Road needs to be improved to address increasing demands of traffic and to such destinations as Fintry Provincial Park and Lake Okanagan Resort. Residents emphasized that Westside Road should be improved to standards which address roadway safety and not the encouragement of it as a Kelowna by-pass route;

2. Residents value retaining the predominantly rural character of their communities. To retain this rural character for future generations residents felt that environmentally sensitive features and visually sensitive areas such as Blue Grouse Mountain, Sugarloaf Mountain, Shorts Creek, Lambly Creek and Jennie Creek need to be preserved. Residents also felt that some form of visual quality assessment should be undertaken on forested Crown lands to minimize the impact to communities along the west shores of Okanagan Lake;

3. Residents envision the North Westside area to remain a predominantly rural area, and that major residential development will be directed to other areas of the Region where urban services and infrastructure are available;

4. Residents value the rural lifestyle their smaller and isolated communities provide. New development will be expected to reflect the rural character and lifestyle. New housing development should take the form of infill and development of existing vacant and serviced lands prior to considering other North Westside lands;

5. Residents feel the existing condition of infrastructure and utilities in certain subdivisions will need to be addressed to ensure existing development is adequately serviced by community water, sewage disposal, storm drainage, fire

protection, and maintenance of roads. In identifying the need to address certain servicing issues, residents acknowledge the area's limited or low level of infrastructure and community services, and desire to maintain this rural character for the future;

6. Residents envision the enhancement of existing North Westside community parks and recreation facilities, as well as the acquisition of future parks and facilities when appropriate;

7. Residents feel that further commercial and resort development should not be encouraged in the North Westside area beyond that which is already zoned or approved;

8. Residents feel the need to facilitate more efficient and effective means of communication, and coordination of existing services between all citizens of the North Westside area, the Regional District, and provincial ministries;

9. Residents envision a future school site in the area so that their children are no longer required to be bused to schools in the Lakeview and Vernon areas; and

10. Residents feel the need to establish a mobile or satellite health clinic in the North Westside area.

Chapter 3

Natural Environment

Setting

The Okanagan is the northernmost extension of the deserts that cover the great divide of North America. The geography is dramatic with steep valley hillsides that plunge down to the lake and valley bottom below. The rain shadows of the mountains create a very dry climate that changes by elevation. The closer to Okanagan Lake at the valley bottom, the drier it is. The normal high-water level of Okanagan Lake is 342.6 metres above sea level with a 200 year flood level of 343 m. Precipitation records indicate not only periods of drought, but also a wide variation of precipitation from one year to the next.

Air Quality

The valley topography of the Okanagan creates the conditions for temperature inversions that often result in periods of air stagnation. During such inversions the valley is essentially "capped" and air circulation into and out of the valley is reduced which highlights the increasing need for air quality management measures.

Ecosystems

The Okanagan is recognized as one of the most ecologically diverse regions of Canada. This valley has more Threatened, Endangered, and Rare species than any other part of BC. Those species are associated with certain ecosystems and cannot exist without the environment that supports them. The rarest ecosystems, and also those under the most threat, are in the valley bottom and consist of open grasslands, pine savannahs, and dry southerly oriented lands. The watercourses in these areas are important oasis that provide for connections between ecosystems and support biodiversity. The geography of within the OCP area is predominantly cooler east-facing slopes predominated by Interior Douglas-fir woodlands.

Shoreline

Within the Regional District of Central Okanagan OCP area, shorelines (along Okanagan Lake) account for nearly 38.4km, of which approximately 10.5km are cliff/bluff and approximately 4.4km are low rocky shorelines. Cliff/bluff and low rocky shorelines are recognized as preferred habitats for shore spawning Kokanee. (Data from Regional District of Central Okanagan – Okanagan Lake Foreshore

Inventory and Mapping (Magnan and Cashin 2006))1. The cumulative length of shoreline, within the OCP area, containing historic anecdotal records of Kokanee shore spawning activity is approximately 36.6 km (>95%).

The Regional District focuses upon conserving streams, wetlands, ponds and the variety of nearby ecosystems they support. There are three main streams that cross the OCP area; Whiteman Creek, Short's Creeks and Lambly (Bear) Creek. The Crystal Mountain area spans two primary watersheds; Powers Creek and Jack Creek, a key tributary to Trepanier Creek. These streams and their tributaries are an important habitat in their own right and drain into spawning streams for Kokanee, trout and other fish. In addition to these larger more prominent watercourses, numerous small springs and streams support moist to wet broadleaf communities along the east-facing slopes of the OCP area overlooking Okanagan Lake. These moist to wet riparian and wetland communities help to both attenuate and filter surface and shallow groundwater flows helping to maintain water quality and quantity of water in aquifers and streams.

In recent years, the Regional District, provincial, and federal agencies have conducted inventories of the rare ecosystems, in part to determine the range of rare and endangered species and to manage for health of these populations. Native fish populations have declined as a result of stream works (e.g.: dams, concrete breakwaters etc). There is also habitat loss from urban settlement and uses, agriculture, forestry, and the introduction of plants and animals not native to the Okanagan.

Environmental Standards and Policies

The Province of British Columbia has put in place legislation that requires local governments, such as Regional Districts, to protect streams and their associated riparian areas. The Regional District has a certain time frame in which to comply with provincial requirements and enact regulations and permits to protect local streams and water bodies.

The Central Okanagan Sensitive Ecosystem Inventory (SEI) is a co-operative effort between federal, provincial and local governments and conservation organizations to inventory rare and fragile ecosystems of this area. The information is derived from aerial photography and supported by selective field checking of the data. SEI is a "flagging" tool that provides scientific information and support to local governments and others who are working to maintain ecological and biological values. This information provides a useful basis for private land stewardship and land use planning, for example as input to rezoning or subdivision applications.

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[1] Magnan, B. and Cashin, T. 2006. Central Okanagan Lake Foreshore Inventory and Mapping. Regional District of Central Okanagan.

The North Westside Sensitive Habitat Inventory Mapping (SHIM) project is an aquatic inventory completed in 2008, which identifies, inventories, and maps all watercourses, their associated riparian habitats and important fisheries habitat features. This method is a standard for fish and aquatic habitat mapping in urban and rural watersheds in B.C. The mapping is used extensively as a reference in reviewing development applications.

In 2005, the Central Okanagan Lake Foreshore Inventory and Mapping Report was completed which identifies, inventories, and maps the foreshore, its associated riparian habitats and important habitat features. This methodology is used extensively as a reference in reviewing development applications along the foreshore of Okanagan Lake. The Foreshore Inventory Mapping will be reviewed and updated in 2010.

Federal and provincial governments have a number of guideline documents that may be considered to supplement RDCO's environmental standards and policies. These guidelines focus on environmental and waterway protect and enhancement. They include:

- Environmental Objectives and Best Management Practices for Aggregate Extraction;
- Develop with Care : Environmental Guidelines for Urban and Rural Land Development;
- Best Management Practices for Amphibians and Reptiles in Urban and Rural Environments in British Columbia;
- Instream Flow Guidelines for British Columbia;
- Standards and Best Management Practices for Instream Works;
- Riparian Areas Regulation Assessment Methods;
- Stream Stewardship: A Guide for Planners and Developers;
- Land Development Guidelines for the Protection of Aquatic Habitats.
- Access Near Aquatic Areas: A Guide to Sensitive Planning, Design and Management;
- Community Green Ways Linking Communities to Country and People to Nature;
- Wetland Ways: Interim Guidelines for Wetland Protection and Conservation in British Columbia;
- Green Bylaws Toolkit;
- Flood Hazard Area land Use Management Guidelines; and
- Western Screech Owl, *macfarlanei* subspecies Stewardship Agreement.

The Pressure on nature

Development tends to take place near the roads, amenities, and services (like sewer and water) found in the valley bottom. This also happens to be the location of rare dry grassland, and open forest ecosystems as well as stream and shoreline

spawning grounds for fish. With continued growth and the need to preserve agricultural land, there is ever-increasing pressure on rare and endangered plants and animals and continuing loss of habitat.

In the OCP area, development is confined to residential enclaves located within the deltas on the lake shore and in close proximity to the natural environment in the rural areas on higher plateaus. People who choose to live on rural acreages often do so because they want views, pasture, large gardens, a rural lifestyle, and privacy. Yet, those expectations need to be balanced with environmental concerns of conserving scarce and unique ecosystems.

The Image of the valley

The environment of the Okanagan valley is more than a few interesting plant and animal communities. Local residents place a high value on the natural landscape. It is also a key attraction to new residents and visitors. The Okanagan valley has a distinct overall image that is created, largely in part, by its natural environment.

Our environment too

The environment of the Okanagan valley not only supports plants and animals but also the people who live here. With the high hills surrounding the valley and its limited rainfall, the local ecosystem that sustains us all is delicately balanced. The quality of the air and water are easily affected by human activities. The choices we make in managing the area we live in such as the amount of water we use, the type of plants we landscape with, and how and when we burn debris, will directly affect the quality of our lives in the future.

Taking the Lead

The Regional District has endeavoured to provide a leadership role in environmental responsibility. Through developing improved mapping and information, adoption of environmentally responsible products and practices, and the proactive support of environmentally responsible programs, the Regional District intends to be a positive example and active player in promoting environmental responsibility. The Regional District has successfully undertaken, and will continue to undertake, initiatives to protect, enhance, and plan for the sustainability of the natural environment.

3.1 Objectives

There are important objectives that form a framework for the policies:

1. Maintain a healthy environment;
2. Integrate measures to sustain environmental quality and consider impacts on the environment in future land use decisions;
3. Identify and encourage protection, through the development permit process and relevant agencies, of the following:
    a. Riparian areas on creek corridors, lakes and wetland areas;

   b. Wildlife corridors and routes for migratory birds;
   c. Mature to Old growth coniferous woodlands; and,
   d. Sensitive grassland and wildflower areas
4. Identify, protect and restore environmentally significant areas;
5. Enhance ecological systems and ensure diversity in the Region;
6. Proactively address environmental issues and take a leadership role;
7. Work with property owners and agents to inform and guide the design of development in a way that is sensitive to important landscape features such as watercourses, hillsides, and sensitive ecosystems of the Okanagan;
8. Expand partnerships in the community and in the public and private sectors to integrate open spaces and conservation areas with development lands;
9. Ensure that water quality and quantity is managed for future generations;
10. Meet the requirements of BC's provincial legislation for the protection of streams, watercourses and riparian areas;
11. Reduce risk to sensitive ecosystems, to Rare and Endangered species, to Crown Land resources, and to the community from unintended or unnecessary change to the natural environment; and
12. Require new developments to carry out wildlife habitat and corridor assessments.

3.2 Policies

3.2.1 Water and Riparian Protection

The Regional District will:

1. Continue to protect Environmentally Sensitive Areas on private land through the Development Permit, Rezoning and Subdivision processes.

2. Ensure strict adherence to the *Land Development Guidelines for the Protection of Aquatic Habitat*, which are to:
   - Provide and protect vegetated leave areas to water courses;
   - Control soil erosion and sediment in run-off water;
   - Control the rates of run-off to minimize impacts on the lake;
   - Control work and construction along the foreshore area;
   - Maintain fish passage in streams and the lake for all salmonoid life stages; and,
   - Prevent the discharge of deleterious substances into the lake.

3. Protect Kokanee spawning grounds located in the OCP area.

4. Retain land currently in public ownership located next to water (such as streams and shoreline) as well as water bodies (lakes, reservoirs) in public ownership.

5. Support foreshore leases for uses such as docks when they are ancillary to an upland use and are designed to maintain or enhance the natural function of the foreshore and are in compliance with current provincial guidelines and protocols.

6. Work with the Province to ensure that development adjacent to the Okanagan Lake foreshore and riparian areas are appropriate to the shoreline condition and adjacent aquatic habitat values and that permitted land use is harmonized with protection of these areas as assessed at the Provincial level (based on Kokanee Shore spawning Values). Development setbacks will be in accordance with a shoreline sensitivity rating and activity risk (*A full description of the assessment matrix including: risk; protocol for works; and permissible activities is contained in Appendix 6, Supplement to Aquatic Development Permit Area: Discussion on Sensitive Shoreline Areas).*

7. Recommend to the Province the limitation of dock construction along the Okanagan Lake where required to protect Kokanee spawning grounds, and ensure those which are approved conform to the Provincial private moorage policy and guidelines.

8. Will co-operate with senior governments to provide a coordinated strategy for the stewardship of "riparian assessment areas", in keeping with the general intent of the Riparian Areas Regulation, to ensure that no Harmful Alteration, Disruption, or Destruction of Fish Habitat (HADD) occurs.

9. Work with Provincial and Federal water and resource Managers to protect and enhance water quality, base flows, natural drainage patterns, and continuous riparian corridors of sufficient width to accommodate the dynamic nature of the hydrologic system, to avoid and reduce flood damage, to avoid the need for channel stabilization, to avoid underground drainage systems, to avoid groundwater interruption, and to protect aquatic biota and habitats.

10. Protect ground water, streams, ponds, lakes, and shorelines using methods such as development permits, covenants, subdivision and development servicing bylaws, and park dedication.

11. Support and implement watercourse specific management plans such as the Okanagan Lake Foreshore Plan and Central Okanagan Lake Foreshore Inventory and Mapping.

12. Maintain appropriate riparian buffers, determined by qualified professionals that take into account processes of natural erosion, deposition and movement of natural stream boundaries.

13. Continue to support Okanagan Basin water management strategies, including the activities of Okanagan Basin Water Board.

14. Implement the strategies of the *Central Okanagan Lake Foreshore Plan*, which address competing human uses and natural environment.

15. Maintain and periodically update the inventory of streams, ponds, lakes and shorelines using the *Sensitive Habitat Information Mapping (SHIM)* method.

16. Update records of fish habitat, watercourse location, and watercourse condition, and, produce a strategic overview of the aquatic environment utilizing the information from the *Sensitive Habitat Information Mappin*g.

17. Update records of foreshore condition and kokanee spawning locations and, produce a strategic overview of the lakeshore aquatic environment on the North Westside utilizing the information from the *Central Okanagan Lake Foreshore Inventory and Mapping* Report (2005);

18. Produce Foreshore Development Guidelines utilizing the information from the *Central Okanagan Lake Foreshore Inventory and Mapping* methodology*;*

19. Encourage and support the analysis of ground water hydrology, in areas with high water tables or identified aquifers, and require environmental assessments in advance of considering zoning amendments for uses such as heavy industrial, mining, fuel storage and/or sewage containment.

20. Locate low intensity land uses and manage forms of development on floodplains and aquifers in accordance with provincial regulations.

21. Recommend that Provincial land and water Managers manage the drainage areas by controlling access to community water supplies and intakes, limiting development including resource leases with the maintenance of water quality and quantity as prime considerations. The community water supply should be protected.

3.2.2 Terrestrial Management

The Regional District will:

1. Continue to protect Environmentally Sensitive Areas on private land through the development permit, rezoning and subdivision processes.

2. Require that rezoning applications for land proposed for development:
    a. Include information that assesses the environment;

   b. Identifies natural features for that site; and,
   c. Considers environmental impact and overall ecosystem connectivity on and offsite. The exact characteristics and location of connecting ecosystems will be refined through development applications and in consideration of the Regional District Sensitive Ecosystem Inventory

3. Consider the rarity and uniqueness of the particular habitat as it relates to the remaining habitat in the OCP area. Development should avoid sensitive areas and be designed to retain important ecosystem features and functions. Responsiveness to this information will be a very important consideration in the approval of an application.

4. Require new developments to prepare a wildlife habitat and migration impact statement where there is identified potential for impact on wildlife habitat.

5. Continue to advocate protection of Environmentally Sensitive Areas on Crown land through the Okanagan-Shuswap Land and Resource Management Plan process;

6. Continue to pursue the implementation of the wildlife strategies through the objectives and policies in the Westside Road Parks Preplan (1996).

7. Evaluate development and servicing proposals in consideration of the Sensitive Ecosystem Inventory of the Regional District of Central Okanagan and the North Westside Aquatic Inventory (SHIM) of the Regional District of Central Okanagan as well as provincial Best Management Guidelines and publications.

8. At time of subdivision and rezoning, assess opportunities using methods such as park dedication, land trusts, covenants, or development agreements to conserve corridors of "sensitive ecosystems" (refer to Sensitive Ecosystem Inventory) and to manage these areas in a manner that provides connectivity and movement of Rare and Endangered species. Open space should have characteristics in accord with provincial government Best Management Practices.

9. Conserve, enhance and promote the protection of wildlife corridors and ecosystem connectivity with interfacing Crown lands.

10. Maintain and protect natural linkages. Prefer for protection as open space those lands, which are riparian areas, ravines, steep slopes and sensitive ecosystems in a way that provides for overall ecosystem connectivity in the OCP area.

11. Support provincial management of Endangered Species by discouraging the sale of Crown Land and the extension of community water, public roads or sewer services to Crown Lands as established in the Okanagan Land and Resource Management Plan (LRMP), until such time as a comprehensive plan is completed.

12. Map and evaluate riparian areas, ravines and steep slopes as a whole in order to avoid the creation of isolated ecosystems due to subdivision or development. Explore alternatives to ensure interconnectedness between ecosystems. Road and utility corridors should be designed to minimize crossings of aquatic and sensitive ecosystems.

13. Explore alternatives to ensure interconnectedness between ecosystems. Road and utility corridors should be designed to minimize crossings of aquatic and sensitive ecosystems.

14. Encourage the use of native vegetation to reclaim disturbed sites.

15. Encourage the use and management of topsoil specifically designed for water retention purposes.

16. In general, development design should reflect the objectives and guidelines of the Best Management Practices produced by the Province of BC.

3.2.3 Stewardship and Management

The Regional District will:

1. Continue to support an Environmental Advisory Commission to consider and provide input to the Regional Board and the citizens of the North Westside in the protection, enhancement, restoration, management and appreciation of our common natural heritage and to ensure that communities are planned for the environmental sustainability and community health for present and future generations.

2. Develop an educational program and materials for those properties located within the Terrestrial Ecosystem Development Permit Area in order to encourage awareness and stewardship of sensitive ecosystems.

3. Work with the Environmental Advisory Commission to implement provincial Best Management Practices and/or to assess site-specific management practices based on measures and results based standards to supplement Policies of the Official Community Plan.

4. Continue to support and participate in a regional Air Quality program to evaluate the incremental impacts of development and to develop regional management agreements that protect air quality.

5. Investigate a joint process with the Province to identify wildlife corridors, ecosystem connectivity, forest interface management areas and develop a long-term strategy for crown lands in advance of considering urban expansion.

6. Determine methods to fund the management of natural open space lands that are under the jurisdiction of the Regional District.

7. Encourage and support voluntary habitat conservation and restoration. Raise the public awareness of good environmental stewardship practices.

8. Continue to review the bylaws and activities of the Regional District to ensure that the environmentally responsible practices are being utilized.

9. Continue to support regional pest management regulations, including measures to control the spread of weeds.

10. Support measures designed to improve forest health (e.g.: tree spacing, control of pine beetle) and, where possible, implement complementary measures on rural lands adjacent to provincial forest.

11. Consider supplementing Regional District environmental policies and programs by supporting partnership agreements to implement regulatory programs of provincial and federal agencies.

12. Promote an ethic of environmental stewardship through civic leadership and ongoing education on ways to reduce, reuse and recycle resources, as well as lifestyles and patterns of development that will help improve environmental quality.

Chapter 4

Natural Hazards

The Okanagan is a steep sided valley nestled in the mountains. In the OCP area, rural and resort development is located on the flat deltas along the lakeshore and in the hillsides due topographic constraints. The rural and resort development requires a carefully planned response to the challenges these locations present. It is also important that, while not considered a focus for dense residential development, that there are policies in place to ensure that there is consideration of important natural hazards before there are any policy changes to allow for more intensive development in the future.

Variety of Information

When a development is proposed there are a variety of hazards that are assessed including flooding, landslip or rockfall, and forest wildfire. The information that is available for the entire Regional District can be variable and may lack detail and so hazards often need to be investigated on a site-by-site basis.

Shaping development

The hazards that are identified on a particular site are factors that need to be considered in site planning for any proposed development. It is important to know when to consider hazards and what level of detail is necessary.

A long-term approach to hazards

Some hazards such as geologic issues can be evaluated and reduced at the time of development. Other hazards such as wildfire not only affect new development but threaten existing homes and businesses as well. Because forests grow, it is also a hazard that can change over time. In our dry valley climate, the threat of wildfire will be forever present and there needs to be several approaches across a variety of fronts to combat it. Ongoing management efforts are required.

Restoring a Balance

Fires were once common in this dry valley. The ponderosa pine, for example, has pinecones that open when exposed to fire and release seeds. Because fires burned through on a regular basis debris and fuels were periodically removed. Therefore when fires did burn they had less fuel, were "cooler", and more often restricted to the ground. Because human settlement has removed the localized ground fires that once were common in the valley we need to mimic those effects not only to reduce wildfire hazard, but, to restore and maintain a natural environment once shaped by fire.

4.1 Objectives

1. Protect the natural visual quality and character which form an integral part of the OCP area.
2. Adequately assess conditions hazardous to development.
3. Require that hazards be avoided or reduced at the time of development.
4. Reduce wildfire hazard threats to existing development.
5. Help prevent the loss of life and damage to property from flooding, erosion, moderate or higher fire hazard, soil instability, landslide, and other potential hazards;
6. Support residential and resort development in appropriate hillside locations which respect the topography and retain existing dominant land forms and vegetation.

4.2 Policies

The Regional District Will:

1. Discourage development that may be damaged by flooding from being located on land that might be flooded as identified by the setbacks and elevation provisions recommended by the Province of BC. Where construction may occur on existing parcels that might be flooded, buildings should meet those construction and location requirements.

2. The susceptibility of an area to mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche may be assessed at the time of development application:

    a. A rezoning application may require an overall assessment of the site for development suitability (from conditions both on and off the site) prepared by a professional engineer licensed in BC specializing in geotechnical issues. Further detailed information may be required as a result of the assessment.

    b. A subdivision application may require a detailed hazard report (from conditions both on and off the site) and ways to reduce that hazard to a safe level prepared by a professional engineer licensed in BC specializing in geotechnical issues. The professional engineer will be required to determine an adequate level of safety given the type of hazard and the land use proposed. Completion of works that reduce the hazard may be required prior to subdivision approval depending upon the content of the report.

    c. Responding to the referral of an application for a lease on Crown Land, the Regional District may request a detailed

hazard report for the site itself and the effect upon development in areas neighbouring the site.

3. Require that the susceptibility of an area to wildfire hazard be assessed at the time of development application:

    a. A rezoning application may require an overall assessment of the site for susceptibility to wildfire (from conditions both on and off-site) prepared by a professional forester licensed in BC specializing in forest wildfire assessments. Further detailed information may be required as a result of the assessment.

    b. A subdivision application may require a detailed report of the site for susceptibility to wildfire (from conditions both on and off-site) and ways to reduce that hazard.

        The report shall be prepared by a professional forester licensed in BC specializing in forest wildfire assessment and using the methodology supported by the BC Ministry of Forests. Completion of works that reduce the hazard will be required prior to subdivision approval depending upon the content of the report.

    c. Responding to the referral of an application for a lease on Crown Land the Regional District may require a detailed wildfire hazard report for the site and development in areas neighbouring the site, including recommendations that reduce the hazard.

    d. A professional engineer's report may be required to evaluate road access, road loads in an emergency, water pressures, and other factors pertaining to wildfire.

    e. Encourage provincial agencies to update mapping for the OCP area in order to clearly indicate areas that are susceptible to wildfire.

    f. Coordinate with RDCO Parks staff regarding the ongoing:
        i. Regional *Community Wildfire Protection Plan* (CWPP)
        ii. Fuel Management and Fuel Hazard reduction.

    g. Investigate and implement methods of wildfire hazard abatement to a moderate level from both a Regional and local perspective. Support the consideration of the reduction of

wildfire hazard to the OCP area in provincial forest management and harvesting decisions.

h. Utilize a variety of wildfire hazard reduction methods such as education, development evaluation and approvals, development permits, and building permits. Review and update current practices.

i. Determine methods that will ensure that wildfire hazard reduction works are maintained in the long term. Investigate methods such as covenants, zoning bylaws, subdivision and development bylaws, building bylaws, and specified area taxation.

j. Encourage wildfire hazard reduction in a way that is supportive of restoring the natural environment. Such hazard reduction mimics the natural effects of localized ground fires that once were common but that human settlement has removed from the environment. Typical methods include thinning and spacing trees and vegetation, removal of debris and dead material from the ground, and removal of lower tree branches. Wildfire hazard reduction, done responsibly, can be compatible with habitat conservation and restoration.

k. Address the recommendations of the Regional District of Central Okanagan *Community Wildfire Protection Plan* (CWPP).

Chapter 5

Agriculture and Large Holdings

The rural landscape forms a significant back drop to the character of the North Westside plan area. The agricultural and large holdings (e.g. RU-ALR, RU1 and RU2 zones) reinforce the rural character. This chapter discusses the issues, objectives and policies for the North Westside area.

5.1 Agriculture and Large Holdings

All lands within the Agricultural Land Reserve (ALR) are designated on the OCP Future Land Use Map 8 as "Agriculture". Large Holdings are those larger parcels designated in the Zoning Bylaw as Rural Residential, RU1 and RU2, and having a minimum parcel size of 4 ha(10 acres) or greater, and allow for example compatible resource oriented uses such as forestry and farming. Large rural parcels have been designated "Large Holdings" on the OCP Future Land Use Map 8. Together the agricultural and large rural designations comprise 78% of all lands in North Westside area, and contribute towards defining the rural character of the North Westside area.

The *Farm Practices Protection (Rights to Farm) Act* and amendments to the *Local Government Act* provide the Regional District with new legislation to implement the Province's Right to Farm concept. The Province has prepared a *Guide for Bylaw Development in Farming Areas* to provide standards that can be incorporated into zoning bylaws or to create separate farm bylaws. Although active agricultural operations are limited in the plan area, the provisions in the OCP are intended to support those lands in the ALR as well as retain the rural character of the area. Agricultural Land Reserve Areas map identifies those areas which are in the Agricultural Land Reserve.

Issues

- Protection of large rural and agricultural parcels as a defining character of the area;
- How to implement the "Farm Practice Protection (Right to Farm Legislation)";
- Conflict between agricultural operations and residential/resort developments; and

- The need to address the increased potential of fire hazard by subdividing to permit increased rural residential uses.

Objectives

The Regional District's agriculture and large holding objectives are to:

1. Protect and maintain the economic viability of the agricultural sector of the community and encourage its improvement and expansion;

2. Improve the coexistence between the residential/resort development, and rural and agricultural uses through better buffering and screening techniques;

3. Support the removal from the ALR any lands identified by the Provincial Agricultural Land Commission as not part of the long term agricultural strategy where the land owner is in agreement; and

4. Preserve existing large rural and agricultural parcels in recognition that the North Westside area will continue to remain a rural area within the regional context of the Rural Westside Official Community Plan, with limited community services and infrastructure.

Policies

The Regional District will:

1. Designate all lands within the ALR as "Agricuture", excepting those lands approved for non-farm use by the Provincial Agricultural Land Commission as well as those lands containing or proposed for, non-farm uses that are permitted within the ALR;

2. In consideration of limited community services, infrastructure and existing land available for development, zoning amendment applications to allow for further fragmentation of parcels within "Agriculture" and "Large Holding" designations will not be supported;

3. Encourage new subdivisions adjacent to agricultural land or livestock grazing land, to provide perimeter fencing of the subdivision notwithstanding that Provincial jurisdictions having authority may require this provision;

4. Evaluate new developments on the implications and impacts on the agricultural uses in the area;

5. Ensure new developments provide and maintain distinct buffers which conform to the *Landscape Buffer Specifications* established by the Provincial Agricultural Land Commission, including any future amendments thereto;

6. In addition to the *Landscape Buffer Specifications*, also consider where appropriate, naturally occurring buffers such as roads, topographic features, watercourses, fencing, and transitional land uses such as country residential and small holdings parcels;

7. Reduce impact of pest infestation on farm operations and residential fruit trees by enforcement of bylaws dealing with abandoned orchards and non-maintained orchards;

8. Minimize the impact of roads and utility corridors through agricultural land by utilizing only those lands necessary, and by maximizing the capacity of existing corridors and roads;

9. Support the agricultural industry by establishing economic strategies to promote the industry, and to identify new farm markets;

10. Support the agricultural and rural economy by encouraging secondary uses (e.g. home occupations, agri-tourism, and second processing of products produced on site). Note: methods to achieve this policy may include revisions to *Zoning Bylaw No. 871* with respect to the home occupations provisions, bed and breakfast regulations, and the uses or "value added" processes permitted in the agriculture and large holding zones;

11. Implement the Provincial Agricultural Land Commission and Ministry of Agriculture policy direction to implement the "Farm Practice Code" through its *Guide for Bylaw in Farming Areas* as part of *Zoning Bylaw No. 871*;

12. Consider support for ALR exemption or exclusion applications based on community need, having regard for the land's agricultural capability and the examination of non-ALR alternatives;

13. Consider support for applications for exemptions or exclusion from the ALR where the land is of very poor agricultural soil capability. The final decision for exemption or exclusion from the ALR rests with the Provincial Agricultural Land Commission;

14. Resource development should not be subject to visual impact analysis from Controlled Recreation tenures. Facilities such as Crystal Mountain ski runs, upper mountain tea house or restaurant will be oriented to avoid long viewscapes.

15. Request the Provincial Approving Officer require any new developments undertake a fire hazard risk assessment where the property contains or borders

forest land. The assessment will consider, but not be limited to the following criteria:

a) incorporating fuel breaks adjacent to or on the large holding or rural subdivisions;

b) establishing zones which are clear of debris, highly combustible material or trees around potential structures and homes as defined by the Ministry of Forests;

c) utilizing fireproofing techniques and fireproof materials in building design;

d) designing roads to provide evacuation routes and facilitate movement of fire fighting equipment;

e) ensuring all roads are named and signed;

f) availability of volunteer fire brigades and where appropriate fire protection districts;

g) availability of water supply facilities adequate for fire suppression;

h) provision of access to local water sources, lakes and streams as part of access requirements; and

i) establishment of residential building setbacks of 30 metres abutting Crown land.

5.2 Resource Extraction

During the focus group sessions, residents expressed concern over the potential of large-scale tree removal, and its many impacts from soil erosion to visual impact. Much of the upper forested lands such as Sugarloaf Mountain and Blue Grouse Mountain are Crown land and outside the boundaries of the North Westside OCP. These lands are influenced by the *Okanagan-Shuswap Land and Resource Management Plan* (LRMP) process, which is presently under review. The Regional District is a participant in the process along with other provincial ministries and stakeholders and has interests which include:

- plan coordination and consistency with OCP's such as the Rural Westside Official Community Plan;
- land use compatibility;
- protection of community health;

- protection of visual quality and land forms;
- water quality and quantity;
- protection of the environment; and
- parks, open space and recreational access.

On privately held land in the OCP boundaries, the Regional District is limited in the protection of forested areas. The Regional District is limited to areas subject to floods, erosion and landslides, or avalanche. The Regional District may however, request visual quality assessments where private lands are proposed for development.

Mineral resource extraction is controlled by the Ministry of Energy, Mines and Petroleum Resources, Mining and Minerals Division. This responsibility is established in two acts: the *Mineral Tenure Act*, which establishes tenure, and the *Mines Act*, which regulates mining activities through the *Health, Safety and Reclamation Code for Mines in B.C.*

The authority of the Regional District is limited to the provision under the *Local Government Act*. The North Westside OCP is required under the *Local Government Act*, to identify the approximate location and area of sand and gravel deposits that are suitable for future sand and gravel extraction. Mineral and Tenure Activities map identifies known mineral and tenure activities provided by the Ministry of Energy, Mines and Petroleum Resources.

While the Ministry of Energy, Mines and Petroleum Resources expressed concern to minimize loss of mineral resources through land alienation in order to ensure the supply of affordable sand and gravel, the objective and policy statement in this section provide direction to address the conflicts that do arise where large scale removal of the resource occurs in proximity to existing communities and transported on roads such as Westside Road.

Issues:

- Regional District's ability to control tree cutting on private land is limited to areas subject to floods, erosion, landslide or avalanche;
- The public's desire to implement visual quality assessment on Crown land, and on private lands where development occurs;
- Conflict between recreation vehicles and logging trucks on Westside Road;
- Conflict between sand and gravel operations in proximity to existing communities and hauling on Westside Road; and

- Loss of mineral resources through development.

Objectives

The Regional District's resource extraction objectives are to:

1. Encourage the Province to manage the natural resources in the Okanagan Lake watershed in a sensitive and integrated manner, and to have due consideration for those who use and live next to Crown land;

2. Encourage the Ministry of Energy, Mines and Petroleum Resources to consider adjacent land uses and impacts on existing infrastructure when issuing resource extraction permits;

3. Encourage the Ministry of Energy, Mines and Petroleum Resources to require all resource aggregate extraction sites to be reclaimed once the aggregate has been extracted;

4. Encourage the Ministry of Forests to apply visual quality assessment guidelines to the Provincial Forest visible from Okanagan Lake; and

5. Encourage the retention of tree cover on privately held land in order to minimize visual impacts, erosion, land slides, and sedimentation in area stream courses.

Policies

The Regional District will:

1. Continue to participate in the *Okanagan-Shuswap Resource Management Plan* process as a means to ensure local government concerns are addressed with respect to the natural resources in the Okanagan Lake watershed;

2. Encourage the Ministry of Energy, Mines and Petroleum Resources to continue referrals of mineral exploration proposals to the Regional District for comments. Areas having aggregate resources are identified on the Mineral and Tenure Activities map. The Ministry is encouraged to have due consideration for the impact of resource extraction activities on existing residential developments and on Westside Road;

3. Encourage the Ministry of Energy, Mines and Petroleum Resources to require all resource aggregate extraction sites to be reclaimed once the aggregate has been extracted;

4. Require all large aggregate resource extraction sites, on one hectare or larger, to be designated Industrial I4 under the Zoning Bylaw; or where the extraction process is expected to take less than two years require a Temporary Industrial Permit. This

policy recognizes the Regional District's ability to only regulate the process of aggregate material.;

5. Encourage the Ministry of Forests to implement a visual quality assessment program for the Crown land visible from Okanagan Lake, including Sugarloaf Mountain and Blue Grouse Mountain; and

6. Require a visual quality assessment for private lands deemed suitable for subdivision, rezoning or building, and may require a conservation covenant to preserve significant forested areas in areas identified as environmentally sensitive, steep hillsides, or leave strip areas adjacent to watercourses.

Chapter 6

Residential

Historically, residential development has occurred in proximity to settlement areas such as Fintry, Killney Beach and Wilson's Landing. The predominant housing form in the plan area is single detached housing on lot sizes which range from .25 hectares in the Zoning Bylaw's Country Residential, RU5 zone down to 700m^2 in the Single Family Residential, R-1 zone. Adjacent to many of the settlement areas are larger country residential and small holding lots which range in size between 5000m^2 and 2 hectares.

Properties zoned, or having the potential to be zoned, in the Zoning Bylaw as Single Family Residential, R-1, R1a, and R-1M zones, Residential (Mobile Home Park), R5 zone; and Country Residential, RU5 zone, are illustrated as "Residential-Low Density" on the OCP Future Land Use Map 8. Lands zoned, or having the potential to be zoned, in the Zoning Bylaw as Country Residential, RU4 zone, and Small Holdings, RU3 and RU6 zones are illustrated as "Rural Residential" on the OCP Future Land Use Map 8.

The North Westside area has in the past maintained a large inventory of vacant lots in all residential categories. For example, the 1997 inventory of R-1 (700 m^2) and RU5 (.25 ha) zoned lots totaled 1571 lots. In comparison the 1996 population for the entire North Westside area was 1205 persons housed in approximately 548 single detached homes. The existing vacant lot supply is adequate to meet the housing needs for the time horizon of this Official Community Plan.

The OCP identifies one multiple family site located in Caesar's Landing. The zones in the Caesar's Landing area replace a Land Use Contract and were considered by the Regional District to have less impact than the original LUC's. This multiple family designation corresponds to a comprehensive development, which includes a mix of land uses including residential and commercial. The OCP Future Land Use Map designation of "Multiple Family/Intensive Residential" is intended for apartment, townhouse and intensive residential uses up to 60 dwelling units per gross hectare.

During the initial public consultation process residents expressed a desire to see the existing vacant lots utilized prior to more new lots being developed. Residents also suggested the OCP make provision for new housing developments to prepare "development plans" which would require public input prior to Regional Board consideration.

Issues

- How to preserve the existing rural character of residential areas;
- The need to provide housing for a full range of income levels, lifestyles and ages;
- Maximizing use of existing serviced and subdivided lands;
- Requiring preplans for any new large residential development areas; and
- Make provision for home occupations as a form of economic development.

Objectives

The Regional District's residential objectives are to:

1. Provide the opportunity for residential development within existing established communities;
2. Provide for a range of housing which addresses life cycle, income levels, lifestyles and housing needs;
3. Maintain the rural character of the North Westside area; and
4. Encourage the establishment of home based businesses.

Policies

The Regional District will:

1. Encourage new housing on existing vacant lots prior to considering more of the same housing type on large holding or rural residential lots;
2. In consideration of limited community services, infrastructure, and existing land available for development, zoning amendment applications to further subdivide rural parcels for residential development will not be supported;
3. Consider alternatives to the existing Land Use Contracts which presently exist, in favour of a concept development plan to be prepared which proposes a more conventional housing form and density consistent with policy 4 below;
4. RC-1 (Compact Housing) shall be considered only in the multiple Family/Intensive Residential designation. Two zones, of which RC-1 is one, were created from what used to be encompassed under one higher density multiple family-housing zone. That previous zone was too broad and led to uncertainty

with regard to its intent for both the community and developers. RC-1 was created to include all intensive residential development (intensive residential development defined as separate housing units at a low multiple family density) while another zone was created to include multi-story housing. RC-1 has not been considered by the community for any designation other than Multiple Family/Intensive Residential."

5. Assess future residential developments and concept development plans on the following development criteria:

    a) capability of handling on-site domestic water and sewage disposal, or availability of community water or sewer;

    b) availability of community water or sewer systems to be extended to existing neighbouring subdivisions which are presently unserved;

    c) capability of the natural environment and topography to accommodate additional development;

    d) impact on adjacent land uses and character of the existing area;

    e) location relative to existing roads and other community and essential services;

    f) susceptibility to natural hazards including, but not limited to, flooding, soil stability, land slide, rockfall, moderate or higher forest fire risk;

    g) demonstration of housing need, and provision for a variety of housing types;

    h) timing and staging of development;

    i) an environmental impact assessment where the parcel contains watercourses; and

    j) a visual quality assessment where development is proposed on hillsides and other visually sensitive areas.

6. Request the Provincial Approving Officer require any new developments undertake a fire hazard risk assessment where the property contains or borders forest land. The assessment will consider, but not be limited to the following criteria:

    a) incorporating fuel breaks adjacent to or on the rural or residential subdivisions;

b) establishing zones which are clear of debris, highly combustible material or trees around potential structures and homes a defined by the Ministry of Forests;

c) utilizing fireproofing techniques and fireproof materials in building design;

d) designing roads to provide evacuation routes and facilitate movement of fire fighting equipment;

e) ensuring all roads are named and signed;

f) availability of volunteer fire brigades and where appropriate fire protection districts;

g) availability of water supply facilities adequate for fire suppression;

h) provision of access to local water sources, lakes and streams as part of access requirements; and

i) establishment of residential building setbacks of 30 metres abutting Crown land.

7. Review the need to provide more affordable housing using secondary suites, manufactured homes within existing and new developments, while maintaining sensitivity to the existing rural character of the North Westside area, and resolving additional load on any infrastructure;

8. Support the provision of indoor and outdoor amenity spaces in multiple housing residential areas for private use to create a more people-friendly built environment, and to foster increased livability, visual experience and neighbourliness.

9. Require development permits for all multiple family developments to control form and character, and to ensure sensitive integration in their comprehensive developments (e.g. Caesar's Landing);

10. Review its *Zoning Bylaw No. 871* and *Subdivision and Development Servicing Bylaw No. 704* to provide alternate methods for the increasing of amenities, open space, special needs and affordable housing, and consider such mechanisms as: density bonusing, density transfers; covenants; dedications; and voluntary stewardship in the form of contracts, leases and trusts;

11. Encourage more flexible zoning techniques or tools for development projects which are comprehensive in terms of mixing residential and other compatible uses, open space and preservation of environmentally sensitive areas;

12. Ensure special attention is given to those new residential developments which abut existing residential areas. Transition areas or zones will be identified to ensure that new and existing developments blend together in a sensitive manner;

13. Where new residential developments may potentially conflict with rural or agricultural land uses, development guidelines will be prepared as part of the approval process. The following criteria will be incorporated:

    a) Where new development adjacent to areas within the Agricultural Land Reserve, guidelines prepared by the Provincial Agricultural Land Commission - *Landscape Buffer Specifications*, should be incorporated within the design guidelines; and

    b) Environmentally Sensitive Areas such as streams and watercourses should be incorporated into the buffer areas between urban and rural uses; and

14. Encourage and promote the establishment of home occupations (a.k.a. home based businesses) in the North Westside area as part of its Regional economic development strategy. To achieve this policy the Regional District will review and revise the home occupation regulations contained in the *Zoning Bylaw No. 871*. Provision should be made to provide flexibility and a range of home occupations which do not detract from the residential or rural character of the area, yet allow for reasonable, compatible, and "value added" ancillary home based commercial uses.

Chapter 7

Commercial

During the initial consultative processes, the public expressed a desire to encourage a limited amount of local commercial uses to serve the established rural residential and recreation communities. They also expressed a strong desire to not see Westside Road become a proliferation of strip commercial. This OCP identifies those existing zoned local commercial areas. Residents presently drive outside the plan area to purchase all local commercial services. The growth management and transportation demand management concepts both encourage some form of limited local commercial uses to serve the needs of local and recreational communities and thereby reducing the number of trips and the length of trips outside the area. The OCP Future Land Use Map 8 illustrates existing commercially zoned parcels (e.g. Business District C1, Neighbourhood and Commercial C2) as "Commercial".

The North Westside area has historically been perceived as a rural and resort area. There have over the years been a number of large scale commercial resort developments and commercial recreational resorts proposed. To date only a few have actually developed. There remains the potential for the remaining number to be built under existing zoning and Land Use Contracts, and this concerns residents in the area given the condition of Westside Road. The OCP Future Land Use Map 8 identifies the resort developments and recreational resorts as " Commercial-Resort".

The resort zoning remains on the Fintry site. Consideration should be given by the Province or the Regional District to rezone the lands to a provincial park designation, and to prepare a land use plan for the area which is compatible with the existing residential area and the natural environment.

Issues

- The lack of local commercial development;
- The public's concern about the development of strip commercial along Westside Road;

- The public's desire to ensure, wherever possible, approved existing resorts are developed in a sensitive manner to adjacent lands, and improve Westside Road adjacent to their development; and

- The concern that the existing resort zoning is still on Fintry Provincial Park.

Objectives

The Regional District's commercial objectives are to:

1. Encourage good quality local commercial uses to serve the existing rural, residential and recreation communities;

2. Address the further expansion and development of resort developments; and

3. Rezone the Fintry Provincial Park site to park.

Policies

The Regional District will:

1. Limit local commercial uses to those existing zoned areas, or where they may be developed in conjunction with resort developments;

2. Not support commercial development along Westside Road beyond that which may already be zoned, or designated;

3. Direct resort development to those areas identified on Future Land Use Map 8 and evaluate each proposal on the following criteria:

    a) capability of handling on-site domestic water and sewage disposal, or availability of community water or sewer;

    b) capability of the natural environment and topography to accommodate the development;

    c) impact on adjacent land uses and the character of the existing area;

    d) Where feasible, any improvements to Westside Road should include sufficient shoulders to permit safer pedestrian opportunities;

    e) availability of essential services (e.g. fire protection);

    f) susceptibility to natural hazards including but not limited to, flooding, soil instability, rock fall or moderate or higher forest fire risk;

g) environmental impact where the land parcel contains lakes, marsh lands, and watercourses; and

h) visual quality assessment where the resort development is proposed on hillsides and other visually sensitive areas.

4. Avoid zoning that would result in road side commercial or overnight accommodation uses on crown lands abutting the road between Upper Glenrosa and Crystal Mountain Resort.

5. The area designated "Resort Study Area" requires a cost of growth analysis which is to indicate the total impact upon all infrastructure and potential demand for additional infrastructure within the North Westside OCP area. Following this analysis the Regional Board will determine if an Official Community Plan Amendment is warranted. The Regional Board shall ensure that proper mechanisms are in place for the developer to pay for the full costs of growth prior to consideration of an Official Plan Amendment.

   Should an Official Community Plan Amendment be considered as a result of Policy 4, that the "Resort Study Area" site be evaluated in accordance with the criteria identified in Policy 3 of Chapter 6 and the overall density shall be evaluated in accord with the intent and policies of the North Westside OCP. In addition, the development of Lot 6, Plan 30301 shall be connected to the infrastructure services of the Lake Okanagan Resort.

Chapter 8

Transportation

During the public consultation process the condition of Westside Road emerged as the single most important issue. The primary concern expressed was the existing condition of the road. The road has many blind corners; narrow rights-of-way; few safety rails; and usually no shoulders where to pull off. The North Westside OCP expresses the community's strong desire to have the road made safer.

At the same time however, residents also expressed the desire not to have the road turned into a freeway which would impact the character of this rural area. The Ministry of Transportation and Infrastructure identifies Westside Road as a controlled access highway, Westside Road is also part of the Ministry's long-range planning process, and the *Okanagan Valley Transportation Plan* (OVTP) process to review potential long-term highway network improvements. During the public consultation process residents expressed concern with the concept of Westside Road becoming a Kelowna by-pass route, or that an alternate highline connector road may run through their communities.

The *Westside Road Area Parks Preplan* identifies a series of "Regional Trail Corridors" and "Local Trails". Many of the trails are on Crown land, but do have trailheads and trails, which extend into private lands. Several road dedications leading to the Okanagan Lake have also been dedicated as a provincial requirement for public beach access. During the public consultation process many residents expressed a desire to improve existing recreation facilities, which include the trails.

The condition of Westside Road also raises safety concerns for residents walking along the road. Where feasible, any improvements to Westside Road should include sufficient shoulders to permit safer pedestrian opportunities..

The existing bicycle system in the North Westside area is limited to regional and local trail systems. In the long-term as Westside Road is improved provision should be made for providing shoulders on Westside Road, and for establishing bicycle lanes. This would establish a bicycle route, which would connect to existing routes in the rest of the Regional District.

Although the North Westside area does not warrant public transit service at this time, the Regional District should continue to monitor conditions should Westside Road

improvements and demand present any opportunity to expand the regional transit system to Trader's Cove or beyond.

Issues

- The safety of North Westside;
- Improvements to Westside Road will alter the rural character of the North Westside area;
- The Ministry of Transportation and Infrastructure may have plans for a Westside Highline Connector;
- Make sure trail connections are acquired through private land at the time of rezoning and/or subdivision;
- The public's ability to walk safely along Westside Road; and
- The public's ability to cycle safely along Westside Road.

Objectives

The Regional District's transportation objectives are to:

1. Promote the need for safety improvements along Westside Road to the Ministry of Transportation and Infrastructure;
2. Ensure future improvements to Westside Road do not alter the rural character of the roadway;
3. Ensure future improvements do not encourage Westside Road to become a Kelowna bypass route; and
4. Encourage the development of trails and bicycle routes.

Policies

The Regional District will:

1. Encourage and support the Ministry of Transportation and Infrastructure to improve safety and access along Westside Road;
2. Encourage the Ministry of Transportation and Infrastructure to maintain the rural character of North Westside;

3. Support and encourage the provision of increased walking and cycling opportunities as an alternative transportation method by:

    a) acquiring trail connections through private lands as identified in the *Westside Road Parks Preplan (1996)*;

    b) encouraging the Ministry of Transportation and Infrastructure to construct safe pedestrian and cycling lanes along Westside Road as improvements permit; and

    c) require new developments to construct walking and cycling connections through the development and connections to regional trails;

4. Encourage the Ministry of Transportation and Infrastructure to apply the following road safety and design policies:

    a) future roads and alignments are to be designed with due consideration for the environmentally sensitive areas and watercourses as well as existing and potential land uses;

    b) Consider access management and control for future development and new subdivisions so that the safety and operational status of Westside Road is sustained or improved;

    c) offset intersections on major roads are to be avoided;

    d) proposed new roads are to be planned to avoid disruption of farming and fragmentation of agricultural land; and

    e) the Ministry of Transportation and Infrastructure will apply the Ministry's *Manual of Aesthetic Design Practice* to the design and construction of any new roadways;

5. Encourage the Ministry of Transportation and Infrastructure to initiate a thorough public participation process regarding any future improvements to Westside Road;

6. Continue to achieve public beach accesses dedicated through the authority of the Ministry of Transportation and Infrastructure; and

7. Support the Ministry of Transportation and Infrastructure stated position not to proceed with Westside Highline Connector Road through the plan area.

Chapter 9

Institutional and Utility Services

The North Westside plan area contains varying degrees of Community facilities and utility services. This section reviews a number of issues pertaining to the availability and future planning of those facilities and services.

9.1 Education and Community Facilities

The school system is operated by School District No. 23 under the mandate of the Ministry of Education. The Regional District has no mandate on education policies other than advocating to the School District on policy areas that impact the Regional District.

Presently there are no schools or school sites within the North Westside area. Students are presently bused to schools outside the plan area. School District No. 23 enrollment figures (1996) indicate there are a total of 44 students attending Lakeview Elementary school; 29 students attending Kelowna Secondary School; and 83 students who are bused to School District No. 22 in Vernon (as part of a separate school agreement).

The School District requires 200 elementary students from an area before it can consider establishing a school. In 1996 the elementary school student population was 93 students.

As part of the *Westside Road Parks Preplan* an elementary school site has been identified in the vicinity to the "Valley of the Sun" subdivision. The site has been identified as part of a sportsfield/community complex. The construction of any future school or community complex will require a safety review of access onto Westside Road.

The North Westside presently has one community hall at Killiney Beach. The facility is a joint use facility with the local fire service. One additional site is proposed at the "Valley of the Sun" as part of a community complex/school site. There maybe additional opportunities for community facilities through joint use with such services

as fire halls, or through the use of rental of private facilities such as Lake Okanagan Resort.

Issues

- Making sure a future elementary school site is protected in the North Westside area;
- How to better utilize existing community facilities; and
- How to address residents' desire to establish some form of health service in their rural area.

Objectives

The Regional District's education and community facilities objectives are to:

1. Maintain existing facilities and provide new sites for schools and community facilities;
2. Encourage the provision of community institutional uses to serve the needs of the community; and
3. Encourage the establishment of a mobile or satellite health clinic to serve the needs of residents in the North Westside area.

Policies

The Regional District will:

1. Continue liaison with School District No. 23 to determine the need for constructing an elementary school;
2. Coordinate resources to ensure provision for a future school site in the general location of the "Valley of the Sun" subdivision;
3. Continue the commitment to establish joint-use agreements with School District No. 23 to make the best use of land and community facilities;
4. Continue partnerships with community groups and local residents to facilitate construction and operation of new community centres; and
5. Review opportunities and encourage the establishment of a mobile or satellite health clinic office to serve the needs of the rural communities in the North Westside area.

6. Where community or school uses are adjacent to areas within the ALR, guidelines prepared by the Provincial Agricultural Land Commission – Landscape Buffer Specification, should be utilized.

9.2 Protective Services

During the initial public consultation process concern was expressed at the availability of fire protection services. Map 6 illustrates the fire protection areas which presently exist. The two fire protection areas include the Westside Road area and Wilson's Landing area. There is a need to expand service to those areas presently not covered, and to ensure new areas are supported. It is equally important to ensure that all communities have sufficient water supply to support fire protection.

The issue of police presence in the North Westside was also identified The establishment of a community policing program and the increase in policing presence are ways to address this issue.

Issues:

- The lack of fire protection service to all existing settlement areas;
- The absence of adequate water supply to some existing areas to support fire protection; and
- The lack of community policing and policing presence in the area.

Objectives

The Regional District's protective services objectives are to:

1. Encourage the expansion of fire protection services to all residential communities in the North Westside plan area;
2. Encourage the maintenance of existing protective services and facilities and coordinate resources to establish new facilities; and
3. Review opportunities to expand existing programs and to provide additional policing to the plan area.

Policies

The Regional District will:

1. Review and implement opportunities to expand the existing fire protection service areas to include all residential subdivisions and communities in the plan area;

2. Review and require existing and future water systems to be capable of fire suppression;

3. Acknowledge the significant contribution of volunteers in existing community programs such as "Rural Neighbourhood Watch", and review with the R.C.M. Police. and residents methods to improve and implement new programs;

4. Review with the R.C.M. Police. opportunities to expand the police presence in the plan area; and

5. Review and locate additional fire halls to provide or improve fire protection.

9.3 Water Supply and Distribution

The North Westside area is comprised of a number of private water purveyors, Regional District systems, and private individual wells. The water purveyors and their service areas are illustrated on the Institutional and Utility Services map. There is a need to ensure existing developments and future developments have a secure, safe, and sustainable water supply and distribution system.

Issues

- Making sure there is a long-term sustainable water supply in the plan area; and

- The public's perception that there is a lack of cooperation and coordination among water purveyors and approving authorities.

Objectives

The Regional District's water supply and distribution objectives are to:

1. Continue to expand the Regional District's water supply and distribution system as required to service existing and future development; and

2. Continue cooperation and coordination between water purveyors in order to improve the overall water supply and quality of supply.

Policies

The Regional District will:

1. Continue liaison with the Ministry of Environment, Lands and Parks, and the various water purveyors to ensure an overall coordinated water management strategy for water quantity and quality;

2. Ensure that all new residential developments and commercial developments (excepting camp grounds and recreation commercial designations) are serviced by a community water and distribution system in accordance with the Regional District's *Subdivision and Development Servicing Bylaw No. 704*;

3. Ensure that new rural developments on parcels greater than 2 hectares are serviced by either a community water system or by an approved on-site ground water source with flow rates in accordance with the Regional *District's Subdivision and Development Servicing Bylaw No. 704*; and

4. Investigate where a community water system is being installed to ensure the ability of the system to allow for servicing of existing subdivisions without community water.

9.4 Sewage Collection and Disposal

The predominant sewage disposal method in the North Westside area is individual on-site septic disposal. Individual septic disposal systems are not a long-term sustainable method of sewage disposal. This method of disposal also increases the probability of potable ground water contamination and nutrient loading into Okanagan Lake. New residential developments, and existing subdivisions with above average septic failures are encouraged to make provision for sustainable sewage collection and disposal systems.

Issues

- The lack of long-term sustainable sewage collection and disposal systems for existing developments and those which may be approved in the future; and

- The level of nutrients and pollutants entering Okanagan Lake.

Objectives

The Regional District's sewage collection and disposal objectives are to:

1. Reduce the levels of nutrients and effluent disposal into Okanagan Lake and watercourses; and

2. Review long-term sustainable sewage collection and disposal methods for the North Westside area.

Policies

The Regional District will:

1. Require all new residential developments with a minimum lot size of 700 m^2 and all commercial development (excepting campgrounds and recreation commercial) to be serviced by community sewer and collection systems as defined in the Regional District's *Subdivision and Development Servicing Bylaw No. 704*;

2. Review opportunities to implement long-term sustainable sewage collection and disposal methods for existing developments where appropriate; and

3. Investigate, where a community sewer system is being installed, to ensure the ability of the system to allow for servicing of existing subdivisions without community sewer.

9.5 Storm Drainage

Storm water drainage in the North Westside area is comprised of open ditches, natural drainage courses and absorption into the ground through dry wells. During the public and agency consultation processes storm drainage was identified as an existing problem in certain areas. There is also a need to coordinate storm drainage efforts as the Ministry of Transportation and Infrastructure and the Ministry of Environment, Lands and Parks both have jurisdiction over certain aspects of storm drainage, while the Regional District is concerned that no controls are available to control storm drainage on private development lands.

A second concern is the destination of the stormwater. Okanagan Lake is the ultimate destination for much of the North Westside's storm drainage. Given that Okanagan Lake is the source of drinking water for the area's water purveyors, and an important ecosystem, it therefore becomes important to manage the quality and quantity of the storm water.

Issues

- The quality of stormwater entering Okanagan Lake from existing and proposed developments.

Objectives

The Regional District's storm drainage objectives are to:

1. Prepare strategies for overall stormwater management;

2. Control drainage, sediment and erosion for new and existing development;

3. Coordinate and resolve drainage issues with provincial ministries having jurisdiction; and

4. Monitor the quality of storm water run-off into fish-bearing creeks and Okanagan Lake.

Policies

The Regional District will:

1. Require all developments to prepare a drainage, sediment, and erosion control plan that will be used during the subdivision or development of the parcel. The plans will be prepared in accordance to guidelines established in the Regional District's *Subdivision and Development Serving Bylaw No. 704;*

2. Require developers of land to control construction silts, gravel and debris to ensure there is no discharge into natural drainage courses, watercourses, onto highways, or adjacent farmland;

3. Coordinate the resolution of storm drainage issues in new and existing developments with the Ministry of Transportation and Infrastructure and the Ministry of Environment, Lands and Parks; and

4. Coordinate efforts with the Ministry of Environment, Lands and Parks to monitor water quality run-off into Shorts Creek, Lamby Creek (a.k.a. Bear Creek), and Okanagan Lake.

9.6 Solid Waste Management

The Regional District has established a solid waste management plan to reduce and recycle domestic waste in the region over the next 20 years. This has been in response to the Ministry of Environment, Lands and Parks which has set goals to reduce waste delivered to landfills by 50% by the year 2000.

During the public consultation process residents expressed a desire to increase the number of transfer station locations so that residents would not have to travel significant distances to the region land fill.

Issues

- Will there be sufficient landfill space in the future;
- How to encourage more recycling; and
- Public desire to see more transfer stations in the North Westside area.

Objectives

The Regional District's solid waste management objectives are to:

1. Reduce the volume of waste requiring disposal by 50% in accordance with Ministry of Environment, Lands and Parks waste reduction targets;
2. Increase the number of new transfer stations and improve the operations of existing transfer stations; and
3. Encourage recycling facilities to be established in conjunction with transfer stations.

Policies

The Regional District will:

1. Continue to implement its solid waste management plan;

2. Review alternative locations in the North Westside area where transfer stations can be established, and facilitate improved operations for those stations experiencing difficulty; and

3. Facilitate the establishment of recycling stations in conjunction with solid waste transfer station operations.

9.7 Other Utilities

Other utilities which service the North Westside area include B.C. Telephone, BC Hydro, Cable Television lines and BC Gas service. BC Gas service is limited to Traders Cove. The utility services to this area are provided on a user pay basis. Future development in the North Westside area will determine the feasibility of expanding some services such as natural gas. It will also be important to ensure ongoing coordination of utility services to the area by both the Regional District and the Ministry of Transportation and Infrastructure.

Objective

The Regional District's objective for other utilities is to:

1. Encourage cooperation and coordination of utilities, which service the North Westside.

Policy

The Regional District will:

1. Encourage the cooperation and coordination of all utility companies, the Ministry of Transportation and Infrastructure, and the Regional District.

Chapter 10

Parks and Recreation

In 1996 the Regional District completed the *Westside Road Parks Preplan*. (1996) The plan identifies a number of recreational and park opportunities which need to be addressed in the Rural Westside Official Community Plan. This chapter discusses those opportunities and the issues expressed by residents.

10.1 Parks and Recreation

The parks preplan identifies a number of park types found in the North Westside area. The categories and criteria include:

a) Provincial Parks

Provincial Parks fall under the jurisdiction of the B.C. Parks.

b) Regional Parks

Park land that is larger in area than neighbourhood parks and offers aquatic, natural interpretation, outdoor recreation and linear opportunities. These parks are often purchased or acquired through crown lease/grant and fall under the jurisdiction of the Regional District of Central Okanagan. All electoral areas including the City of Kelowna and the District of Lake Country pay for the acquisition and maintenance of these parks.

c) Neighbourhood/Community Parks and Facilities

Generally these parks are smaller than regional parks and offer play equipment, picnic sites, and green space. These parks are often acquired through the subdivision process, gifting, and/or highways permit and fall under the jurisdiction of the Regional District of Central Okanagan. Tax monies collected in the unincorporated areas pay for the maintenance of these parks.

A community facility provides an area for the community to congregate. These facilities may include a community hall, fire hall, indoor/outdoor skating rink, swimming pool, and/or sports fields.

d) Trails

Trails are used primarily for hiking and walking in order to experience nature. Trails can lead from a subdivision, natural feature, or park to crown lands, to another natural feature or to another neighbourhood.

e) Natural Open Spaces

Natural spaces include areas left in a natural unaltered state to be enjoyed with as minimum impact as possible. These include: creek corridors, lakes, mountain tops, geologic formations, meadows, and wetlands.

f) Boat Launches

The entire study area follows the shoreline of Okanagan Lake. Boat launches are necessary to provide access to the water for the general public.

While the *Westside Road Parks Preplan* extends beyond the boundaries of the North Westside OCP, to include Crown land it does form the basis for park decisions on the privately held lands and the park locations in the North Westside area. Map 7 illustrates the existing locations and proposed areas for parks and facilities in the North Westside area, and also the interconnection to the many trails on Crown land.

During the initial public process residents expressed the desire to ensure existing park sites and facilities were enhanced to meet the needs of the existing communities.

Residents also expressed concern about the development of the Fintry Provincial Park site in relationship to improvements to Westside Road. Development of major recreational attractions need to coincide with improvements to Westside Road.

The potential for wildfire hazard and vandalism were also identified in park reserve and provincial recreation areas due to lack of supervision.

The *Westside Road Parks Preplan (1996)* has identified 3 potential Regional park sites: Crown land DL 2549 (north of Wilson's Landing); in the vicinity of Caesar's Landing and Forestry Campsite on DL 4021 (Westshores area).

Issues

- Ensuring the park sites identified in the parks preplan meet the recreational needs of new and existing communities;

- The need to establish neighbourhood and community park standards which are representative of the rural character.;

- The public's desire to place greater emphasis on upgrading existing parks and facilities to meet the needs of existing communities;

- The need to address fire hazards and safety with the development of recreational areas; and

- The need to identify historical structures and sites in the area (the proponents of such sites will present documentation and other evidence to validate such objects for preservation).

Objectives

The Regional District's parks and recreation objectives are to:

1. Acquire and provide suitable land for park and recreation (Regional District, Provincial and private) opportunities generally as identified in the *Westside Road Parks Preplan (1996)*;

2. Work with the Ministry of Environment, Lands and Parks to establish protected areas for Shorts Creek and Sugarloaf Mountain;

3. Establish neighbourhood and community park standards for rural areas;

4. Provide interpretive and educational opportunities concerning our park, natural resources, and heritage resources;

5. Evaluate and validate heritage and historical sites working with the appropriate committees, societies, and organizations; and

6. Place greater emphasis on upgrading existing parks and recreation facilities to meet the needs of existing communities.

Policies

The Regional District will:

1. Pursue acquisition of the three regional parks and the sports field/community complex sites in the general vicinity of areas identified on Map 7 using one of the following:

    a) Park dedication pursuant to Part 18 and Section 941 of the *Local Government Act* which is required at time of subdivision;

    b) School Site acquisition as per the *Local Government Act* Section 942;

c) Park land acquired through gifting or donation. Gifting or donations are encouraged as they offer an opportunity for the donator to receive a tax receipt for the value of the property;

d) Crown Lease/grants from the Ministry of Environment, Lands and Parks;

e) Cash in lieu of park dedication is another consideration which will meet the requirements of subdivision;

f) Highway access permits from Ministry of Transportation and Infrastructure;

g) Funds for land acquisition and development raised through referendum; and

h) Community involvement in fund raising for the development of community facilities and parks.

2. Apply to the Ministry of Transportation and Infrastructure to designate Westside Road as the "Fur Brigade Trail" and for a permit to install appropriate interpretive signage;

3. Review the potential acquisition and establishment of interpretive sites associated with the Westside Road designation as the "Fur Brigade Trail";

4. Continue to evaluate and validate heritage and historical sites as part of the *Environmentally Sensitive Area Management Plan* review, working with the appropriate committees, societies and organizations;

5. Continue to work with the Ministry of Environment, Lands and Parks, and appropriate committees and societies for the preservation, rehabilitation and utilization of the heritage buildings at Fintry Provincial Park;

6. Review fire hazard and safety issues during the park master plan process;

7. Direct monies received as "cash-in-lieu" of park dedication or cash received from gifts to parkland acquisition in the North Westside OCP area;

8. Establish neighbourhood and community park standards which represent the needs of the North Westside area, and are not solely based on urban population densities or catchment radii;

9. Review amending Regional District Bylaw 101 to allow camping as a designated use as part of the process to acquire the forestry campsite on Lot DL4021 as a regional park;

10. Continue to advocate to the Ministry of Environment, Lands and Parks the desire to designate Shorts Creek and Sugarloaf Mountain as Protected Areas in the *Okanagan-Shuswap Land Resource Management Plan*;

11. Continue to work with area residents in the improvement of existing parks and recreation facilities; and

12. Continue to implement the *Westside Road Parks Preplan* with respect to establishing a natural and cultural features interpretation program.

13. Any parks or recreation trails situated adjacent to farmland will be fully buffered from visual and trespass aspects as per the ALC Landscape Buffer Specification.

Chapter 11

Temporary Commercial and Industrial Uses

Section 921 of the *Local Government Act* makes provision for a Regional District to issue permits for temporary commercial or industrial uses if designated in the Rural Westside Official Community Plan. If the Rural Westside Official Community Plan designates areas where temporary commercial or industrial uses may be allowed, on an application by an owner of land, the Regional District may, by resolution, issue a temporary commercial or industrial permit may do one or more of the following:

a) allow the commercial or industrial use, including:

    i) in the case of a commercial use, the provision of temporary tourist accommodation, and

    ii) in the case of an industrial use, the processing of natural materials,

    as specified in the permit;

b) permit the construction or use of buildings or structures to accommodate persons who work at the commercial or industrial enterprise in respect of which the permit is issued; and

c) specify conditions under which the temporary commercial or industrial use may be carried on.

The Rural Westside OCP currently does not designate any areas as temporary commercial or industrial permit areas. The intent of the temporary commercial and industrial permit provisions are to aid in the implementation of the business licensing program; and to accommodate the future potential for the temporary processing of natural materials or temporary commercial uses.

The owner of land in respect of which a temporary commercial or industrial use permit has been issued has the right to put the land to the use described in the permit until the

date that the permit expires, or 2 years after the permit was issued, whichever occurs first. Temporary commercial or industrial permits may only be renewed once, after which the use must either be permanently rezoned to permit the use or cease operation. The removal of all temporary permit designations will be considered at the 5 year update of the OCP.

Chapter 12

Implementation Strategy

To ensure the Rural Westside OCP remains as a relevant document to guide land use decisions throughout the community, a planning program will be initiated which includes:

1. Annual assessment of the Rural Westside OCP to determine area revisions;

2. Ongoing maintenance of data regarding growth and development activities in the plan area;

3. Review of the North Westside by all Regional District departments, and where applicable, outside agencies like the Ministry of Transportation and Infrastructure, to assess annual budget and program direction in implementing the plan;

4. Comprehensive review and update of the Rural Westside Official Community Plan no longer than 5 years after adoption, to ensure the Plan addresses the current needs and aspirations of the community and acknowledges changing local and external conditions;

5. Liaison with the Central Okanagan Westside Advisory Planning Commission to monitor potential changes to the plan;

6. Reviewing the Rural Westside OCP in context of the Growth Management Strategy, once approved by the Regional Board;

7. The Regional Board will strive to amend the Official Community Plan only once every six months in the first year after adoption and once every year after the first year. This implies that the Regional Board will consider all amendment applications at one time, as one comprehensive submission. Official community plan amendment applications where the proposed land use is considered a public use or need can be considered at any time. A comprehensive review will be undertaken at approximately five year intervals, at which time the Future Land Use Map 8 and if necessary plan policies, shall be amended as appropriate to guide development and land use for the following five years; and

8. A block application for the exclusion (where the land owner is in agreement) of lands from the ALR where the Provincial Agricultural Land Commission has identified them as not part of the long term agricultural strategy.

Chapter 13

Development Permit Areas

13.1 Designating Development Permit Areas

There are specific community goals for issues such as the appearance, form and character of certain types of land uses; respect for the environment; and dealing with potential hazards such as wildfire and development within hazardous areas. It is important that these goals are considered when certain types of development or buildings are proposed. Development Permits are one of the key methods made available to the Regional District through the provincial *Local Government Act* to accomplish this evaluation.

Development permits will be required prior to any development or subdivision of land within a Development Permit Area. The Official Community Plan designates Development Permit Areas for the:

a) Establishment of guidelines to protect aquatic ecosystems;

b) Establishment of guidelines to protect terrestrial ecosystems

c) Establishment of guidelines for hillside development

d) Establishment of guidelines for wildfire interface construction

e) Establishment of guidelines to regulate the siting, form, character and landscaping of all General Commercial Areas;

f) Establishment of guidelines to regulate the siting, form, character and landscaping of Resort Commercial Areas; and

g) Establishment of guidelines to regulate the siting, form, character and landscaping of all General Multiple Family Residential Areas.

h) Establishment of guidelines for the Crystal Mountain Resort area to regulate the form and character of development.

Each Development Permit has specific objectives and guidelines that have been developed to achieve certain community goals. The location and circumstances where the objectives and guidelines for each Development Permit apply is indicated

in the Official Community Plan in text and maps. When a proposal is located in those areas and fits those circumstances, applications for Development Permits are required so that the proposal can be evaluated.

There are several types of Development Permits that achieve a variety of different community goals. A certain proposal may be required to consider just one set of guidelines, or several sets of guidelines, depending upon the type of proposal being made and its location.

General Development Permit Policies

1. Development within designated Development Permit Areas will be reviewed by the Regional District in consideration of the objectives and guidelines identified in this Section. Conditions or restrictions may be imposed on the development accordingly.

2. In accordance with the *Local Government Act* of the Province of BC, the Regional District will require funding to ensure the completion of landscaping, environmental rehabilitation, or other conditions for which security may be held.

3. Development Permit Areas are designated and Development Permits are required in accordance with the following sub-sections 13.2 through 13.9.

13.2 Aquatic Ecosystem Development Permit Area

The Aquatic Ecosystem Development Permit Area is designated in accordance with the *Local Government Act* for purpose of protection of the natural environment, its ecosystems and biological diversity. All land uses or alteration, within these designated areas, require a Development Permit.

Justification

Aquatic ecosystem development permits are for the protection of watercourses such as streams, ponds, and wetlands and the critical habitat and biodiversity in their riparian areas. Such ecosystems are important not only in their own right but form a backbone of corridors between ecosystems that create a healthy diversity and better support the needs of a variety of species. These connections avoid the creation of isolated "islands" and increase ecosystem sustainability for the future.
Fish habitat is an important consideration. The Federal *Fisheries Act* (1985) and the Provincial *Fish Protection Act* provides penalties for the destruction or the degradation of fish habitat, including sediment and riparian clearing.

The Aquatic Ecosystem Development Permit Area was established through the identification of stream and riparian areas utilizing a combination of field Inventory (using sub-metric global positioning system), interpretation of provincial TRIM[2] data, field surveys, and documentation of riparian locations.

Aquatic Ecosystem Development Permit Areas include areas of land designated on Maps 3A, 3B and 3C. Further definition is provided within Appendix 6: Supplement to Aquatic Ecosystem Development Permit Area: Discussion on Sensitive Shoreline Areas.

In Aquatic Ecosystem Development Permit Areas, a Development Permit must be approved before land is altered or subdivided (including but not limited to land clearing, preparation for the construction of services or roads, and blasting); and, before construction of, addition to, or alteration of a building or structure.

Development Permit is not required where;

1. A development permit of this type has already been issued or a covenant dealing with aquatic ecosystem issues is registered on property title for the area in the past, and the conditions in the development permit or covenant have all been met, and the conditions addressed in the previous development permit or covenant will not be affected and the existing covenant protects the entire identified riparian area, or,

[2] TRIM = Terrain Resource Inventory Mapping

2. A Qualified Environmental Professional (QEP) certifies in a signed letter that such a water feature (stream, wetland, or riparian) is not present at the location specified. This may be the case where TRIM mapping interpreted a watercourse based on landforms such as gullies, which may not convey surface flows. Field Inventory and Mapping completed by the RDCO endeavoured to confirm the presence of aquatic features on the landscape. However, stream lines identified by TRIM base remain within the DP area until certified by a QEP that such a feature is not present, or,

3. The Development Permit Area is fenced in a way acceptable to the Director of Development Services in order to prevent any accidental disturbance, and, there is a permanent protection of the DP area by means such as a restrictive Covenant, return to Crown Land, provided as public park, or similar method acceptable to the Director of Development Services, or,

4. A dock is to be constructed under permit issued by the Province of BC and is constructed in accord with provincial requirement, or

5. There is change of use or repair, renovation or reconstruction of a building in which the building "footprint" is not moved or increased or,

6. There is placement of temporary construction and project sales offices, or storage of construction materials on a site provided that the use is removed within 20 days of completion of the project and the activities do not disturb or damage the identified riparian area, or,

7. The activity involves timber harvest, forest road construction, open livestock range, grazing enhancement, forest recreation or other forest management activity on Crown Land that is conducted under the auspices of the District Forest Manager, or,

8. The activity involves water management conducted under the auspices of the Regional Water Manager, or

9. The activity involves replanting or replacement of agricultural crops on areas of a site that are currently in crop production, or,

10. The activity occurs on land designated provincial "Agricultural Land Reserve", and relates solely to normal farm practices in accordance with the *Farm Practices Protection Act,* or

11. The activity involves the environmentally sensitive removal of trees and shrubs designated as hazardous by a professional forester registered in British Columbia and in accordance with provincial "Firesmart" standards or those trees and shrubs designated as host trees by the Sterile Insect Release Program, or,

12. The activity is conducted under direction of the Provincial Emergency Program.

Development Permits issued in this area will be in accordance with the following objectives and guidelines:

a. Development Permit Objectives and Guidelines for Aquatic Ecosystems (Appendix 2)

13.3 Terrestrial Ecosystem Development Permit Area

The Terrestrial Ecosystem Development Permit Area is designated in accordance with the *Local Government Act* for purpose of protection of the natural environment, its ecosystems and biological diversity and, protection of development from hazardous conditions. All land uses or alteration requires a Development Permit.

Justification

The Central Okanagan basin of British Columbia is an area of great ecological significance within both the Province of B.C. and Canada as a whole. It is an area with high biodiversity values, and many rare and endangered ecosystems, plant and animal species.

A 'sensitive' ecosystem is one that is ecologically fragile and/or is recognized as rare in the provincial landscape. Rare ecosystems are those that are considered to be provincially rare either because of a naturally limited distribution or because disturbance has significantly limited their distribution.

The Regional District of Central Okanagan is committed to the protection of identified areas of high ecological and natural value. Terrestrial ecosystems in the Central Okanagan support a number of Red[3] and Blue[4] -listed species and are a critical component to the health, vitality and economy of the local community.

[3] Red List = List of ecological communities, and indigenous species and subspecies that are extirpated, endangered or threatened in British Columbia.

[4] Blue List = List of ecological communities, and indigenous species and subspecies of special concern (formerly vulnerable) in British Columbia.

Sensitive ecosystems may be severely influenced by development unless there is effective community stewardship and land use planning.

The Development Permit Area is established to include Coniferous Woodland, Broadleaf Woodland, Grassland, Sparsely Vegetated, and Mature Forest Ecosystems identified in the Sensitive Ecosystem Inventory: Copies of the inventory are available on provincial government websites for download or upon request to Regional District of Central Okanagan.

Terrestrial Ecosystem Development Permit Areas include areas of land designated on Maps 4A, 4B and 4C.

In Terrestrial Ecosystem Development Permit Areas, a Development Permit must be approved before land is altered or subdivided (including but not limited to land clearing, preparation for the construction of services or roads, and blasting); and, before construction of, addition to or alteration of a building or structure.

Development Permit is not required where;

1. A development permit of this type has already been issued or a covenant dealing with Sensitive Terrestrial Ecosystem issues is registered on property title for the area in the past, and the conditions in the development permit or covenant have all been met, and the conditions addressed in the previous development permit or covenant will not be affected, or

2. The Development Permit Area is fenced in a way acceptable to the Director of Development Services in order to prevent any accidental disturbance, and, there is a permanent protection of the DP area by means such as a restrictive covenant, return to Crown Land, provided as public park, or similar method acceptable to the Director of Development Services, or

3. A site inspection is conducted and a professional report by a Registered Biologist with experience in rare and endangered species, is submitted to the Director of Development Services, documenting that ecosystem attributes on the site have been lost due to previously approved development, or

4. There is change of use, repair, renovation or reconstruction of a building in which the building "footprint" is not altered or increased or alteration or addition to buildings and structures that are less than $10m^2$ area, or

5. There is placement of temporary construction and project sales offices, or storage of construction materials on a site provided that the use is removed

within 20 days of completion of the project and the activities do not disturb or damage the identified ecosystem attributes, or

6. The activity involves timber harvest, forest road construction, open livestock range, grazing enhancement, forest recreation or other forest management activity on Crown Land that is conducted under the auspices of the District Forest Manager, or

7. The activity involves water management works conducted under the auspices of the Regional Water Manager, or

8. The activity involves replanting or replacement of agricultural crops on areas of a site that are currently in crop production, or

9. The activity occurs on land designated provincial "Agricultural Land Reserve", and relates solely to normal farm practices in accordance with the *Farm Practices Protection Act,* or

10. The activity involves the environmentally sensitive removal of trees and shrubs designated as hazardous by a professional forester registered in British Columbia and in accordance with provincial "Firesmart" standards or those trees and shrubs designated as host trees by the Sterile Insect Release Program, or

11. The activity is conducted under direction of the Provincial Emergency Program.

Development Permits issued in this area will be in accordance with the following objectives and guidelines:

a. Development Permit Objectives and Guidelines for Sensitive Terrestrial Ecosystems (Appendix 3)

13.4 Hillside Development Permit Area

The Hillside Development Permit Area is designated in accordance with the *Local Government Act* for purpose of protection of the natural environment, its ecosystems and biological diversity and protection of development from hazardous conditions. All land uses or alterations require a Development Permit.

Justification

Hillside developments are more difficult to construct and can have more prominent environmental, physical and visual impact than on flatter areas. All these factors mean that hillside development must be carefully designed in a manner sensitive to its location. The Development Permit Area has been established through

interpretation of provincial Terrain Resource Information Mapping and 1-m interval contour data and identification of lands containing slopes of 30% or greater.

Hillside Development Permit Areas include areas of land designated on Maps 5A, 5B and 5C.

In Hillside Development Permit Areas, a Development Permit must be approved before land is altered or subdivided (including but not limited to land clearing, preparation for the construction of services or roads, and blasting); and, before construction of, addition to or alteration of a building or structure.

Development Permit is not required where;

1. Construction entails fences, solid screens less than two (2) meters in height or, retaining walls less than 1.5 meter in height, or

2. Alteration of land or construction is for a purpose other than human settlement and a topographic survey is conducted by a BC Land Surveyor (or other person as permitted by the *Land Surveyors Act*) and submitted to the Director of Planning and indicating that the area of activity involves slopes less than 30%, or

3. A development permit of this type has been issued or a covenant has been registered on property title identifying that areas greater than 30% slope will remain undisturbed, and the conditions in the development permit or covenant have all been met, and the conditions addressed in the previous development permit or covenant will not be affected, or

4. There is a change of use, repair, renovation or reconstruction of a building in which the building "footprint" is not altered or increased, or alterations or addition to buildings and structures that are less than $10m^2$ in area, or

5. There is placement of temporary construction and project sales offices, or storage of construction materials on a site provided that the use is removed within 20 days of completion of the project, or

6. The activity involves timber harvest, forest road construction, open livestock range, grazing enhancement, forest recreation or other forest management activity on Crown Land that is conducted under the auspices of the District Forest Manager, or

7. The activity involves replanting or replacement of agricultural crops on areas of a site that are currently in crop production, or,

8. The activity occurs on land designated provincial "Agricultural Land Reserve", and relates solely to normal farm practices in accordance with the *Farm Practices Protection Act,*

9. The activity involves water management works conducted under the auspices of the Regional Water Manager.

10. The activity involves the environmentally sensitive removal of trees and shrubs designated as hazardous by a professional forester registered in British Columbia and in accordance with provincial "Firesmart" standards or those trees and shrubs designated as host trees by the Sterile Insect Release Program, or

11. The activity is conducted under direction of the Provincial Emergency Program.

Development Permits issued in this area will be in accordance with the following objectives and guidelines:

a. Hillside Development Permit Design Guidelines (Appendix 4)

13.5 Wildfire Interface Construction Development Permit Area

The Wildfire Interface Construction Development Permit Area is designated pursuant to Section 919.1 (1) of the *Local Government Act* for purpose of protection of development from hazardous conditions. All habitable land uses require a Development Permit.

Justification

The Okanagan has a naturally dry climate and a community interface with large forested areas. Wildfire will be an ever-present threat.

Reducing wildfire hazard involves a multi-layered approach including education, larger community prevention activities, requirements at the time of rezoning or subdivision for new development, and changes in how residents build homes. These Development Permit Guidelines are considered a minimum and relate only to new home construction, large additions and their immediate vicinity. Other community protection requirements may be determined and required through other development approval processes.

An important part of reducing wildfire hazard involves modifying how individual homes near the provincial forest interface area are constructed. The accumulation of small choices such as siding material, building material, screening of soffits,

screening the tops of chimneys, using non-combustible landscape mulch, and choosing plant material, can add up to either saving or losing a home to wildfire.

This Development Permit Area has been established for all properties within the OCP area. The approved Regional District Community Wildfire Protection Plan recommendations from the study should also be taken into consideration for proposed development in the Development Permit Area.

Wildfire Interface Construction Development Permit Areas include areas of land designated on Maps 6A, 6B and 6C.

A Development Permit must be approved before construction of, addition to or alteration of a building or structure.

Development Permit is not required where:

1. The construction or alterations in accessory buildings or structures are not in excess of 40 square meters, or

2. Plans for construction are submitted for a building permit, and the plans show compliance with the guidelines "Wildfire Interface Development Permit Design Guidelines"; and, a restrictive covenant is registered on the title of the property in order to ensure that future property owners are aware of and obligated to the wildfire hazard reduction measures, or

3. A development permit of this type or a covenant registered on property title has already been issued for the area in the past, and the conditions in the development permit or covenant have all been met, and the conditions addressed in the previous development permit or covenant will not be affected.

Development Permits issued in this area will be in accordance with the following guidelines:

a. Wildfire Interface Development Permit Design Guidelines (Appendix 5).

13.6 General Commercial Development Permit Area

1. Category

The General Commercial Development Permit Area is designated under Section 879 (1) (e) (form and character of commercial development) of the *Local Government Act*.

2. Area

The designated area is identified on the Future Land Use Map 8.

3. Justification

The commercial areas identified in the North Westside OCP are part of a larger comprehensive development area containing a mix of commercial and residential uses; or are local commercial sites which are located within existing communities. These commercial areas are also within a rural context, and thereby their location, size, form and character can have a significant visual and land use impact on the surrounding area.

The design guidelines contained in this section can help ensure the commercial development minimizes the negative aspects on the rural character of the area.

4. Guidelines

Development permits issued in this section will be in accordance with the following guidelines:

a) Building and Structures

i) All buildings, structures and additions thereto will be designed in a manner which gives consideration to the relationship with adjacent buildings and open spaces, the efficiency of the circulation system and the design and siting compatibility with surrounding rural land uses;

ii) Any wall of an end building which is visible from the road should be finished to the same standard as the front of the building to provide an attractive appearance;

iii) Landscaping, awnings, lighting fixtures, and other structures should be architecturally integrated with the design of the buildings;

iv) The design of fascia signs containing individual business signage should be integrated into the design of the building. No billboards or roof signs will be permitted;

v) All building signage should be subtle, externally luminated and of high quality materials;

vi) Signage should be scaled to the pedestrian in terms of size, location, lettering and lighting;

vii) Enhance the relationship of commercial areas to adjacent and surrounding rural and residential areas by preserving view corridors, by providing convenient pedestrian access to the development, and by giving consideration to the design of side and rear facades;

viii) Within comprehensive developments encourage mixed use developments where residential units are located above commercial developments; and

ix) Commercial development is encouraged to be sensitive to and compatible with the existing landscape. Design techniques will be used which minimize grading impacts on the topography, including natural drainage features, the foreshore, and highly visible slopes.

b) Screening and Landscaping

i) All landscaping must be in accordance with the Landscape Design Guidelines in Appendix 1.

13.7 Resort Commercial Development Permit Area

1. Category

The Resort Commercial Development Permit Area is designated under Section 879 (1) (e) (form and character of commercial development) of the *Local Government Act*.

2. Area

The designated area is identified on the Future Land Use Map 8.

3. Justification

The resort commercial areas identified in the North Westside OCP are large recreational and/or resort developments. Resort commercial areas are either controlled by Land Use Contracts or by conventional zoning categories. These large commercial land uses can have a significant impact on the existing rural character of the North Westside area. This development permit area is intended to control the general form and character of conventionally zoned resort and recreational developments and thereby reduce their visual and land use impacts on the surrounding area.

4. Guidelines

Development permits issued in this section will be in accordance with the following guidelines:

a) Building and Structures

i) The use of sub-roofs, dormers, balconies, bay windows and shadowing to break up the massiveness of the multi-level structures is encouraged;

ii) Where a site is to contain several buildings, careful attention should be given to the provision of usable private open space, trail linkages between buildings, and other potential development enclaves. Walkways and trails shall be indicated on the site plan;

iii) All development on hillsides or steep topography should be designed to minimize the requirement for significant and visible cut and fill situations. The proposed development should blend in with and complement the surrounding terrain;

iv) Resort commercial development is encouraged to be sensitive to and compatible with the existing landscape. Design techniques will be used which minimize grading impacts on the topography and protection of sensitive areas and natural drainage features on highly visible slopes;

v) Recreation or play areas should be provided within each development and should be sensitive to the needs of all age groups likely to reside within or visit the development; and

vi) All signs should be architecturally compatible with the overall design of the buildings.

b) Screening and Landscaping

i) Where a resort commercial development is to be constructed adjacent to a property with a rural residential, lower density residential use, or farmland the resort commercial design shall provide sufficient buffering in terms of screening, fencing, berming and landscaping to reduce potential land use conflicts;

ii) All waste disposal bins will be completely screened within an enclosure;

iii) Substantial landscaping will be provided and maintained to screen parking lots. Retention of mature trees within the overall landscape treatment is encouraged;

iv) Large surface parking areas should be broken down into smaller parking lots evenly dispersed throughout the development and integrated with planted landscaped areas;

v) Indigenous plant material with setbacks areas must be preserved where possible. Where land is disturbed or regraded, it is to be replanted with indigenous or native plant material resembling the character of surrounding areas;

vi) Instead of underground irrigation systems, low-flow or drip irrigation systems which minimize the use of water should be encouraged;

vii) Mulching and other measures which limit water evaporation loss to the environment should be encouraged;

viii) Four season plant materials will be provided in outdoor living spaces to allow maximum winter sun and summer shade, and to maximize year round foliage;

ix) Walled or gated resorts will be discouraged. Bareland strata developments or commercial resorts should use landscaping and the clustering of units using the natural landscape to create the image of exclusivity; and

x) Planting area for High Fire Hazard Areas - moderate to high fire hazard areas include undeveloped canyons, grassland and woodland hillsides where

native vegetation has become overgrown. Resort commercial development within or on the fringes of these areas is subject to wildland brush fires. A transition between ornamental landscaping and native vegetation may be created by selective pruning and thinning native plants and revegetation with low fuel volume plants. Such a transition reduces the readily flammable fuel which spreads fire into developed areas.

c) Parking and Access

i) Underground parking for multiple level resort commercial development is encouraged. Vehicle access to parking areas and circulation onsite will minimize interference with pedestrian movement;

ii) The number of vehicle access points to a resort commercial development from major roads should be minimized; and

iii) Internal private roadways should be wide enough to permit easy negotiation of car access to individual garage or carport, parking areas, and to provide fire truck accessibility.

13.8 Multiple Family General Development Permit Areas

1. Category

The Multiple Family General Development Permit Area is designated under Section 879 (1)(e) (form and character of multiple family development) of the *Local Government Act*.

2. Area

The designated area is identified on the Future Land Use Map 8.

3. Justification

The Multiple family developments identified in the North Westside OCP are part of a larger comprehensive development area containing a mix of residential and commercial uses. These development areas are also within a rural context, and thereby their predominant size, location form and character can have a significant visual impact on the surrounding area.

The design guidelines contained in this section can help ensure the development enhances the landscape and minimizes the negative aspects on the rural character of the area.

4. Guidelines

Development permits issued in this section will be in accordance with the following guidelines:

a) Buildings and Structures

i) The use of sub-roofs, dormers, balconies, bay windows and shadowing to break up the massiveness of the structure is encouraged;

ii) First storey units are encouraged to have ground access and outdoor amenity space for family use;

iii) To the extent practical, the massing of buildings shall be oriented on a site in such a manner that predevelopment view corridors are not impeded;

iv) Where a site is to contain several buildings, careful attention should be given to the provision of usable private open space , trail linkages between buildings, and other potential development enclaves. Walkways and trails shall be indicated on the site plan;

v) All development on hillsides or steep topography should be designed to minimize the requirement for significant and visible cut and fill situations. The proposed development should blend in with and complement the surrounding terrain;

vi) Recreation or play areas should be provided within each project and should be sensitive to the needs of all age groups likely to reside within the development;

vii) All signs should be architecturally compatible with the overall design of the buildings; and

viii) Multiple family development is encouraged to be sensitive to and compatible with the existing landscapes. Design techniques will be used which minimize grading impacts on the topography and protection of sensitive areas and natural drainage features on highly visible slopes.

b) Screening and Landscaping

i) Where a multiple family development is to be constructed adjacent to a property with a rural residential, lower density residential use, or farmland the new residential design shall provide sufficient buffering in terms of screening, fencing, berming and landscaping to reduce potential land use conflicts;

ii) All waste disposal bins will be completely screened within an enclosure;

iii) Substantial landscaping will be provided and maintained to screen parking lots. Retention of mature trees within the overall landscape treatment is encouraged;

iv) Large surface parking areas should be broken down into smaller parking lots evenly dispersed throughout the development and integrated with planted landscaped areas;

v) Indigenous plant material within setbacks areas must be preserved where possible. Where land is disturbed or regraded, it is to be replanted with indigenous or native plant material resembling the character of surrounding areas;

vi) Instead of underground irrigation systems, low-flow or drip irrigation systems which minimize the use of water should be encouraged;

vii) Mulching and other measures which limit water evaporation loss to the environment should be encouraged;

viii) Four season plant materials will be provided in outdoor living spaces to allow maximum winter sun and summer shade, and to maximize year round foliage;

ix) Walled or gated communities will be discouraged. Bareland strata developments should use landscaping and the clustering of units using the natural landscape to create the image of exclusivity; and

x) Planting area for High Fire Hazard Areas - moderate to high fire hazard areas include undeveloped canyons, grassland and woodland hillsides where native vegetation has become overgrown. Multiple family development within or on the fringes of these areas is subject to wildland brush fires. A transition between ornamental landscaping and native vegetation may be created by selective pruning and thinning native plants and revegetation with low fuel volume plants. Such a transition reduces the readily flammable fuel which spreads fire into developed areas.

c) Parking and Access

i) Underground parking for multiple family development is encouraged. Vehicle access to parking areas and circulation onsite will minimize interference with pedestrian movement;

ii) The number of vehicle access points to multiple family development from major roads should be minimized;

iii) Internal private roadways should be wide enough to permit easy negotiation of car access to individual garage or carport, parking areas, and to provide fire truck accessibility;

iv) Where ground-oriented multiple family units have attached garages or carports, the units should be wide enough to allow the creation of attractive entrances to the individual units so that entrances dominate the streetscape, not garages; and

v) Where individual townhouse or apartment units have vehicular access via public streets, combined driveway access points are encouraged in order to minimize interruptions of landscaping along the boulevard.

Intensive Residential Development Permit Guidelines

Goal; That intensive residential developments be visually appealing to the community around them through providing detailing, landscaping and visual transparency between the development and the neighbouring community.

Development Permits are required;

- At the time of the subdivision application.

Development Permits are not required;

- If the proposed subdivision is for fee simple lots and the developer enters into an agreement with the Regional District to place a street tree meeting Regional District requirements at least every 60 feet on properties fronting public roads.

Development Permit guidelines.

- Edge preferences;
  - Landscaping and berms or a combination thereof are preferred to fences or walls.
  - Low fences with landscaping and/or berms are preferred to high fences.
  - Transparent fencing is preferred to solid fencing or walls.
- Fences or walls along the property line should be discontinuous (Jog in and out), landscaped (on the development property) on the public side of the fence, and be visually transparent (having breaks or the addition of lengths of materials such as wrought iron that allow for visual continuity between the development and public areas).
- Fences or walls should have detailing and a design treatment that creates variety and interest yet has an overall cohesive appearance. Attention to the details of design and the skillful use of multiple materials and multiple colours is encouraged.
- Entrances should show a high degree of detailing and landscaping. There should be a change in design and landscaping that visually reflects the importance of the entrance.
- The only permanent signs permitted are those that identify the property and name of the development. These are limited to the main entrances.
- Plant material and installation is to include shrubs, groundcovers and trees that meet the BC Nursery Trades Association Landscape Standards. Landscaping between the development site and the neighbouring community is to be generous and cohesively designed. The placement of trees, especially when adjacent to public streets is strongly encouraged.

13.9 Crystal Mountain Resort Design Development Permit Area

1. Category

The Crystal Mountain Resort Design Development Permit Area is designated in accordance with the *Local Government Act* for purpose of establishing objectives for the form and character of development.

2. Area

Crystal Mountain Resort Design Development Permit Areas include all lands designated as "Crystal Mountain Resort" identified on the Future Land Use Map 8c.

3. Justification

The design guidelines have been prepared by Oberto Oberti Architecture and Urban Design Inc. to create an identifiable and cohesive design character for the resort. The intent is to have each building and other man-made feature contribute to the character of the area so that there is an identifiable mountain resort image instead of a disparate collection of individual components that compete for attention as monuments to a particular individual or corporate taste.

4. Guidelines

Development Permits issued in this area will be in accordance with the following objectives and guidelines:

1. A Development Permit must be approved before construction of, addition to or alteration of a building or structure.

2. Mountain Resort Design Guidelines for Crystal Mountain (Appendix A-9)

Chapter 14

Greenhouse Gas (GHG) Emission Reduction

In 2007, Bill 44 *Greenhouse Gas Reduction Targets Act* was enacted by the Government of British Columbia. This legislation committed the Province of British Columbia to reduce greenhouse gas emissions by 33% below 2007 levels by the year 2020, and 80% below 2007 levels by the year 2050. As a result of this legislation in 2008, the Province of British Columbia made an amendment to the *Local Government Act,* Bill 27, to ensure that greenhouse gas emissions were reduced at a local level. Under this amendment, it was made mandatory that all Official Community Plans include targets, policies and actions for the reduction of greenhouse gas emissions by May 31, 2010.

On September 26, 2007, the Regional District of Central Okanagan (RDCO) became a signatory of the B.C. Climate Action Charter. As signatory to this charter, the Regional District has committed to develop strategies and take action to achieve the following goals:

i. being carbon neutral in respect to our local government operations by 2012,
ii. measuring and reporting our local government's GHG emissions profile, and
iii. creating complete, compact, more energy efficient communities within our Regional District.

To meet the goals stated above, policies and actions as outlined in this section have been developed. There are a number of existing strategies and plans already established within the Regional District that will further contribute to meeting these goals. The Regional Growth Strategy, along with the Okanagan Similkameen Airshed Coalition Committee's *Towards an Okanagan & Similkameen Valley Air Quality Management Plan* (2008), and the *Solid Waste Management Plan* (2006) are among the guiding documents currently in place to assist in the reduction of GHG emissions. The Province of British Columbia will support local governments to achieve some of these goals by providing the tools (Community Energy and Emissions Inventory (CEEI)) necessary to track and report GHG emissions.

As of May 2011, Bill 27 (2008) and the *Local Government (Green Communities) Statutes Amendment Act* will require Regional Growth Strategies to establish targets for the reduction of GHG emissions and policies and actions to achieve these targets. The Regional Growth Strategy (RGS) for the RDCO was adopted in 2000, and a comprehensive review and update of the RGS will commence in 2010. In accordance with the RDCO's commitment to reducing GHG emissions, the review of the RGS will be an essential component to assisting the local government to achieve its reduction targets. These targets will complement the policies and actions stated in this section.

The RDCO is part of the Okanagan Similkameen Airshed Coalition Committee, which develops strategies for Valley-wide improvements in air quality. This committee is a partnership between the RDCO, North Okanagan, and Okanagan-Similkameen Regional Districts.

The RDCO Waste Reduction Office implements programs to help reduce garbage going to local landfills. There are many initiatives which the Waste Reduction Office has implemented to reduce waste within the Central Okanagan region. In 2009, the Curbside Automated Waste Collection System was established. This waste reduction initiative included delivery of more than 150,000 carts to more than 50,000 homes throughout the Central Okanagan.

Targets

In accord with Provincial legislation, the Regional District's Greenhouse Gas Reduction Targets include:

- 10% reduction by 2020 from 2007 levels
- 33% by 2050 from 2007 level

These targets apply to the Rural Westside OCP area and the following policies and actions will be considered as they relate to development in the OCP area.

Policies

The Regional District will:

Land Use

1. Evaluate land use decisions and new developments on the implications and impacts on the natural environment.

2. Protect, and encourage farming to develop local food production by supporting the preservation of agricultural lands.

Development & Energy

3. Encourage sustainable development practices such as the use of energy efficient products (solar and geothermal technology) when new construction is taking place or when retrofitting existing buildings.

4. Promote acceptance and application of green building principles, strategies, and technologies among professionals and building developers.

Transportation

5. Support the development of plans and programs that will encourage sustainable modes of transportation and reduce the dependence on single occupancy automobiles.

6. Encourage and promote the establishment of home occupations or home based businesses through various zoning designations in the Zoning Bylaw in order to decrease dependence on automobiles.

7. Support and encourage the provision of increased walking and cycling opportunities as an alternative transportation method by:
    d) acquiring trail connections through private lands as identified in the *Westside Road Parks Preplan (1996)*;
    e) encouraging the Ministry of Transportation and Infrastructure to construct safe pedestrian walkways and cycling lanes along Westside Road as improvements permit; and
    f) requiring new developments to construct walking and cycling connections through private development and connections to regional trails.

Environment

8. Identify and recognize the significance of the natural areas which are essential for carbon absorption, and ensure that development is directed away from these carbon sinks.

9. Continue to protect Environmentally Sensitive Areas on private land through the development permit, rezoning, and subdivision processes.

10. Encourage coordination with various levels of government to jointly manage the airshed of the Okanagan Valley.

11. Establish programs which reduce the levels of airborne pollutants from residential and agricultural sources.

12. Review the impact of wood burning stoves and rural burning and consider potential regulations with incentives and education programs to encourage composting and chipping at regional sites.

13. Continue to support the work of the Okanagan Basin Water Board.

Waste Management

14. Encourage the use of recycling programs and educational opportunities for waste management to ensure members of the public are taking advantage of waste reduction opportunities.

15. Maintain the ability to investigate the extension of community water and/or sewer servicing to existing and unserviced subdivisions, when existing zoned properties or Land Use Contracts wish to proceed with development.

16. Continue to review and update the Liquid Waste Management Plan (LWMP) (2000) for the Central Okanagan West Electoral Area to help communities meet their wastewater objectives.

Actions

The Regional District will:

1. Work closely with the Okanagan Basin Water Board to address matters related to water conservation and climate change.

2. Implement the programs and plans of the Regional Waste Reduction Office, which includes solid waste management and recycling initiatives among others.

3. Ensure natural areas for carbon absorption remain a prominent component of land use within the Regional District's jurisdiction.

4. Protect Sensitive Terrestrial Ecosystems (protect against the removal of sensitive vegetation and trees and to require mitigation of damaged areas) through Development Permits Areas.

5. Maintain an acceptable level of air quality for the Okanagan air shed.

6. Establish sustainable long term sewage disposal systems in new and existing communities.

Development of Future Policies and Actions

The Regional District has committed to a multiyear initiative to complete a review and update of the Regional Growth Strategy (RGS) 2000. One of the key goals is to develop more detailed GHG reduction policies and actions in conjunction with the RGS review and update process. Once the RGS review and update has been completed and adopted by the Regional Board, these policies and actions will be incorporated into the Rural Westside Official Community Plan. In conjunction with the RGS, the Community Energy and Emissions Inventory (CEEI) report for the RDCO will be updated to better represent the Rural Westside OCP area.

APPENDIX 1

LANDSCAPE DESIGN GUIDELINES

What are Design Guidelines?

The *Local Government Act* of the Province of BC enables the Regional District to outline requirements for the form and character of commercial, industrial, and multiple family development such as appearance and landscaping. The guidelines provide conditions for applicants in developing plans, and a framework for evaluation of those plans by staff and the Regional Board.

1. Landscape Design Goals

1.1. Plants fulfill a multitude of purposes such as visually improving and softening the impact of buildings and parking, screening unsightly land uses, moderating the temperature, and improving air quality. People feel an innate connection to the world around us and living plants contribute to our physical and mental well-being. Landscaping is seen as a positive and desired contribution to the community in the urban environment.

1.2. Landscaping must consist of a variety of trees and shrubs in a cohesive design.

1.3. Landscape plans must respect and improve the views from public areas. The view of any development from the street is important. It creates the initial impression of the development and contributes to the overall character of the area.

1.4. Landscape plans must respect and improve the views from neighbouring residential properties. It is important that any development adjacent to residential areas be a "friendly" neighbour. Neighbouring residential uses should be buffered and screened with landscaping and fencing.

1.5. Trees filter air, moderate the temperature and are of great visual and environmental value. The planting of trees must be incorporated into landscape plans.

1.6. Water is a limited commodity in the Okanagan valley. The use of water conservation measures is important.

All landscape plans should be developed based upon the Landscape Design Goals, in consideration of the following landscape design guidelines.

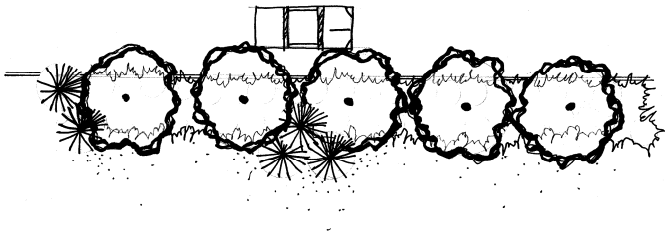
2. Views from public areas (such as roads, schools and parks)

2.1. Landscaping should be provided;

2.1.1. Along property lines that are next to public areas.
2.1.2. Along the base of buildings that are seen from the public areas.
2.1.3. Between parking areas and public roads.

2.2. All front yard setbacks should be landscaped.

2.3. Within any landscaped area fronting a public road street trees (several regularly spaced trees of one species) are to be provided at no more than 9 meter intervals and are to be at least 2.5 meters tall. The planting of other trees in addition to the street trees is strongly encouraged.



Street trees are required along roads.

3. Views from residential areas

3.1. Landscaping and buffering is to be provided next to any adjacent residential area. The entire setback should be landscaped in trees and shrubs.

3.2. Landscaped berms create a visual buffer. Even a small elevation change in the ground has an impact. Berms are encouraged especially where the creation of a visual screening effect is desired.

4. Parking, vehicular traffic, and waste collection areas

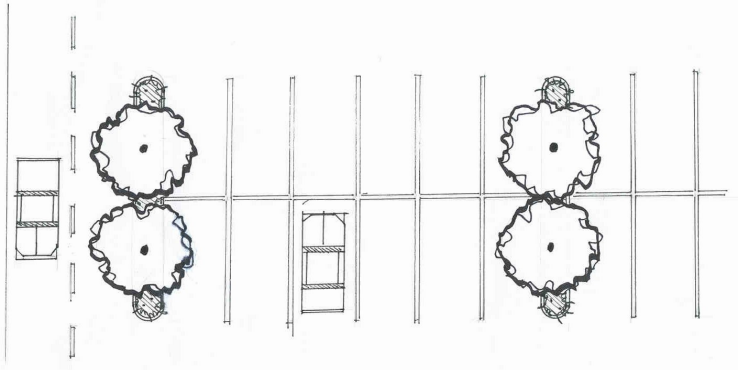
4.1. Outdoor storage or waste collection areas should be screened by fencing, hedging or landscaping.

4.2. Where landscaping is adjacent to parking or vehicular traffic there should be a concrete curb to protect the landscaping from damage.

4.3. In parking areas, landscape islands of trees and shrubs should be used to visually break up large expanses of parking. They are encouraged;

4.3.1. Between internal collectors (not used for direct access to parking stalls) and aisles that provide direct access to parking stalls,

4.3.2. At the end of aisles.
4.3.3. In mid-aisle to interrupt long aisles of parking stalls.



Trees and landscaping improve the parking environment for people and visually softens the impact of asphalt.

5. Existing landscaping

5.1. Integration with, or augmentation of, any existing landscaping is encouraged.

5.2. Retention of existing trees and integrating them into the proposed site and landscape design is encouraged.

6. Cohesiveness

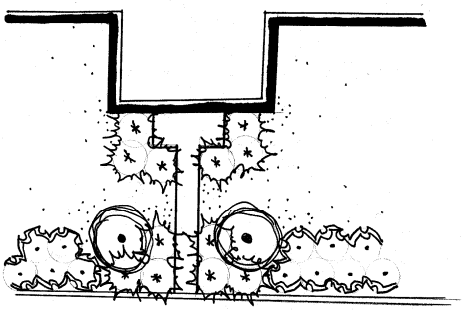
6.1. To create visual cohesiveness, choose a few types of plants and use them repeatedly in groups throughout the site. This creates overall visual continuity as opposed to a hodge-podge of "one of everything".

6.2. It is best to use a particular type of plant in odd number groupings (7, 9, 11 etc).

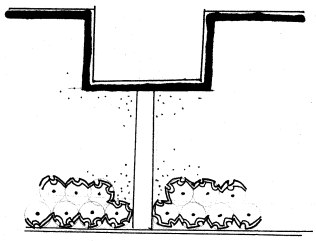
7. Focus

7.1. A change in the type or number of plants can be used to create a focus. That focus is important;

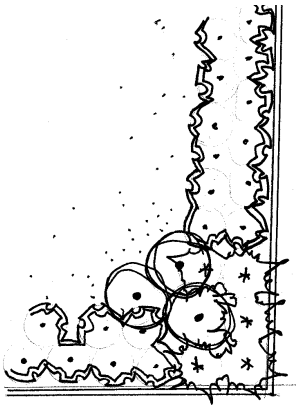
7.1.1. At entrances onto the site for either cars (driveways) or people (sidewalks),
7.1.2. Near important entrances and doors into buildings.
7.1.3. To emphasize changes in architecture.
7.1.4. At intersections, if the property is on a street corner.



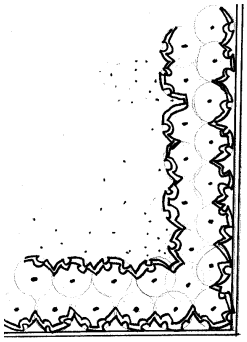
Focus created by the use of landscape material



No focus



Focus



No focus

Landscaping can create a focus at a street corner or where cars access the site.

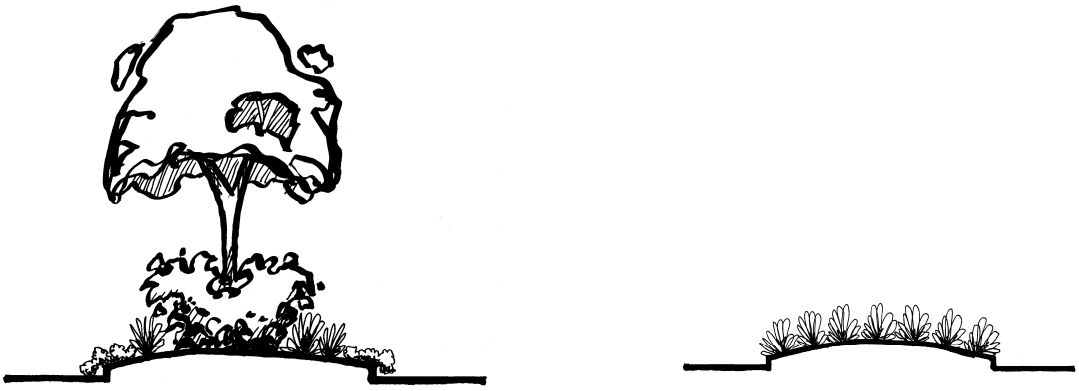
7.2. A focus is created by:

7.2.1. Changing the shape of the landscaped bed.
7.2.2. Using more landscaping at the focus.
7.2.3. Using a certain type of plant(s) or a specimen plant only at a focus.

8. Depth and Variety

8.1. Plant types should be selected such that there is interest provided in all four seasons. The use of at least one type of evergreen tree or shrub is encouraged.

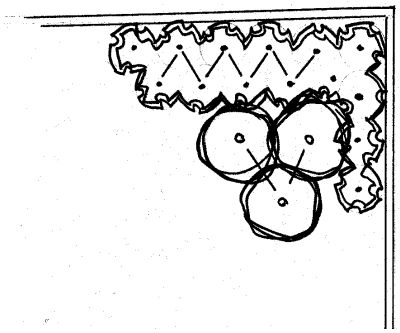
8.2. To increase variety and interest, choose different types of plants that will grow to be various heights. Include a combination of groundcovers, shrubs of various heights and trees.



Groundcovers, shrubs and trees create variety. One height is visually monotonous.

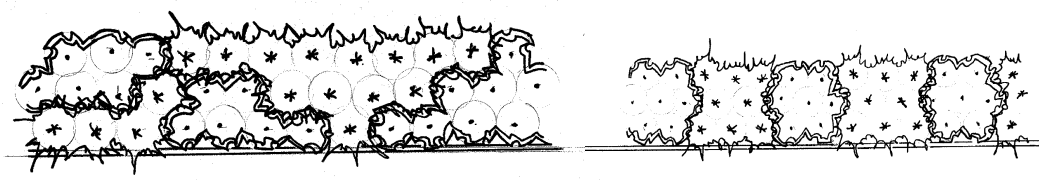
8.3. Visual depth is produced by;

8.3.1. Staggering plant material. Each plant is slightly offset from the next.



Staggered plants create visual depth and a natural appearance.

8.3.2. Layering plant material in a landscaped bed from one side to the other. Rather than one species across the entire depth of the bed, a few species are placed one behind the other to create a visual layering affect. Different plants are weaved in front and behind each other rather than placed in a linear series of regimented groups.



Layering creates depth and visual variety … versus no layering

9. Plant spacing

The distance between plants is called "on-centre spacing" and is measured from the centre of one plant to the centre of the neighbouring plant. The distance is based upon ensuring the plants fill in in a reasonable amount of time, yet are far enough apart to avoid overcrowding. Areas that require a development permit often have a relatively high public profile, therefore adequate plant density is important.

9.1. An acceptable "on centre" spacing will result in the landscape completely filling in in about 5 years time. On-centre spacing is very species dependant and typically varies as follows;

9.1.1. Groundcovers (such as arctostaphylos, cotoneaster, paxistima canbyi) – 6 inches to 2 feet on centre.
9.1.2. Small shrubs (such as spiraea japonica, potentilla fruticosa) – 2 to 3 feet on centre.
9.1.3. Medium shrubs and junipers (such as many hardy shrub roses, spiraea bumalda, cornus alba, pinus mugo)– 3 to 4 feet on centre.
9.1.4. Large shrubs (such as forsythia intermedia, many syringa, amabilis , cotinus coggygria – 4 to 5 feet on centre.

(The plants mentioned as examples of shrub size are not a complete list and are only general examples. Some species may have varieties that are larger or smaller, for example winged-burning bush, euonymous alatus, is a large shrub whereas euonymous alatus "compactus" is a medium sized shrub)

10. Shrub size

It is important that there be a good initial appearance and that landscaping not take too many years to fill in. Planting very small plants will reduce and delay the intended visual effect.

10.1. Unless a groundcover, all shrub material must be at least 2 gallon (#2) size.

If the landscaping covers a particularly large area, a reduction in size may be considered by the Regional District for one or more plant types. This would be contingent on plants in areas of high visual impact (such as at areas of focus discussed previously) being of an adequate container size to visually compensate for the other plants being less than a #2 pot size.

11. Standards

11.1. Plant material in the specified container size must meet the BC Landscape Standard for size and leaf density. (The BC Landscape Standard is published jointly by the BC Society of Landscape Architects and the BC Landscape and Nursery Association).

11.2. All trees shall be staked in accordance with the BC Landscape Standards. (The BC Landscape Standard is published jointly by the BC Society of Landscape Architects and the BC Landscape and Nursery Association).

11.3. All planted areas are to be covered with landscape fabric and mulched.

11.4. All landscaped areas must be irrigated. Low volume irrigation methods are encouraged. A Xeric (dry land) landscape design must still have an irrigation system to ensure survival during the initial years and to provide some water if required after the landscape is established. A low volume irrigation method is encouraged.

12. Plant material that is prohibited

12.1. There are certain plants that may harbour damaging diseases that can be transmitted to commercial orchards and vineyards in the Okanagan. The following types of plants are not permitted as part of planting plans;

12.1.1. All trees of the genus MALUS (apples or crabapples, including all ornamental or flowering crabapples).
12.1.2. All trees of the genus PYRUS (pears, including asian and ornamental pears).
12.1.3. All trees of the genus PRUNUS (flowering cherries and flowering plum).
12.1.4. All plants of the genus CYDONIA (quince).
12.1.5. All plants of the genus CHAENOMELES (flowering quince or japonica).

(Note: All plants have a latin name consisting of two words. The first word is the genus name, the second is the species name. For example, a flowering cherry is Prunus subhirtella.)

Plant material that is drought tolerant

All plants need water but there are some plants that are more tolerant of low water conditions than others. The use of drought tolerant plants reduces the need for frequent irrigation and saves water. It is important to remember that adequate watering during the first year or two is very important to ensure long-term plant survival.

The following species are generally more drought tolerant than most and their use is encouraged. This is not a comprehensive list. There are many other plants available that are also low water consumers.

Ground cover
Arctostaphylos uva- ursi – Bearberry
Cotoneaster horizontalis – cotoneaster
Herocallis sp. – daylily
Thymus sp – thyme (esp. wholly thyme)
Vinca minor – periwinkle (shade or part shade only)

Shrubs
Amelanchier alnifolia – Saskatoon berry bush
Buddelia davidii – butterfly bush
Caragana - Caragana
Cornus stolonifera – red osier dogwood
Cornus alba – yellow twigged dogwood
Holodiscus discolor – Oceanspray
Juniperus sp. – Juniper
Lonicera japonica "Halliana" – Hall's Honeysuckle
Mahonia aquifolium – Oregon grape
Pinus mugo - Mugo shrub pine
Physocarpus opulifolius – Golden Ninebark
Potentilla fruticosa – Cinquefoil
Rhus – Sumac
Rosa sp. – wild rose types
Sambucus sp - Elderberry
Spiraea sp. – Spiraea
Symphoricarpus albus – Snowberry bush

Trees
Abies concolor – White fir
Ailanthus altissima – Tree of Heaven
Carpinus betulus - European hornbeam
Celtis occidentalis – Common Hackberry
Cladrastis lutea – American Yellowood

Fraxinus pensylvanica – White ash
Ginkgo biloba - Gingko
Kolreuteria paniculata –Golden Raintree
Morus alba – White mulberry
Phellodendron amurense – Amur corktree
Pinus ponderosa – Ponderosa Pine
Pinus sylvestris – Scotch Pine
Sophora japonica
Sorbus aucuparia – Mountain Ash
Tilia sp. - Linden
Ulmus parvifolia – Lacebark Elm

Plant material that is beneficial to birds.

The following plant material is beneficial to birds. The use of these types of plants as part of an overall landscape design is encouraged. If the plant is being used because it produces berries, cones or fruit, it is important to check with the plant nursery that the species you choose actually produces fruit. Many types of plants have some species (or varieties) that do produce fruits and some that don't.

Trees

Sorbus sp. (those that produce berries) – ash trees
Evergreen trees (those that produce cones)

Shrubs

Amelanchier sp. – serviceberry (also called Saskatoon berry)
Mahonia aquifolium - Oregon Grape
Rosa sp. (Those that produce rose hips in winter) – wild roses
Symphorocarpus sp. - Snowberry
Medium or large shrubs with a twiggy dense growth pattern (provides cover)

APPENDIX 2

AQUATIC ECOSYSTEMS DEVELOPMENT DESIGN GUIDELINES

Aquatic Ecosystem Development Permit Objectives and Design Guidelines

Characteristics

Aquatic ecosystems are wet ecosystems including and surrounding watercourses, lakes, streams, ponds, broadleaf woodlands and wetlands. Some of these ecosystems may be dry during the summer or frozen in winter. The geography and vegetation that surrounds, protects and interacts with the aquatic environment is called the riparian area. Together, the water and the riparian area form an aquatic ecosystem.

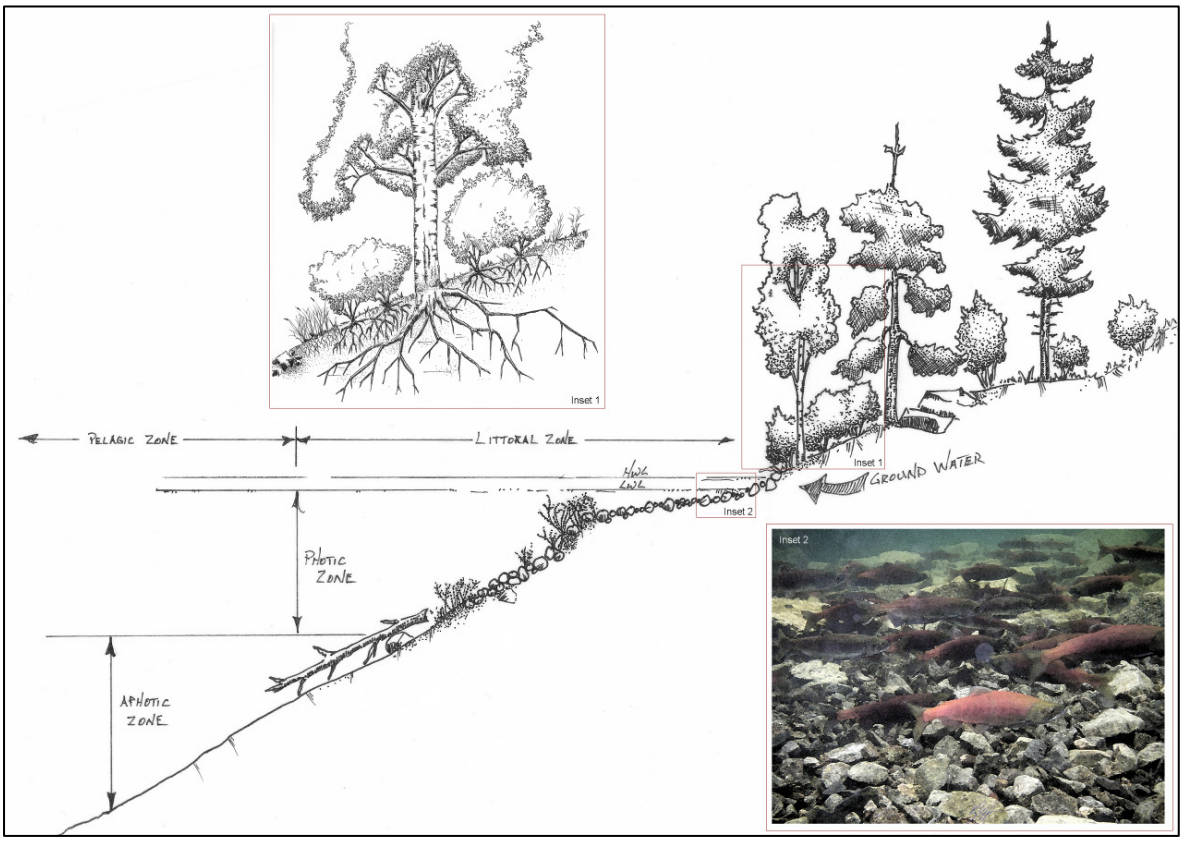


Illustration. Typical section of the North Westside shoreline of Okanagan Lake.

Aquatic ecosystems are protected not only because of their great importance to the ecology of the Okanagan but also because Provincial and Federal legislation (Riparian Area Regulation, the *BC Water Act*, and the *Federal Fisheries Act*) require that the RDCO ensure the protection of aquatic ecosystems.

Importance

The importance of aquatic ecosystems is far reaching and is only briefly summarized here. In the dry ecology of the Okanagan, aquatic habitats are critical for the survival of wildlife and form necessary travel corridors between habitats. Water is an important part of maintaining biodiversity and is essential for many species. Many rare species in the Okanagan are associated with aquatic environments.

The Okanagan also has a limited water supply and the water quality of surface water and aquifers (both below ground and in surface recharge areas) is important. The riparian habitat is a natural water purifier and pollution filtration system. A healthy riparian area also helps slow water flow and prevent erosion.

The entire water system is highly interconnected and fragile. A change in one part of a stream or wetland can have downstream consequences on wildlife, people and property. Finally, the quality of the aquatic environment will affect fish habitat and fish population numbers.

The Aquatic Ecosystem Development Permit Area (DPA) is designated in accordance with the *Local Government Act*. The Aquatic Ecosystem Development Permit Area provides protection for the natural environment, its ecosystems and biological diversity and, protection of development from hazardous conditions. Aquatic ecosystem development permits are for the protection of watercourses such as streams, ponds, and wetlands and the critical habitat and biodiversity in their riparian areas. Such ecosystems are important not only in their own right but form a backbone of corridors between ecosystems that create a healthy diversity and better support the needs of a variety of species. These connections avoid the creation of isolated "islands" and increase ecosystem sustainability for the future.

Aquatic ecosystems are protected not only because of their great importance to the ecology of the Okanagan but also because legislation of the Province of BC (the *Fish Protection Act*, the *Riparian Area Regulation*, and the *Water Act*) and Federal legislation (such as the *Fisheries Act*) all require that the Regional District ensure the protection of the aquatic ecosystem.

The *Trepanier Water Management Plan* completed in 2004 covered 5 major watersheds in the Okanagan. The report concludes that climate change will reduce water flows from current levels. Coupled with increasing demand there will be with future impacts on water quality, water availability, and changes to the natural environment.

The Aquatic Development Permit Area was established through the identification of stream and riparian areas utilizing a combination of field Inventory (using sub-metric global positioning system), interpretation of provincial TRIM[5] data, field surveys, and documentation of riparian locations.

[5] TRIM = Terrain Resource Inventory Mapping

Objectives

- To protect the ecological attributes and socio-economic values that is common to all Aquatic Ecosystems.
- To protect, restore and enhance Aquatic Ecosystems (water, wetland, riparian and broadleaf woodland).
- To protect Aquatic Ecosystems through the use of buffers.
- To protect water quality and quantity.
- To protect vital wildlife functions such as (but not limited to) a travel corridor, a place of refuge, water source, fish habitat, and a breeding habitat to ensure future generations.

Aquatic Development Permit Area Guidelines

- A leavestrip for the protection and restoration of the riparian ecosystem is to remain undisturbed near watercourses. The intention is that the leavestrip will be untouched by development and left in its natural condition, or, if damaged by previous use or construction, the ecosystem restored or enhanced.
- The leavestrip should be evaluated, established and monitored by a Qualified Environmental Professional (QEP) experienced in environmental assessment and design registered in the Province of BC following evaluation of the leavestrip requirements and recommendations.
- The assessment will include (but is not limited to) the consideration of:
    a. The Sensitive Ecosystem Inventory and Sensitive Habitat Inventory and Mapping Data and any other environmental information available from the RDCO or provincial ministries.
    b. Leave strips of sufficient width to accommodate the dynamic nature of the hydrologic system, maintain water quality, base flows and natural drainage patterns. A report prepared by a professional hydrologist may be required in circumstances where the hydrological condition has been or may be significantly disturbed.
    c. Provincial Best Management Guidelines pertaining to aquatic habitats, groundwater management and drinking water protection.
    d. An indication of when monitoring of important environmental conditions by the professional will occur.

- The Assessment Area will include:

    a. A 30-m band (horizontal plane) measured perpendicular from the mean annual highwater line (level) of the watercourse; For a ravine that is less than 60 m wide, from the top of the ravine to a spot 30 m beyond the top of the ravine; for a ravine that is more than 60 m wide, a strip that is 10 m wide from the top of the ravine.

- Leave strip widths will be determined based on the following factors:

a. If fish bearing or connected by surface water to a fish bearing water body:

- For **creeks and wetlands**, the leave-strip area will be no less than 15-m (horizontal distance) from the bankfull level of the subject watercourse. If the setback determined using the Detailed Assessment Methods of the Provincial Riparian Areas Regulation (RAR) exceeds 15-m, the leavestrip area will then comply with the Setback under the RAR.
- For an **active floodplain**, the leave strip (determined from (a.)) will start at the outer edge of this feature. *Active floodplain areas are those that are flooded more frequently than 1 in 5 years.* Seasonally inundated channels are to be included in the active floodplain;
- For **Okanagan Lake,** leave strips will be commensurate with the shoreline condition and adjacent aquatic habitat values and permitted land use will be harmonized with protection of these areas as assessed at the Provincial level (Based on Kokanee Shorespawning Values) through a Black/Red/Yellow/No Colour shoreline sensitivity and rating and activity risk matrix. (*Appendix 6).* Through continued work with the Province and the updating of the Foreshore Inventory Mapping and associated Aquatic Habitat Index, specific minimum setbacks may be set which reflect existing shoreline character (% disturbed). The proposed derived colour zones and setbacks are outlined in Table 1. The actually mapped area may vary depending on the update to the Foreshore Inventory Mapping and discussions with the Province. In the interim, the proposed shoreline sensitivity zones as outlined in Appendix 6 will be used as guidance for site specific development applications and will be subject to consideration from the Province as it relates to the critical black zones identified in the Okanagan Region Large Lakes Foreshore Protocol.

Table 1. Okanagan Lake Leave strip widths by Shoreline Sensitivity (*Appendix 6*).

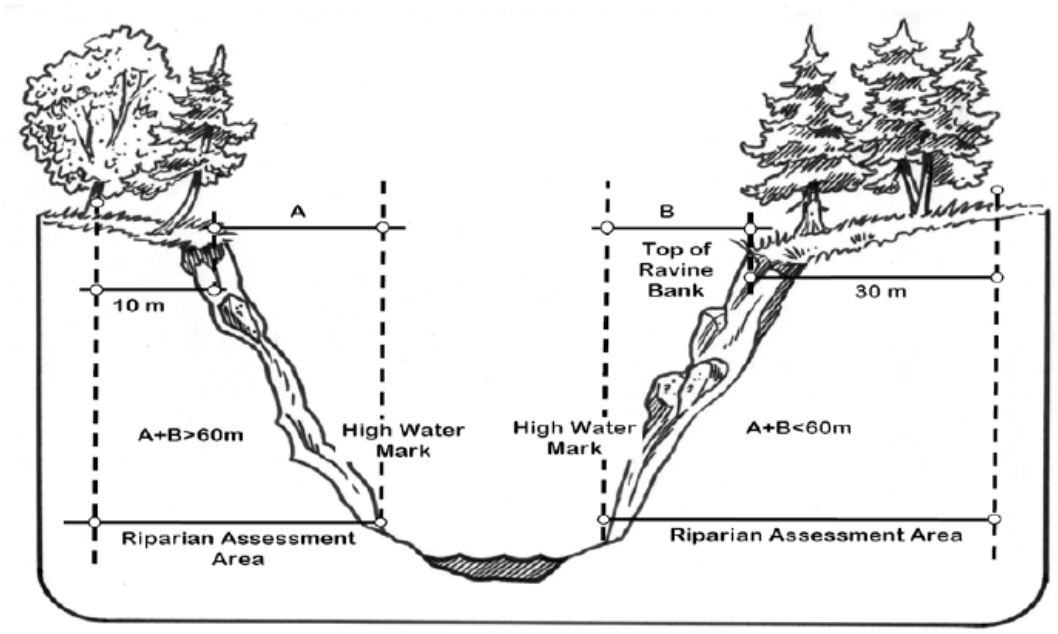
Shore Zone	Leavestrip
Red	30-m
Orange	20-m
Yellow	15-m

b. If **non-fish-bearing** and not connected by surface water to a fish bearing water body

c. Other considerations in determining an appropriate leavestrip include:

- Whether the watercourse has downstream water intakes.
- What the intended land use is within the property (both within and outside of the Development Permit Area).
- Whether the land use includes livestock storage, on site septic disposal, fuel storage, aggregate extraction, or other sources of potential surface or groundwater contamination.
- Proximity to stream or shore spawning areas.

- The location of the natural wetland, riparian and broadleaf woodland ecosystem communities.
- The location of important denning or nesting habitat.
- Ecosystem continuity off site and in the larger area.
- The extent of land clearing, berming, or removal of vegetation and topsoil.
- The timing of site work and rehabilitation.
- The natural slope of the land.
- In consideration of the guidelines of the development permit area.



- Leavestrips and open spaces should be linked to develop a continuous network of ecosystems.
- Networks of leavestrips, open spaces and foreshore may provide for public access where such access is designed in a way that is not detrimental to the natural environment.
- Where impact on the leavestrip may be permitted during construction, provisions should be in place to rehabilitate the leavestrip using native species. Rehabilitation is intended to restore or enhance the ecosystem in the leavestrip.
- Should damage occur to the leavestrip during construction, the RDCO may require a professional assessment of the damage and a report on recommendations for rehabilitation.

- All leavestrips may be required to be identified along their perimeter during all phases of construction by means such as brightly coloured snow fencing in order to prevent any accidental disturbance.
- Active bird nests and the nests of eagles, peregrine falcons, osprey, burrowing owls or heron (whether occupied or not) are protected by the provincial Wildlife Act. The provincial Develop with Care: Guidelines for Urban and Rural Land Development document has suggested minimum buffer distances that are based on scientific research and professional observation.
- Avoid the location of roads, driveways, and utility corridors along, parallel to, or across riparian ecosystems in order to maintain natural connectivity. Where it can be demonstrated that alternatives are not possible, design crossings that are narrow and perpendicular to riparian areas and elevated in order to maintain connectivity.
- Manage and minimize opportunities for livestock crossings and access to water.
- Maintain hydrologic regimes. Changes to surface and ground water flow can negatively impact aquatic, riparian, and wetland ecosystems. Trails and road construction and development should be designed to maintain the hydrology of these ecosystems. Inflow and outflow streams should not be diked or dammed.
- Maintain normal wetland and water processes such as flooding, seasonal drawdown, and groundwater recharge.
- Maintain entire intact ecosystems wherever possible discouraging any disruptive uses. Damage from motorbikes, ATV's, unplanned and unmaintained trails, mountain bikes and vehicles can easily adversely alter sensitive ecosystems and water quality. Manage access actively with fencing and railings.
- Riparian vegetation should be maintained where intact, or restored where disturbed or where invasive weeds have intruded.
- In general, development design should reflect the objectives and guidelines of the Develop with Care document produced by the Province of BC.

Specific Guidelines

The following specific objectives and specific guidelines pertain to the riparian and wetland ecosystem as identified by the Sensitive Ecosystem Inventory. They are in addition to the Objectives and Guidelines for aquatic ecosystems and relate to the important characteristics of that particular ecosystem.

Riparian Ecosystems

Characteristics – riparian ecosystems are defined as ecosystems that are adjacent to, and significantly influenced by a water body. That is, these sites are moister than, and have a plant community that is distinct from the surrounding upland. Riparian ecosystems are typically linear in nature. Wetlands are riparian in nature but were treated separately here because of their distinct ecological nature.

Riparian ecosystems are also divided into distinct classes (bench, gully, and fringe) according to their environmental and vegetation characteristics.

Vegetation maintains the cohesive nature of the stream bank, and reduces the power of the stream. During flood events, riparian vegetation catches fine nutrient-rich sediment, thus maintaining the productivity of the site. Without this vegetation, streams become wide and shallow, and sediment can accumulate in the stream channel where it may harm fish and reduce water quality. It can take many decades to stabilize denuded stream banks and restore narrow, deep stream channels. Riparian vegetation also provides inputs of organic matter into soils, which increases their capacity to absorb and store water. Additionally, riparian vegetation moderates water temperatures, provides an important source of food for many aquatic organisms, and provides important wildlife cover for nesting and feeding.

- Bench riparian ecosystems are flood or *fluvial* ecosystems. They have distinct characteristics that are associated with moving water such as creeks, streams and rivers. Bench riparian ecosystems are rich in nutrients, species and vegetation structural diversity. Generally, these sites are productive and develop more quickly after disturbance than adjacent upland sites. Typically, these ecosystems occurred as a band on either side of a creek and often formed natural corridors through the landscape. Soils of this ecosystem type are typically sandy and gravely, and were poorly developed. They usually have a mix of coniferous and deciduous trees in the overstory, with shrubby understories.
- Gully riparian ecosystems occur at the base and lower slopes of moderate to steep-sided linear sites (small valleys or ravines) with significant moisture. These ecosystems have either permanent or intermittent surface water flow, or significant subsurface flow, but are usually not subject to flooding. These are also rich and productive sites, and they form natural corridors through the area, providing habitat that is distinctly different from the surrounding landscape. These ecosystems usually have a mixed coniferous and deciduous overstory with shrubby understories. Slopes are often steep, and soils are variable.
- Lakes and ponds typically have fringe riparian ecosystems associated with their shorelines. Sandy, gravely soils were common in these ecosystems and soils are often gleysols or mottled. This class also includes sites on *fluvial fans*, and sites with significant seepage that are sensitive to soil and hydrological disturbances; soils are typically medium-textured on these sites. Within the North Westside OCP area, fringe riparian ecosystems are commonly associated with the Okanagan Lake foreshore, pond fringes, and moist seepage slopes. These ecosystems usually have mixed coniferous and deciduous overstories with shrubby understories.

Importance - According to the Sensitive Ecosystem Inventory the importance of this ecosystem includes its rarity (most riparian plant communities as listed with the CDC as rare), high biodiversity, fragility (sensitive to disturbance and changes in hydrology), aquatic habitat protection, water quality, wildlife corridors, flood protection and erosion reduction as well as social values.

Objectives specific to this ecosystem:

- To conserve as much of the ecosystem as possible. Where there are changes intended, maintain the key characteristics of the ecosystem as much as possible including:

    a. riparian vegetation;
    b. large cottonwood trees;
    c. threatened or endangered species or natural plant communities;
    d. natural processes such as stream flow, flooding, and stream channel movement;
    e. nesting or denning sites;
    f. standing dead trees, and downed trees and logs; and
    g. riparian corridors, and connectivity with upland communities.

Specific Riparian Guidelines:

- Discourage human settlement or other development within or adjacent to riparian areas.
- Riparian vegetation should be maintained where it is present, and restored where it has been lost.
- Manage access actively (e.g. with fencing and railings) to minimize the effects of recreation and other human uses.
- Where practical or necessary, restrict livestock access with fencing. To allow safe wildlife access, fences should be top-railed, page-wire should not be used, and bottom wires should be 45cm above ground level.
- Control pets. Pets should be restrained and hunting dogs should be trained away from riparian areas during the spring and summer. Other disturbances to waterfowl during the nesting season should also be avoided.
- Protect structural features: Large trees, snags, logs provide critical nesting habitat for many species of birds and animals. Large, old cottonwood trees and snags are especially important for birds, bats and other animals.
- Avoid use of pesticides in or near water and important foraging areas for wildlife. Pesticide use near foraging habitat for animals that feed on insects (e.g., Olive-sided Flycatcher and Common Night Hawk) should be avoided.
- Allow natural disturbances to occur. Flooding, windthrow, channel changes, slope failures and debris flows are recognized as important factors in the creation and maintenance of high diversity riparian habitats. These events and processes should be maintained as follows unless they pose a threat to safety or property.
- Minimize bank or flood protection. Human changes such as channel stabilization, deposition of rip-rap, and vegetation removal reduce riparian diversity and habitats.

- Maintain natural flow regimes. Deforestation, removal of vegetation, or increased impervious surfacing can result in significant increases in the size, duration, and frequency of floods. Bank erosion can also worsen.

Wetland Ecosystems

Characteristics - Wetlands occur on sites where the water table is at, near, or above the soil surface for a sufficient period of time to influence soil and vegetation development. Wetland ecosystems characteristically have plants that are adapted to growing on saturated soils with low oxygen levels. Wetlands were divided into distinct classes according to their environmental and vegetation characteristics. These classes included swamps, marshes, and shallow water ecosystems.

Wetlands are focal points for wildlife because of their infrequent occurrence in this landscape. Wetlands provide wildlife and biodiversity values that are disproportionate to the area they occupy on the land base. Wetland vegetation provides food, shelter, breeding habitat, and cover for many species of amphibians, reptiles, mammals, birds, and insects. Wetland vegetation provides food for many aquatic organisms. Ponds and shallow open water bodies are important watering sites for many species and provide painted turtle habitat, especially if floating logs are present. Wetlands are also sources of insects that provide food to birds and bats. Properly functioning wetlands store and filter water, and maintain water quality. They reduce the levels of sediment, nutrients, and toxic chemicals in outflow water.

Importance - According to the Sensitive Ecosystem Inventory the importance of this ecosystem includes its extreme rarity, high biodiversity, fragility, maintenance of water quality as well as social values.

Specific Wetland Guidelines*:*

- Discourage human settlement and other land developments within, or adjacent to, wetland areas. It is strongly recommended that such activities in and around wetlands be avoided. Roads should not be built near wetlands as they can alter hydrology and lead to extensive mortality of wildlife species that use wetlands.
- Maintain wetland hydrology. Draining or ditching in or around wetlands, the filling in of wetlands, and the discharge of stormwater into such sites should be avoided. Vegetation cover should not be removed as this increases surface runoff and reduces the amount of groundwater infiltration, thus reducing available summer moisture. Additionally, areas of impervious ground surfacing (i.e., pavement) should be minimized. Wetland hydrologists may need to be consulted to determine how to protect wetland hydrology.
- Maintain water quality. Wetlands store and filter water, and maintain water quality; therefore, the addition of urban storm drainage, agricultural runoff, and sediment from road building into wetlands should be prevented. Wetlands that have artificially high nutrient levels may experience algal blooms, and vegetation in some marshes may convert from sedges or rushes to cattails.
- Restrict recreational access. Intensive recreational use of shoreline areas can reduce plant cover, compact soil, and disturb wildlife. Roots of trees and shrubs can be easily damaged

by trampling and trail development in the moist soils of wetlands. Trails often become wide in wet, muddy areas, and sediments from trail damage may affect amphibians and insects. Motorized recreation, mountain biking, and horseback riding should be excluded from wetlands. Many recreational activities can potentially introduce or spread invasive species. In areas where trails to viewpoints in wetlands are desired, raised boardwalks should be used (avoid using rock or bark mulch on trails).

- Manage livestock access. Livestock use of many wetlands and ponds for water has significantly altered these sites. Overuse of wetlands by livestock can lead to soil compaction, damage and loss of vegetation cover and structure, and introductions of invasive plant species. Shrub and graminoid vegetation on many sites quickly recovers, however, when cattle use is reduced. Alternative watering sites, and fencing to allow a single access point to the water source can be used to maintain wetland functions and values while allowing some cattle use.
- Prevent disturbance of nesting or breeding areas. Recreational activities along wetland edges and canoeing in wetlands can impact amphibians, nesting waterfowl, and other birds, and thus, should be avoided during the breeding season (May through August). Disturbance of soils around wetlands, especially sandy soils that might be used by painted turtles for egg-laying, should also be avoided.
- Restrain pets near wetlands during spring and summer. Pets should be controlled to avoid disturbances to amphibians, waterfowl, and other birds during the breeding season (May through August).
- Allow natural wetland processes to maintain wetland functions and values. Beaver activity, flooding, seasonal drawdown, and groundwater recharge and discharge should be maintained. Inflow or outflow streams should not be diked or channelized.
- Avoid use of pesticides in or near wetlands.

APPENDIX 3

TERRESTRIAL ECOSYSTEMS DEVELOPMENT PERMIT OBJECTIVES AND DESIGN GUIDELINES.

Terrestrial Ecosystems Development Permit Objectives and Design Guidelines.

The Terrestrial Ecosystem Development Permit Area is designated in accordance with the *Local Government Act* for purpose of protection of the natural environment, its ecosystems and biological diversity and, protection of development from hazardous conditions. The Central Okanagan basin of British Columbia is an area of great ecological significance within both the Province of B.C. and Canada as a whole. It is an area with high biodiversity values, and many rare and endangered ecosystems, plant and animal species. A 'sensitive' ecosystem is one that is ecologically fragile and/or is recognized as rare in the provincial landscape. Rare ecosystems are those that are considered to be provincially rare either because of limited distribution or because disturbance has significantly limited their distribution. The Regional District of Central Okanagan is committed to the protection of identified areas of high ecological and natural value. Terrestrial ecosystems in the Central Okanagan support a number of Red and Blue-listed (rare and endangered) species and are a critical component to the health, vitality and economy of the local community. Sensitive ecosystems may be severely influenced by development unless there is effective community stewardship and land use planning.

Objectives

There are essentially two (2) objectives, both with the overriding goal of conserving important natural environments for current and future generations:

- To ensure that sensitive environments are identified and protected in areas that may be subject to future rural subdivision (as shown in the future land use designations and map of this OCP).

- To encourage and support the current rural and resort use of land in a way that best conserves important and vanishing environments. The Development Permit Area is established to include Coniferous Woodland, Broadleaf Woodland, Grassland, Sparsely Vegetated, and Mature Forest Ecosystems identified in the Sensitive Ecosystem Inventory: Central Okanagan. Copies of the inventory are available upon request to Regional District of Central Okanagan.

Other objectives include:

- To protect the ecological attributes and socio-economic values that are common to all Sensitive Terrestrial Ecosystems.
- To conserve Sensitive Terrestrial Ecosystems in a relatively natural state while supporting rural and resort land uses.

- To plan land development and new subdivisions carefully in a manner that protects Sensitive Terrestrial Ecosystems.
- To protect Sensitive Terrestrial Ecosystems through the use of buffers.
- To identify feasible habitat corridors connecting core conservation and significant habitat areas.
- Incorporate wildfire management in a way sensitive to the ecosystem that mimics the effect of the natural fire cycles that once occurred in the Okanagan and helped to shape and maintain the natural balance.

Terrestrial Ecosystem Development Permit Area Guidelines

- Plan land development carefully in a manner that is sensitive to the surrounding natural landscape.
- Discourage settlement, construction, land disturbance, and other development within or directly adjacent to Sensitive Terrestrial Ecosystems.
- Concentrations of high quality ecosystems and habitat for rare species should be prioritized for conservation.
- Delineate buffers around Sensitive Terrestrial Ecosystems. Fencing may be necessary along some buffers where further adjacent development and activity is anticipated, provided that fencing does not obstruct important wildlife movement corridors.
- Avoid the creation of isolated islands of ecosystems. Delineate corridors between Sensitive Terrestrial Ecosystems to create interconnectedness especially for critical wildlife travel routes.
- Conserve snags and standing dead trees where safe to do so. Soft decaying wood is a valuable home and food source for many birds and animals. For some species it is essential. Standing dead trees are typically topped to within 6 metres of the ground in an area that is safe should it eventually fall. It is recognized that dead wood decays over time and the eventual removal of standing dead wood and snags is acceptable. Locate settlements, drives, construction and other development away from existing large, old trees and snags. Artificial snags can be located in safe areas to help improve habitat.
- Plan, design and implement land development and subdivision to protect Endangered, Threatened, or Vulnerable species or plant communities. Avoid disturbance to sites where Rare plants are growing and where rare natural plant communities occur, and maintain critical habitat structures such as old trees, snags, trees with cavities, natural grasslands.
- Conserving trees in communities (groups of trees along with their associated understory) rather than isolating individual specimens is preferred. Groups of trees form a larger intact ecosystem and are more likely to maintain the important characteristics of the ecosystem over time than a few scattered trees. However, some ecosystems are characterized by or may contain some isolated trees and their conservation as well is important.

- The conservation of trees should extend beyond the drip line of the tree. The roots of established trees are very sensitive. A trees root system on the surface and below ground may be larger than the part of the tree you see above ground. Damage to the roots (especially in mature trees) can impede the trees ability to obtain water and nutrition and may eventually kill the tree. The drip line is an imaginary line drawn around the tree(s) outside the full extent of the branches.
- Maintain water quality. Water quality can be affected by excessive land alteration, erosion, and the improper use and storage of chemicals and hazardous materials.
- Prevent disturbance of nesting sites and breeding areas. It is important that animals have the habitat that supports their reproduction and so ensures future generations.
- Control invasive species.
- Restore native vegetation where it has been disturbed.
- Carry out erosion and sedimentation control measures to prevent ecosystem degradation.
- Restore the effects of the natural cycle of low intensity fire once common to the Okanagan. The suppression of fire by mankind has dramatically altered the ecology of the valley as well as increased the available fuel for wildfire. Wildfire hazard mitigation can happen in an environmentally sensitive way that restores ecosystems to the natural condition that would be expected if the normal cycle of fire was permitted to affect the environment.
- Identify critical habitat. Where disturbance cannot be mitigated it may be acceptable, at the discretion of the RDCO, to do environmental improvements off the property in compensation for loss on-site with the intention of no net loss of critical habitat overall.

Specific Guidelines

The following specific objectives and specific guidelines pertain to the specific ecosystems as identified by the site-specific assessment or by the Sensitive Ecosystem Inventory. They are in addition to the Overall Objectives and Overall Guidelines and relate to the important characteristics of that particular ecosystem.

Coniferous Woodlands

Characteristics – Coniferous woodland ecosystems in the study area have open coniferous tree canopies. They occur in drier climates, on rocky knolls, and on steep south-facing slopes where limited moisture or shallow soil limited tree establishment. These ecosystems have scattered ponderosa pine and interior Douglas-fir trees, and saskatoon growing in rock fractures with patches of grasses and forbs in shallow soil pockets. Historically, these ecosystems would have burned frequently, except on sites with minimal vegetation and lots of exposed rock. Fire exclusion has resulted in forest ingrowth on some sites (Min. of Environment – SEI).

Importance – Coniferous woodland ecosystems comprised the largest sensitive ecosystems category with the Central Okanagan Sensitive Ecosystem Inventory. Mature woodlands are a high priority for conservation and preservation. Younger structural stages can be important in forming buffers and providing recruitment for older structural stages. Although areas of coniferous woodlands and

mature forests remain, many have been altered significantly through selective logging and fire exclusion and furthermore have been degraded by fragmentation, human use, in growth, and invasive plants (weeds).

Specific Coniferous Woodlands Objectives

- Delineate buffers around coniferous woodland ecosystems
- Avoid direct and indirect impacts
- Plan land development carefully

Specific Coniferous Woodlands Guidelines

- Buffer to prevent invasive weed species & help maintain ecological viability and connectivity to other ecosystems
- Discourage human settlement or development
- Manage access
- Prevent soil disturbance
- Require an ecological inventory be conducted by qualified professional
- Design and implement land development activities to protect

Broadleaf Woodland Ecosystem

Characteristics – Broadleaf woodland ecosystems are where the natural changes in the ecological community over time have resulted in mature broadleaf woodlands as the climax stage of succession (the long term stable ecosystem for the site). Typically these are areas dominated by trembling aspen and other broadleaved trees and shrubs. Broadleaf woodlands are located in broad, moist depressions or areas of subsurface water seepage and may occur adjacent to riparian ecosystems. This ecosystem can have an understory that is predominantly shrubby with Saskatoon bushes, snowberry bushes, Oregon grape, or grassland. Soils tend to be rich due to decomposing leaf litter and nutrients carried to the site by moisture. These sites are very rare and important ground water (aquifer) recharge areas as well as habitat. The tree cavities found in broadleaved woodlands are important nesting habitat.

Importance – According to the Sensitive Ecosystem Inventory the importance of this ecosystem includes its extreme rarity (covering only 0.3% of the SEI study area), high biodiversity, specialized habitat (many species depend on features found only in broadleaf woodlands), fragility (the water seepage makes the soils very vulnerable) as well as social and visual values.

Objectives specific to this ecosystem

- To conserve, intact, as much of the ecosystem as possible

- Where there are changes intended, maintain the key characteristics of the ecosystem as much as possible including:

  - Aspen and other broadleaf trees and their root systems,
  - A single layered high canopy,
  - A complex understory of grasses and shrubs,
  - Extensive and thick leaf litter (or other organic matter) surface layer
  - Fragile underlying wetlands and seepage areas.

- There is potential that changes may actually help improve and restore this ecosystem by removing the ingrowth of young coniferous trees that natural fires would have normally periodically cleared out.

Specific Broadleaf Woodland Guidelines:

- Protect nesting and denning sites that were identified on site through an initial reconnaissance or in the ecological inventory. It is important for animals and birds to reproduce and ensure future generations. Important features include dens, raptor nest or perch trees, owl roosts, woodpecker cavities and bat roosts. Cavities in aspen trees are an important unique feature of the broadleaf woodland.

- Conserve soil leaf litter and fallen debris. The decay of fallen vegetation is an important source of nutrients as well as habitat and protection for animals.

- Should the removal of dangerous trees or encroaching coniferous trees be necessary, when choosing trees to thin or remove maintain the high canopy layer of the forest and its filtered sunlight affect. Choose trees carefully in a way that maintains the key characteristics of the broadleaf woodland ecosystem.

- Maintain habitat structures

Grassland Ecosystems

Characteristics – Grasslands are dominated by bunchgrasses with scattered broadleaf perennials and wildflowers. Grasslands are found in dry areas where frequent, low intensity natural fires historically occurred. There are two categories of grassland. "Grassland" ecosystems are open and dominated by grasses and wildflowers with a surface mulch of decaying vegetation, lichens and mosses. "Shrubland" ecosystems are grasslands that contain shrubs such as snowberry, saskatoon berry, and roses. This ecosystem is typically not as dry as the grassland ecosystem and so can sustain some scattered shrubs. The soils of the shrubland ecosystem are typically richer than open grasslands.

Importance – Rarity in North Westside OCP Area, high biodiversity, high sensitivity to disturbance (due to very fragile soils), as well as social and visual values.

Specific Grassland Ecosystem Objectives

- To conserve, intact, as much of the ecosystem as possible.
- Limit disturbance. Because of the lack of moisture and the poor nature of the soils disturbance in the grassland ecosystem can damage the thin crust of viable soil and recovery is very tenuous and slow.
- Where there are changes intended, maintain the key characteristics of the ecosystem as much as possible;
- a predominance of native grasses and perennials (with some scattered shrubs on the moister sites with better soils),
- Conservation of the vital thin active surface soil layer.
- Remove invasive weeds and maintain a healthy ecosystem so that invasive weeds cannot re-establish themselves.
- There is potential that changes may actually help improve and restore this ecosystem by removing the ingrowth of young trees encroaching into the grasslands that natural fires would have normally periodically cleared out.

Specific Grassland Ecosystem Guidelines

- Protect nesting and denning sites that were identified on site through an initial reconnaissance or in the ecological inventory. It is important for animals and birds to reproduce and ensure future generations. Many grassland birds are ground nesters.
- Manage access to minimize vehicular and livestock access. The root systems and thin soils of grasslands are sensitive to disturbance and rely on a very thin active layer of the soil. This ecosystem is one of the most sensitive to surface disturbance.
- Protect large old trees (and their root systems) and snags. Such isolated trees scattered through the grasslands provide shelter, nesting habitat, and food source for wildlife.
- Minimize soil disturbance.
- Manage livestock use. Overgrazing can seriously damage or destroy native grasslands. Also the poor timing of grazing can mean that native plants cannot reproduce or suffer damage. Excessive or improper grazing can cause enough damage to allow invasive weeds (often detrimental to grazing animals) to colonize an area.
- Encourage the maintenance of natural sites and the planting of gardens with native, dry land species. This can actually extend habitat for native birds and animals into the backyard.
- The removal of invasive weeds and the restoration of the grassland is a priority.

Sparsely Vegetated Cliff and Rock Ecosystems

Characteristics – Sparsely vegetated cliff and rock ecosystems occur on sites where rock, cliffs, or talus slopes only allow for discontinuous vegetation cover interspersed with bedrock or blocks of rock. This ecosystem provides protected shelves and crevices that are important for shelter, breeding, and overwintering for a variety of reptiles, animals and birds. Slopes with a warm orientation are especially important.

Importance – Extreme rarity (confirm abundance), high biodiversity, specialized habitat (a number of species including some threatened or endangered species are dependant on these habitats), as well as social and visual values.

Specific Sparsely Vegetated Cliff and Rock Ecosystems Objectives

- To conserve, intact, as much of the ecosystem as possible
- Where there are changes intended, maintain the key characteristics of the ecosystem as much as possible;
- Exposed rough rock and its surrounding plant community;
- Talus slopes and debris accumulation at the base of cliffs and rock outcrops;
- Access to and from the area for wildlife that needs this as essential habitat; and
- Future protection from disturbance.

Specific Sparsely Vegetated Cliff and Rock Ecosystems Guidelines

- Protect nesting and denning sites that were identified on site through an initial reconnaissance or in the ecological inventory. It is important for animals and birds to reproduce and ensure future generations. Important features include hibernacula (hibernation chambers) for snakes and reptiles, raptor nests or perch trees, nesting cavities, woodpecker cavities, and bat roosts.
- Manage access to minimize vehicular and livestock access. Avoid roads near hibernacula and prevent the disturbance of snake hibernacula. Manage road location to prevent snake mortality.
- Minimize soil disturbances and minimize disturbance of rock debris.
- Plan, design and implement land development and subdivision to protect endangered, threatened, or vulnerable species or plant communities. Avoid disturbance to sites where rare plants are growing and where rare natural plant communities occur, and maintain habitat structures such as talus slopes at the base of rock outcrops, steep faces or rock outcrops and cliffs, scattered large old trees and snags.
- Protect large old trees (and their root systems) and snags. Such isolated trees scattered through the sparsely vegetated areas provide shelter, nesting habitat, and food source for wildlife. Discourage rock climbing in areas that have not been

assessed for important habitat considerations. Do not allow rock climbing in important nesting, denning and other habitat features when identified.

APPENDIX 4

HILLSIDE DEVELOPMENT PERMIT AREA OBJECTIVES AND DESIGN GUIDELINES

Hillside Development Permit Area Objectives and Design Guidelines

Hillsides are important, visually dominant features in the Okanagan. Hillside locations can also be subject to hazards and adverse impacts from subdivision and road building. It is important that future subdivision or proposed major landform changes on the OCP area hillsides be undertaken sensitively, in consideration of environmental and visual impact, and also in consideration of the potential impact on neighbouring properties.

Objectives

- To support rural subdivision, road building and construction on hillsides that protects and enhances the natural characteristics of the hillsides which are a significant component of the OCP area.

- To support rural subdivision, road building and construction on hillsides in a manner that minimizes damage to property (both the property under application and neighbouring property) from erosion, soil instability, rock fall, or other identified hazard.

- To support rural subdivision, road building and construction on hillsides in a manner that is sensitive to the natural topography and maximizes the retention of existing landscape, vegetation and soils.

- To support rural subdivision, road building and construction on hillsides in a manner that is responsive to the natural environment and drainage patterns.

Hillside Development Permit Area Guidelines

The following guidelines apply within the Hillside Development Permit Area:

- Require all areas with slopes, greater than or equal to 30%, be investigated as hazardous, environmental, and visually sensitive lands and a no-build/no-disturb covenant considered as part of the zoning, subdivision or building permit approval process.

- Development opportunities, constraints and conditions of design will be identified on the basis of a topographic and feature survey showing natural slope contours (in 2 to 5 meter contour intervals), spot elevations, swales, knolls, ridgelines, bedrock outcrops, cliffs and slope transitions, seasonal and permanent watercourses, drainage routes, vegetation, top of bank, and break lines.

- The topographic survey will include current and future roads (public, strata, and forest), site grading and post development contours (in 2 to 5 meter contour intervals), water intakes on or adjacent to the development site, prominent views, and will identify potential hazards to neighbouring properties from existing or future development.

- A plan of site remediation including but not limited to; sensitive grading, revegetation (reflecting the Okanagan Landscape), erosion control, and soil amelioration, prepared by the appropriate professional (registered landscape architect, professional forester) should be provided in advance of any site grading or removal of forest vegetation.

- The pattern of development should be responsive to the varied topography and natural landscape. Changes to existing terrain should be kept to a minimum.

- Cluster developments on steep slopes, in a manner which responds to the site's natural contours and preserves more unbuilt open space for conservation or recreation/amenity space.

- Roads, access, and driveways should follow topography and avoid excessive cut and fills. Roads are encouraged to incorporate gentle curves and avoid long stretches of straight road.

- A reduction of road widths for local roads in order to reduce construction impact may be considered subject to agreement by the road authority.

- The impact of road design on potential road access to neighbouring lands beyond should be considered in accordance with the principles of these guidelines.

- Fill or cut slopes exceeding 10 metres in vertical height should be graded to resemble naturally occurring terrain and revegetated.

- Cut and fill slopes and road construction should be safe and not create a hazard of debris torrent or landslide.

- Hillside development must preserve or protect unique or special natural features of the site, such as land forms, rock outcroppings, mature trees and vegetation, natural drainage, hilltops and ridge lines.

- Manmade storm drainage and retention ponds should have a natural appearance and restored to the condition of natural environment. Drainage should be designed as natural environmental corridors wherever possible.

- Drainage flow rates offsite should be retained as close as possible to pre-development conditions and drainage retention and detention is encouraged.

- The protection of water quality should be ensured.

APPENDIX 5

WILDFIRE INTERFACE CONSTRUCTION DEVELOPMENT PERMIT OBJECTIVES AND DESIGN GUIDELINES

Wildfire Interface Construction Development Permit Objectives and Design Guidelines

These Design Guidelines will be used in reviewing Development Permit applications. It is important that construction within the Wildfire Interface Construction Development Permit Area designated in the Official Community Plan show a consideration of these guidelines. While these guidelines directly apply only to development permit areas, the recommendations for the reduction of wildfire hazard would be wise considerations for many homeowners in the Regional District. Flying embers can ignite structures up to 1.5 kilometres from the fire source.

In the fall of 2009, the RDCO began developing a Community Wildfire Protection Plan (CWPP). The recommendations in the final CWPP have been approved and the following guidelines and associated policies are to be considered in conjunction with the approved CWPP. .

Introduction

The Okanagan has a naturally dry climate and a large community interface with forested land. Homes have been lost to wildfire and it will be an ever-present danger in the valley.

An important part of reducing wildfire hazard involves modifying how individual homes are constructed near areas of forested public land such as provincial forest or large forested parks. The accumulation of small choices such as siding material, building material, screening of soffits, screening the tops of chimneys, using non-combustible landscape mulch, and the choice of landscape plants, can add up to either saving or losing a home to wildfire. The basis for the Guidelines is the document "Fire Smart, Protecting Your Community from Wildfire" supported by the Alberta Department of Sustainable Resource Development, the British Columbia Forest Service, Natural Resources Canada, most Canadian provinces and endorsed by the report of the Province of BC "2003 Firestorm Provincial Review".

The design guidelines do not cover all measures for wildfire hazard reduction possible but are minimum standards that focus mainly on new home construction, large additions, and their immediate vicinity. A good source for additional information is www.for.gov.bc.ca/protect/safety/. The Development Services Department of the Regional District also has brochures available.

Zones of Fuel Management

The design guidelines are based upon the typical Priority 1 zone of 10 metres from the building established for flat land. While these guidelines represent some minimum requirements, it is advisable to consider a larger Priority 1 zone for properties on a slope, especially on the downhill side. There are three priority areas as outlined in "Fire Smart, Protecting Your Community from Wildfire":

Priority 1 zone is within 10 metres (30 feet) of a building and is the most critical zone. The development permit deals only with this area. While these design guidelines deal with the typical situation, a property owner may wish to consider widening the priority area if located on a slope, especially on the downhill side.

Priority 2 zone begins 10 metres (30 feet) from a building and extends to 30 metres (100 feet) depending upon topography. The more the land slopes, the more the zone should be extended. Radiant heat and burning embers originating from an area this close to a structure may cause it to burn. Vegetation and potential fuels in this area should be managed to reduce fire intensity and rate of spread by methods such as removing dead needles, dead wood and combustible debris from the ground, removing any tree limbs within 2 metres of the ground, and spacing trees so that no tree limb is closer than 3 metres to the next.

Priority 3 zone begins 30 metres from a building and extend to 200 metres or more. High intensity crown fires that occur in this zone may be a potential high source of burning embers.

Objective

- The objective is to reduce the susceptibility to wildfire of new construction or large additions near the provincial forest interface, or the interface with large forested parks.

Wildfire Interface Development Permit Design Guidelines

Roofing – The roof covering shall conform to Class A, B or C fire resistance as defined in the BC Building Code.

Roofs catching fire are the number one cause of building losses during a wildfire event. The roof presents a large, flat area that fire embers can land on and start a new fire. Roofing material has several classifications with Class A being the most fire resistant. Some materials that either fall within the rating system or, can be obtained in forms that meet Class A, B or C requirements, include composite (asphalt and fibreglass) shingles, concrete or clay tile, metal roofing, and wood shake roofing.

Exterior Wall Finishes – Any material used for exterior wall finishes should be fire resistant such as stucco, metal siding, brick, cement shingles, concrete block, poured concrete, logs or heavy timbers as defined in the BC Building Code, and rock.

Second only to the roof material, siding material is the part of the building most prone to ignite in a wildfire event. The intense heat of the fire itself, fire embers, and burning vegetation at the base of the wall, can individually or all together cause the side of a building to catch fire.

Chimneys – All chimneys should have spark arrestors made of 12 gauge (or better) welded or woven wire mesh with mesh openings of less than 12 millimetres.

Chimneys can present a serious hazard as a source of sparks that can start fires, and as a way for burning embers to enter a building.

Eaves, vents, and openings – All eaves, attic and under floor openings should be screened with corrosion-resistant, 3-millimetre non-combustible wire mesh (as a minimum).

Vents are important for the healthy air exchange and moisture escape required in a building. They also are ready-made accesses into a building. Unprotected eaves can allow burning embers to enter and also allow flames that are spreading up a wall to penetrate into the roof structure.

Windows and glazing – All windows must be double paned or tempered

Glass can be shattered by the heat of a fire and create openings for fire and burning debris to enter the building. It is highly unlikely that an interior will ignite from thermal radiation through intact glass.

A single pane thickness of glass is most susceptible to collapse. The larger the pane of glass, the more likely it is to shatter.

Balconies, decks and porches –

- Decks should be constructed of heavy timber as defined in the BC Building Code, or, with 1-hour fire resistant rated assemblies or non-combustible construction as defined by the BC Building Code.
- Manufactured homes should be skirted with a fire resistant material as outlined in the previous guideline for exterior wall finishes.

As with roofs, decks present a large horizontal surface for burning embers to land on and take hold. In addition, decks have an undersurface that also can be a source of fuel for fires. It is important to consider the vulnerability of decks to fire from both above and below.

Landscaping on the property within 10 metres (Priority 1 zone) of a building shall not include coniferous evergreen shrubs such as junipers, mugo pines, or coniferous evergreen hedges.

There are three priority zones for the modification of vegetation to reduce wildfire hazard. Priority Zone 1, the most important, is within 10 metres (30 feet) of the building. Without fuel modification in this critical area, the fire intensity and the rate of spread can make firefighting difficult or impossible.

Coniferous evergreen shrubs are resinous and have a large surface area. They are an excellent fuel for fire and can be a source of flames and sparks that can enter a building. Coniferous evergreen shrubs can also be a source of heat that can burn or melt materials and shatter windows.

It is important to choose plants that are less combustible and burn with less intensity. Deciduous shrubs (shrubs that lose their leaves in the winter), broad-leaved evergreen shrubs (such as bearberry, Oregon grape, cotoneaster, rhododendrons, etc.), perennials, annuals and trimmed grass are preferred.

No additional or new coniferous evergreen trees are to be planted within 10 metres of the building. It is not advisable to retain previously existing mature coniferous evergreen trees within 10 metres (Priority 1 zone) of the building. Any coniferous evergreen trees that are to be retained on the property that lie within 10 metres (Priority 1 zone) of the building must;

- Have limbs pruned such that they are at least 2 meters above the ground.
- Be spaced so that they have 3 metres between crowns. (In other words, the tips of the branches of a tree are no closer than 3 meters to the tips of the branches of another).
- No limbs should be within 3 meters of the building or attachments such as balconies.

Evergreen trees contain resin, have needles that provide a lot of surface area, and are excellent fuel for fires. Close to a building, they act as a ladder that allows the fire to climb onto the building, under eaves and leap onto roofs. They can also be a source of heat that shatters windows. Deciduous trees are a safer alternative in the Priority 1 area. However, the measures outlined here somewhat limit the hazard should the choice be made to retain pre-existing evergreen trees in the Priority 1 area. White pine, ponderosa pine and western larch have a medium flammability while most other coniferous evergreens are highly flammability.

Landscaping on the property within 10 metres (Priority 1 zone) of a building shall use only non-combustible landscape mulches.

Areas covered with landscape mulches are a large horizontal surface for embers to land on, much like roofs and decks. Some commonly used mulch, such as bark chips, are also highly flammable. The combination of flammability and a large surface area creates a perfect environment for fire. Combustible fuel sources should not be located next to a building. Various sizes and colours of landscape rock are a common alternative. Another ground covering choice is low-lying plants that are either deciduous (lose their leaves in the fall), or broadleaved evergreen, trimmed grass, annuals or perennials. The use of landscape fabric can reduce the need for a very thick layer of mulch.

APPENDIX 6

KOKANEE SHORESPAWNING ZONES (ADAPTED FROM THE MINISTRY OF ENVIRONMENT), SHORELINE DEVELOPMENT, AND IDENTIFICATION OF SHORELINE ZONES FOR USE IN THE RDCO OFFICIAL COMMUNITY PLAN

KOKANEE SHORESPAWNING ZONES (Adapted from the Ministry of Environment), SHORELINE DEVELOPMENT, and IDENTIFICATION of SHORELINE ZONES for Use in the RDCO Official Community Plan

Foreshore and riparian areas are important to fish and wildlife species, including species at risk. During the planning and evaluation of works affecting the foreshore, consideration will be given to ensuring that any works do not impose direct or long term cumulative impacts to fish and wildlife species and their habitats. The Okanagan Shuswap Land and Resource Management Plan (OSLRMP) provides strategic direction for the management of large lake shorelines and associated fish habitat, above and below the high water mark (HWM). The OSLRMP directs agencies to manage proactively through identification of fisheries management zones, guide lakeshore development so as to reduce or avoid impacts to sensitive fish habitats, and minimize the potential for cumulative impacts resulting from individual projects. There is also direction to manage the lakeshore in a cooperative manner between all levels of government. This approach is consistent with the Ministry of Environment's shared stewardship model to protect the natural resources of British Columbia. This includes an increased emphasis on fostering stewardship and cooperative approaches to environmental management through collaboration, information sharing, education and use of Best Management Practices (BMPs).

This information is intended to assist provincial and federal agencies, local governments, and the general public during the planning of developments, land use planning (e.g. zoning) and/or the adjudication of applications for specific development activities (e.g. applications for foreshore leases for docks, boat launches or marinas). The Ministry of Environment (MOE) continues to update information related to shore-spawning fish habitat and inventories for species at risk. This document identifies the risks to fish and species at risk and their habitats based on specific development activity.

Knowledge of this information in the early planning stages can be beneficial in choosing an appropriate site or activity. The MOE has adopted the use of a risk matrix for species at risk and the habitat protection provisions of section 35 (1) & (2) of the *Fisheries Act*. At this time review of all proposals for works below the HWM on Okanagan Lake will be follow this protocol. In the development of this protocol foreshore sensitivity maps, risk ratings for specific development activities, and preferred procedures and practices have been developed. Responding to the MOE protocol for works below the Okanagan Lake High Water Level, adjacent upland activities and land use planning exercises should closely consider foreshore sensitivities, ecological values and potential development constraints. This may be particularly relevant with regards to moorage development or

expansion along shorelines with known high (Red Zone) and very high (Black Zone) Kokanee shorespawning use intensity.

Within Okanagan Lake, Foreshore Sensitivity Maps have been categorized into 4 zones based on development activity risk, using Kokanee spawning data, other fish habitat data, and known occurrences of species at risk (SAR).

i) BLACK (Critical Habitat)

Black Zones are critical for Okanagan Lake shore spawning Kokanee. Recent (2001-2008) Kokanee shore spawning inventory data was used to identify where aggregations of 1000 or greater spawning fish were observed. Development is to be avoided or moved to a lower risk area. There is a high likelihood that a request for a HADD authorization under Section 35(2) of the *Fisheries Act* would be triggered with all works within this zone.

ii) RED (High to very high value habitat)

Red Zones are recognized as being very important for the long-term maintenance of Kokanee productivity in these lakes. Recent (2001-2008) Kokanee shore spawning inventory data was used to identify where aggregations of greater than 50 spawning fish were observed. Historical data (1974-1980) was used to identify where aggregations of 1000 or greater spawning fish were observed. In addition, the Red Zone includes the mouth of all Kokanee spawning streams and known occurrences of select species at risk. Depending on the risk rating of the activity, development is to be avoided or moved to a lower risk area.

Based on the Federal Fisheries Act and Project Review Process compensation is not an option for the loss of critical habitats or for the loss of habitat productive capacity due to deposition of deleterious substances in any type of habitat. Critical habitats are most often included in the Black Zone, but may also occur in the Red Zone.

iii) YELLOW (Moderate, with some high value habitat)

Yellow Zones represent high to moderate value habitat required for the long term maintenance and recovery of Kokanee productivity in these lakes. These areas were identified from: recent (2001-2008) Kokanee shore spawning data where aggregations of 50, or fewer, fish were observed; documented historic shore spawning activity with aggregations of less than 1000 fish; the proximity to the mouth of streams; or locations of western ridged mussel shells. Activities in this zone are to follow the protocol provided in this document.

iv) NO COLOUR (unclassified or low value habitat)

Kokanee spawning data is based upon current usage from a depressed population. As stocks recover it is possible that some areas within the yellow zone could change to a Red designation. Therefore, it is important that the most current version of the foreshore sensitivity mapping is applied. If there is a discrepancy between appropriateness of activity, procedures or practices, the higher protection standard is to be applied.

These are areas where no recent or historic shore spawning is known to occur. Certain development activities can have impacts to adjacent fish habitats. In this zone approving agencies are to ensure that applicable BMPs are applied and/or a qualified professional has been engaged.

Risk

Activities Risk, in this context, is based on "likelihood" of impact and "magnitude" of impact for each of the development activities based on the underlying habitat use or characteristics. Risk ratings have considered the ability to reduce impacts through the use of mitigation measures, such as those provided in BMPs. Where the underlying values are high, and the mitigation for the activity is less certain, the risk of impacts resulting from the development is higher. Alternatively, if the underlying values are lower, and/or the mitigation is more certain, the risk of that development activity impacting the habitat is lower.

Varying from the BMP should only occur with low or moderate risk rated activities.

There is a high likelihood that a request for a HADD authorization under Section 35(2) of the *Fisheries Act* would be triggered with "Very High" and "High" risk development activities within any of these zones.

Protocol for Works

The MOE will evaluate proposals below the HWL based on Fisheries and Oceans Canada (DFO) sequence of mitigation options.

These elements should be incorporated into Professional Reports and Development Permit Guidelines:

1. Avoidance of impacts;
2. Minimization of unavoidable impacts; and
3. Compensation for residual impacts that cannot be minimized.

STEP 1: From the mapping, determine what zone the application occurs within.

STEP 2: Determine if development activity can be moved to a lower sensitivity zone (e.g. from Red to Yellow or No Colour).

STEP 3: Determine what the activity risk rating from Table 1. If the activity is not listed, contact the MOE office for advice.

STEP 4: Determine if the risk can be reduced through an alternate activity (eg. type of erosion protection).

STEP 5: Follow procedures described for each sensitivity zone and applicable activity risk. Where several activities with differing risk factors occur as a result of one project, the potential for cumulative impact may increase the risk and move the activity into a higher risk.

Activities with a Very High Risk Rating

The provincial opinion is that development activities that result in a "very high" (VH) risk rating raise significant concerns. Proposals in the VH risk category have significant challenges related to providing adequate mitigation or compensation to address the loss of values associated with such development, and to the costs to implement acceptable mitigation measures. In addition, there is a high likelihood that a request for a HADD authorization under Sec 35(2) of the *Fisheries Act* would be triggered.

Proponents are strongly encouraged to avoid activities with a VH risk associated with them, revising those activities to a lower risk option, or relocating that activity to an area where the overall activity risk is lowered.

Activities with High Risk Rating

The sequence of mitigation steps is to be followed for activities/zones with a "high" (H) risk rating. If the activity cannot be avoided, the proponent is to engage a QP to determine appropriate mitigation for the site. QPs must include a completed checklist in the submission. If the mitigation will not eliminate the risk of a HADD, then a HADD authorization process will be required.

Activities with Moderate or Low Risk Rating

Activities with "moderate" (M) or "low" (L) risk rating are to follow applicable BMPs. If works are inconsistent with the BMPs the proponent is to engage a QP to ensure that the appropriate level of protection is provided through science based alternatives and that legislative requirements are being met. If this is not possible, then a HADD authorization may be required. QEP's must include a completed checklist in the submission.

If the QEP assessment determines that a harmful alteration, disruption or destruction of fish habitat (HADD) is likely to occur, the "no net loss" procedure must be demonstrated should the proponent wish to proceed with applying for an authorization under Section 35(2) of the *Fisheries Act*.

Table 1. Ministry of Environment Risk Assessment for Development Activities below the High water Level.				
	Foreshore Colour Zone			
Activity	Black	Red	Yellow	No colour
Dock	VH	H	H	L
Marina[1]	VH	VH	H	M
Boat launch upgrade	H	H	H	M
New boat launch	VH	VH	H	M
Waterline drilled	M	M	M	L
Dredging	VH	VH	H	M
Waterline trenched	VH	VH	H	M
Geothermal loops	VH	VH	H	L
Infill	VH	VH	VH	H
Piled structure	VH	VH	H	H
Erosion protection (soft-bioengineered)	M	M	L	L
Erosion protection hard-joint planted	H	H	H	M
Erosion protection vertical wall or retaining wall	VH	VH	VH	H
Permanent rail launch system	VH	H	H	M
Removable rail launch system	H	M	M	L
Beach Creation below HWM	VH	VH	VH	VH
Milfoil & Invasive weed removal	H	H	M	L
Aquatic vegetation removal**	VH	VH	H	H
Boardwalk below HWM	VH	VH	H	H
Mooring buoy	H	M	M	L

[1.] Marina = Commercial Moorage = Strata marina or commercial wharf

The provincial opinion is that activities within the VH risk category raise significant concerns. Proposals within the VH risk category have significant challenges related to providing adequate mitigation or compensation to address the loss of values associated with such development and to the costs to implement acceptable mitigative measures. In addition, there is a high likelihood that a request for a HADD authorization under Sec 35(2) of the *Fisheries Act* would be triggered. Proponents are encouraged to avoid activities with a VH risk associated with them or to revise those activities to a lower risk option or to relocate that activity to an area where the overall activity risk is lowered.

The DFO principle of "no net loss", should be applied to proposals within or immediately adjacent to fish habitat. This involves following a progressive sequence of mitigation alternatives, which include: (1) avoidance of impacts, (2) minimization of unavoidable impacts, and (3) compensation for residual impacts that cannot be minimized. It is important to understand that mitigation contains a hierarchy of choices, the first always being avoidance.

Overview of Foreshore Zone Distribution in the North Westside OCP Area

A total of 53 shoreline segments (reaches) were identified along the Okanagan Lake shoreline of the OCP area. As indicated previously, the total shoreline length is about 38.4km. Table 2 summarizes the cumulative shoreline length broken down by Foreshore Zones as identified by the MOE.

Table 2. Analysis of cumulative shoreline length broken down by Foreshore Zones as identified by the MOE. Values shown are not reflective of RDCO FIM mapping (2006) and shore segment data.

Zones (As determined by MOE)	Cumulative Shoreline Length within NORTH WESTSIDE OCPNORTH WESTSIDE OCP Area (km)	Percent of Shoreline
Black	10.6 km	28%
Red	10.8 km	28%
Yellow	8.5 km	22%
No Colour	8.6 km	22%

The current extents of these zones are not based on the shoreline Segments as identified during the Foreshore Inventory and Mapping (Regional District, 2006). Rather these zones are based on the most recent (2008) documented incidents/counts of shorespawning Kokanee. As stocks recover, it is possible that some areas within the Yellow and No Colour zones could change to a Red Zone or even a Black Zone, depending on the number of fish counted. Based on this, the predominant colour zones (Table 3) was calculated and extrapolated the highest current designation (Table 4) within each of the 52 shore segments to the entire segment. This analysis is intended to be reflective of habitat suitability of shore spawning Kokanee since the shoreline and substrate characteristics in individual segments are generally homogenous.

Table 3. Cumulative FIM Segment Length by Predominate Foreshore Colour Zone.

Predom. Colour Zone	Segment Length (km)	Percent of NORTH WESTSIDE OCPNORTH WESTSIDE OCP Shoreline
Black	10.4	27%
Red	12.0	31%
Yellow	7.6	20%
No Colour	8.4	22%

Table 4. Cumulative length of FIM Segments grouped by Maximum Foreshore Colour Zone present in each segment.		
Highest Zone	Cumulative Segment Length (km)	Percent
Black	21.0	55%
Red	9.0	24%
Yellow	6.4	17%
No Colour	1.9	5%

Extrapolation of MOE colour Zones to FIM Lake Segments should be considered as a reflection of Shoreline Habitat Quality. Characterizing individual shoreline segments according to the predominant colour zone (summarized in Table 3) may be an accurate reflection of the Segment's current level of value. However, extrapolating up to the highest assigned score in each segment may better represent a segment's habitat suitability and productive capacity. In developing shoreline leavestrips for the OCP area, the predominant colour zones in each segment were factored into the following Criteria as shown in Table 5.

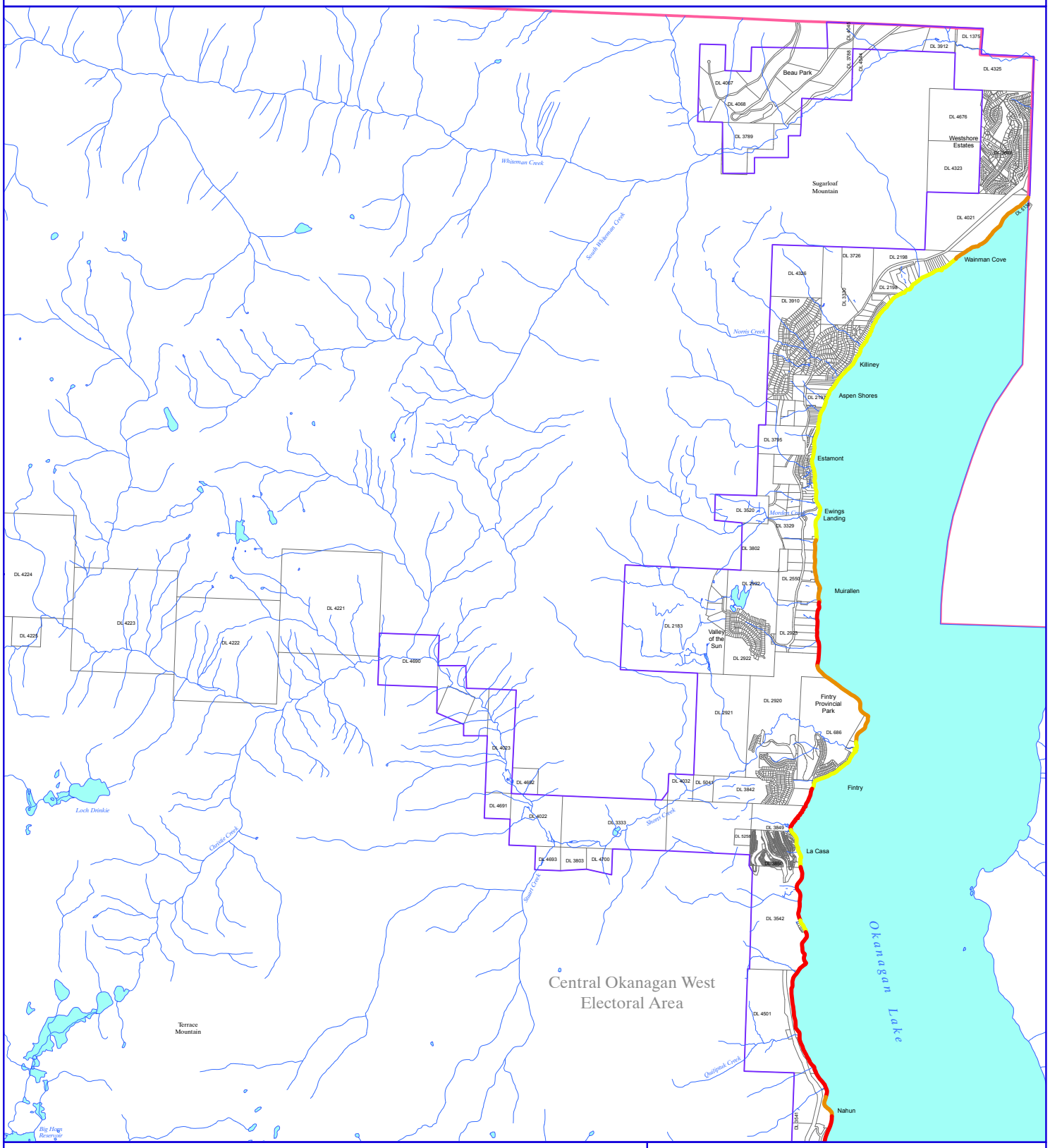
Table 5. Shorezone Sensitivity Rating Criteria for North Westside OCP Area.		
OCP Shore Zone	**Predominant Kokanee Zone in FIM Segment**	**Level of Disturbance**
Red	Black/Red	Shore Segment >80% Natural
Orange	Black/Red	Shore Segment <80% Natural
	Yellow	Shore Segment >80% Natural
Yellow	Yellow/No Colour	Shore Segment <80% Natural

From Table 5, and by adapting shoreline sensitivity and risk ratings from guidance documents Developed for Shuswap Lake, Kootenay Lake, Moyie Lake, and Munroe Lake, the following setbacks (Table 6) have been recommended for respective Shoreline Sensitivity Zones for the Official Community Plan:

Table 6. Recommended shoreline leavstrips/setbacks for the 3-class shoreline sensitivity rating zones.		
Shore Zone	**Minimum Leavestrip**	**Rationale**
Red	30	• Essential for the long term maintenance of fish and/or wildlife values. • Very High Habitat Value because of biophysical characteristics and very low level of Shoreline Disturbance. • Considered integral to the recovery and maintenance Okanagan Lake Kokanee salmon populations.
Orange	20	• High Value Shoreline Area. These are made up of areas that are relatively natural; high value spawning habitats and/or other features that could be impacted by proposed land uses or activities. These areas are sensitive to development, continue to provide important habitat functions, but may be at risk from adjacent development pressures. Restoration opportunities potentially exist in these areas. Proponents should consider moving high risk activities to other areas if possible, or pursuing activities that have lower risks associated
Yellow	15	• Experienced more intensive development disturbance and pressures. • These areas still maintain important general living habitats that are important to fish and wildlife • Development is more appropriate on these shorelines, and should incorporate restoration and protection of habitat features that remain.

The actually mapped Shoreline Sensitivity Zones as shown on Map 6 may vary depending on the 2010 update to the Foreshore Inventory Mapping and discussions with the Province. In the interim, the proposed Shoreline Sensitivity Zones will be used as guidance for site specific development applications and will be subject to consideration from the Province as it relates to the critical black zones identified in the Okanagan Region Large Lakes Foreshore Protocol.

Foreshore Sensitivity Zones



Legend

Shoreline Sensitivity Zones

- RED ZONE
- ORANGE ZONE
- YELLOW ZONE

- Official Community Plan Boundary
- Administration Boundaries
- Creeks and Streams
- Lakes, Marshes and Wetlands

1 0.5 0 1 2 3 4 5

Kilometres

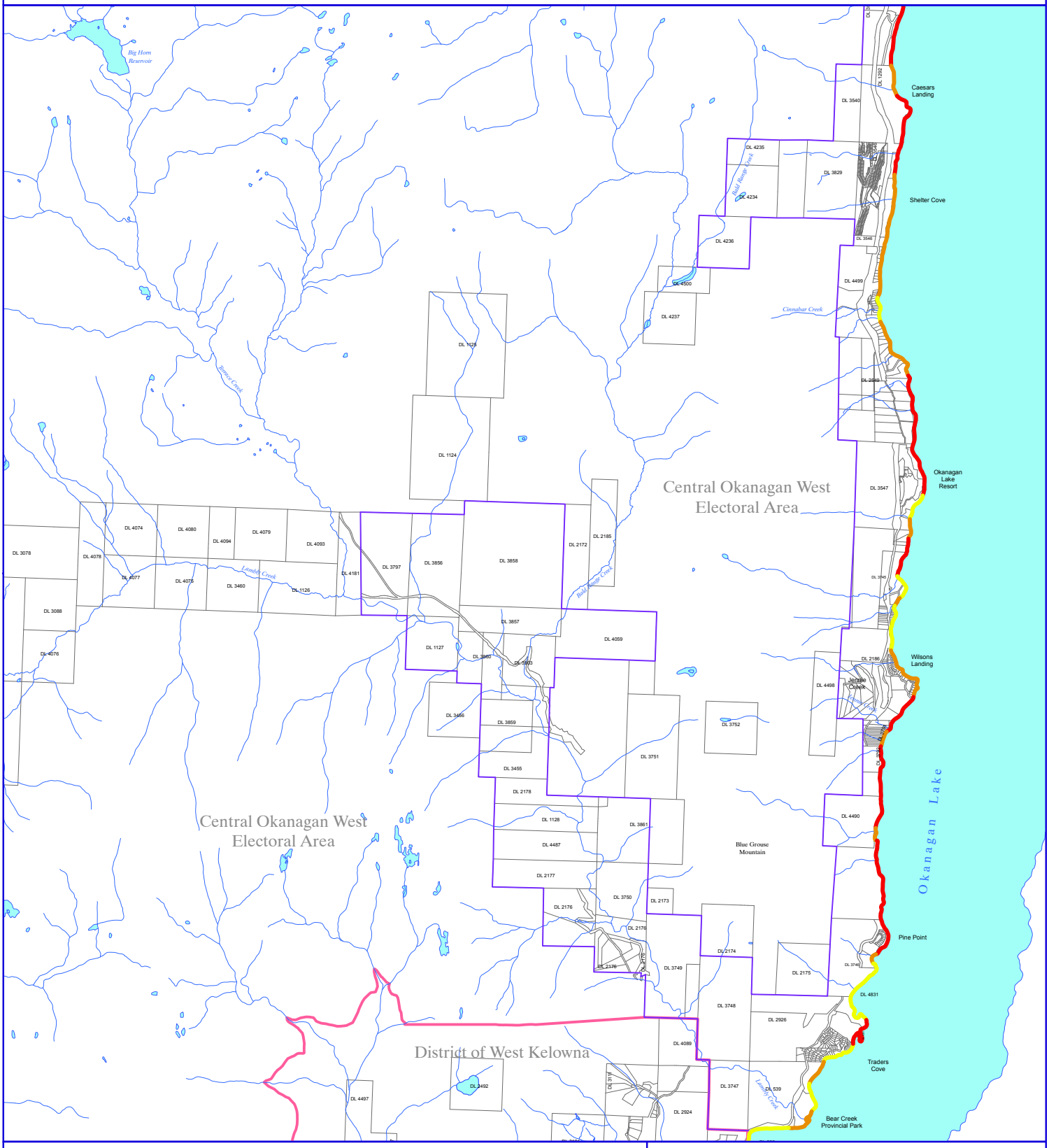
RDCO REGIONAL DISTRICT of CENTRAL OKANAGAN

N W E S

Rural Westside Official Community Plan
Appendix 6 (North)

Note:
This map has been consolidated for office purposes.

Foreshore Sensitivity Zones



Legend

Shoreline Sensitivity Zones

- **RED ZONE**
- **ORANGE ZONE**
- **YELLOW ZONE**

- **Official Community Plan Boundary**
- **Municipal Boundary**
- **Creeks and Streams**
- **Lakes, Marshes, and Wetlands**

1 0.5 0 1 2 3 4 5

Kilometres

RDCO REGIONAL DISTRICT of CENTRAL OKANAGAN

N W E S

Rural Westside Official Community Plan
Appendix 6 (South)

Note:
This map has been consolidated for office purposes.

Appendix "A-9"

Mountain Resort Design Guidelines

for

Crystal Mountain

June 2006

oberto oberti architecture and urban design inc.

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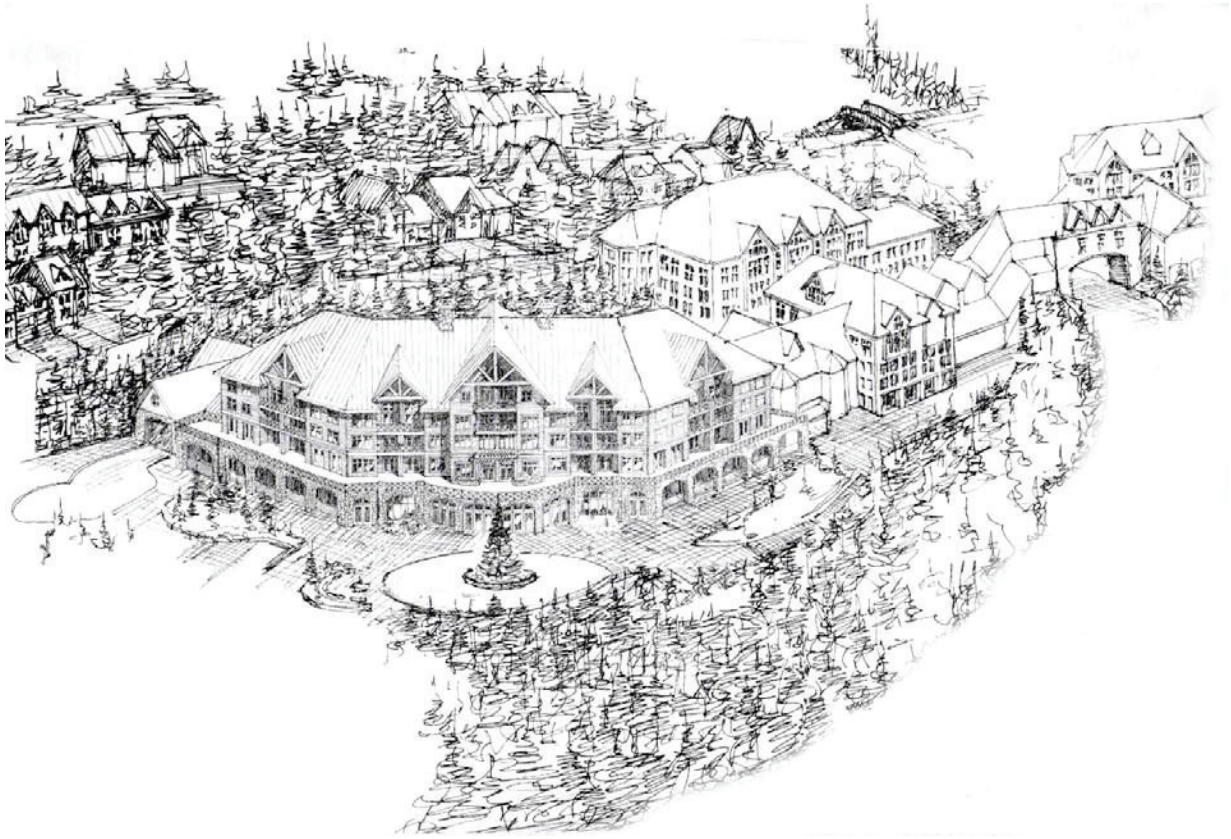
General

These Design Guidelines have been prepared by Oberto Oberti Architecture and Urban Design Inc. to create an identifiable and cohesive design character for the resort, utilizing a fairly limited vocabulary of design features that reinforce the notion of a desirable mountain retreat; an escape from the more mundane solutions of urban centres.

The intent is to have each building and other man-made feature contribute to the character of the area so that there is an identifiable mountain resort image instead of a disparate collection of individual components that compete for attention as monuments to a particular individual or corporate taste. The design style is drawn from the better examples of lodges, hotels, and mountain refuges found in the mountains of Canada and the United States, beginning from the end of the 19th century. Most of the truly successful and better-known examples of mountain architecture are the simple buildings that date from pre-1940, which is why it is often referred to as National Parks heritage architecture. The essence of the style is found in the combination of grand forms, forested settings and rustic materials. Heavy timber detailing and natural stone are often combined with grand roofscapes derived from the romantic and picturesque periods of a style of architecture most popular at the beginning of the 20th century. This architecture provided a genuine response to natural conditions of mountain settings and has created a simple tradition that is fitting with the natural environment.



Character

The design concept will take inspiration from the mountain architecture tradition of the National Parks, the heritage design tradition of the Western Canadian Mountain Ranges and the rustic architecture of the history of the Okanagan region. It will emphasize sloping roofs, the use of wood and stone and generally abundant use of natural materials – primarily timber and local stone. Design for durability of construction and inherent quality will also be mandatory components. *Refer also to Master Plan Section 2 (b) (iv) Resort Fire Prevention and Control for additional fire protection recommendations and requirements.* Also see the Official Community Plan (OCP) containing the Field Forestry report.

The purpose of these guidelines is to identify some of the key features of that mountain architecture style, so that they can be worked into individual compositions that are both unique and conforming. The goal is the creation of a grand yet warm and rustic impression characteristic similar to the National Parks aesthetic tradition. A successful design must respond favourably to both the spirit and intent of these guidelines.

Quality of design in massing proportions and architectural language will be a fundamental principle in achieving a product that will position Crystal Mountain on the tourist map of the Okanagan Valley visitors. This is planned through encouraging design that will maintain the park-like setting of the area today, and design controls to ensure that all future development will follow the original architectural theme and respect open spaces. The guidelines are provided so that the architectural concept and execution of each building is in keeping with the desired image as well as with the overall Master Plan for Crystal Mountain.

Authentic style and character will be derived from the successful design tradition of mountain architecture and will reflect a recognized heritage value and mountain tradition.

The guidelines described in the following pages will emphasize the use of heavy timbers, warm, natural finishing materials, and large interior spaces to combine a grand impression and a warm mountain atmosphere. Authenticity will be emphasized by rustic simplicity and by the avoidance of superfluous or added-on features.

Building Elements

The shape of the building will be determined by its functional mass. False appurtenances and decorative architectural elements with no function will not be permitted. Decorations should only apply to real functions. It is intended that the style be rustic, solid and true, with its elegance and grace provided by good proportions, good massing and good relationship to the other buildings. The building mass resulting from the shape of walls, floors and roofs must be broken into smaller scale components to avoid brutal and overpowering proportions. Ornament and decoration will be encouraged only in the direction of sculpting and finishing the functional building elements. The use and appearance of natural elements will be given preference.

Design Review and Approval Authority Requirements – Site Plan And Conceptual Drawings.

Each building component must be designed to fit within the building envelope designated in the Master Plan/OCP and Zoning documents and must comply with other Master Plan/OCP and Zoning documents requirements and guidelines.

A Design Review and Approval Authority (DRAA) will be responsible for design review and arranging for compliance with these guidelines as set out in the Master Plan/OCP and Zoning documents and in the covenants registered on land titles.

Drawings showing building plans, sections and elevations, roof plans, finishes, colours, landscape and streetscape design must be submitted for preliminary approval to the Design Review and Approval Authority for the resort area prior to application to the authorities having jurisdiction for development and building permits.

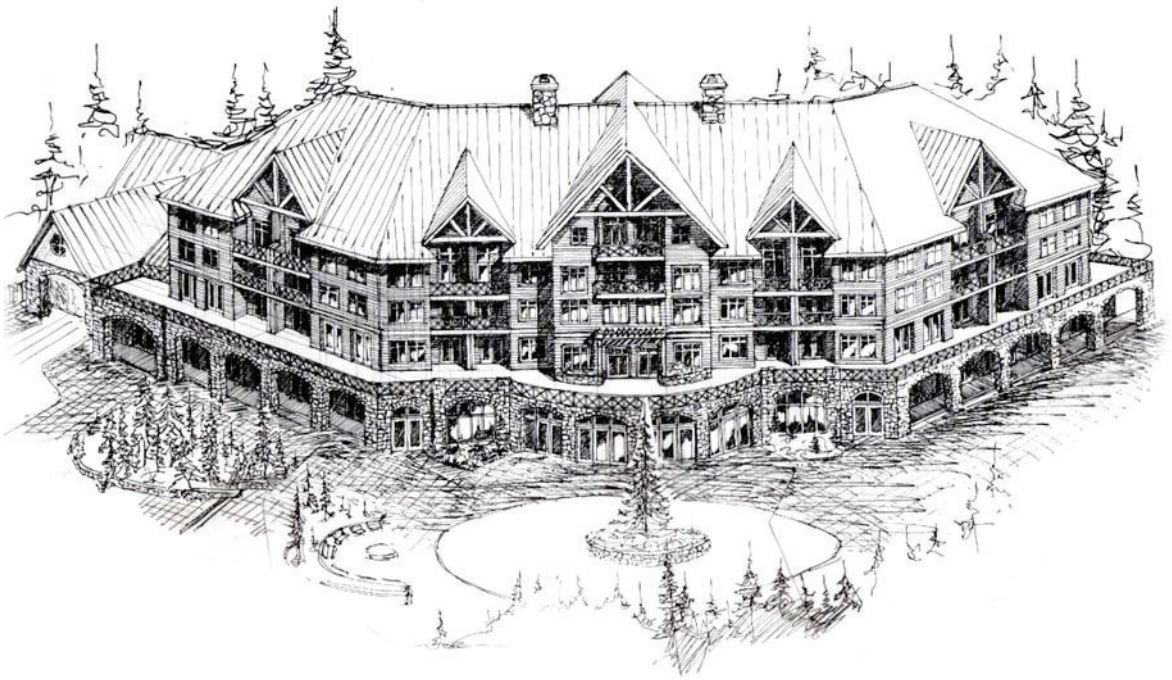
The designers of buildings, signs and incidental development components must submit a site plan, conceptual building drawings, colour schemes and all necessary design information to the Design Review and Approval Authority (DRAA) prior to submitting drawings for a Development Permit. Upon approval, the DRAA will provide a written statement confirming to the authorities having jurisdiction that the project is in compliance with the Master Plan Guidelines. Subject to compliance with the OCP and zoning regulations, B.C. Building Code and any relevant local bylaws, the authority having jurisdiction will then issue a Development Permit and a Building Permit.

Summary of Principles:

- **The resort image will be based on the alpine romantic architecture of the North American National Parks and traditional examples of heritage mountain architecture in a contemporary mountain setting.**

- **The architecture will combine grand forms and rustic materials such as heavy timber and natural stone.**

- **Buildings will conform to the Master Plan for the resort.**



Exterior Building Character

As indicated above, the design concept will take inspiration from the National Parks heritage design tradition and North American mountain architecture. It will encourage steep sloping roofs, heavy timber or log construction, stone bases and generally abundant use of natural materials comprising primarily timber and local stone. Design for durability of construction and inherent quality will also be mandatory components

Roofs

- One of the most characteristic elements of romantic mountain architecture is a steep sloping roof. Roofs will be of utmost importance to the visual landscape of the resort, as they will be viewed from above further up the mountain. Sloping roofs and overhangs are a required element in all building design.

Roof Shapes

- Roofs will be an essential component of the visual landscape of the resort base area and of the single-family dwellings. Steep roofs will be encouraged. All roofs must be sloped at a minimum angle of eight to twelve and designed for proper snow management and engineering. Decks and areas of snow collection must be designed to provide a visual balance of design as well as fulfilling practical needs. Locations of snow dumping must be indicated. Chimneys, mechanical and venting requirements of buildings must be shown in the preliminary design with appropriate reinforcements and design treatment. Roof protrusions must be protected against the action of snow accumulation and movement.

- The main roof form should be articulated with a combination of full-scale gables and dormers that provide windows to habitable spaces (rather than being mere ornaments). The main roof volume should contain at least one floor or mezzanine of habitable space generally, rather than appearing to be a token pitched roof on top of a building originally designed to have a flat roof.

- The roof forms should tie into the main roof volume and wrap comfortably around corners giving a sense of function to the composition, rather than appearing to be stuck onto the façade or main roof as whimsical appurtenances.

- The composition of roof elements may be symmetrical or strongly asymmetrical, but not purely random.

- Roof finishes are important as they are highly visible from the ski slopes and should preferably be of natural slate, or ribbed (standing seam) metal. Asphalt shingles of approved design and colour may be permitted.

- All hotel buildings and buildings in the base area must have a ribbed standing seam metal roof in a copper green colour.

- Roof forms should provide valleys below which there are safe locations for snow dumping

- The roofs above entrance ways must either form a gable end or provide adequate snow fences or similar protection to guard against falling accumulations of ice or snow.

- Eaves should project at least two feet on all sides of a roof (except where adjacent roofs of two buildings terminate at a common wall or where the chateau style is being used for a hotel).

- Eaves may be supported by stylized brackets such as in the tradition of the arts and crafts movement.

- Eaves, fascias, bargeboards, and soffits should be, or appear to be, of natural wood.

- Decorative roof elements such as cupolas, towers, finials, gingerbread tracery and the like are generally discouraged and should be used only in strict moderation and to decorate functional architectural elements.

- Flagpoles incorporated into building or roof designs are encouraged in public base areas to create a sense of place and of visual activity.

- Vented cold roof designs are encouraged in order to minimize maintenance problems.

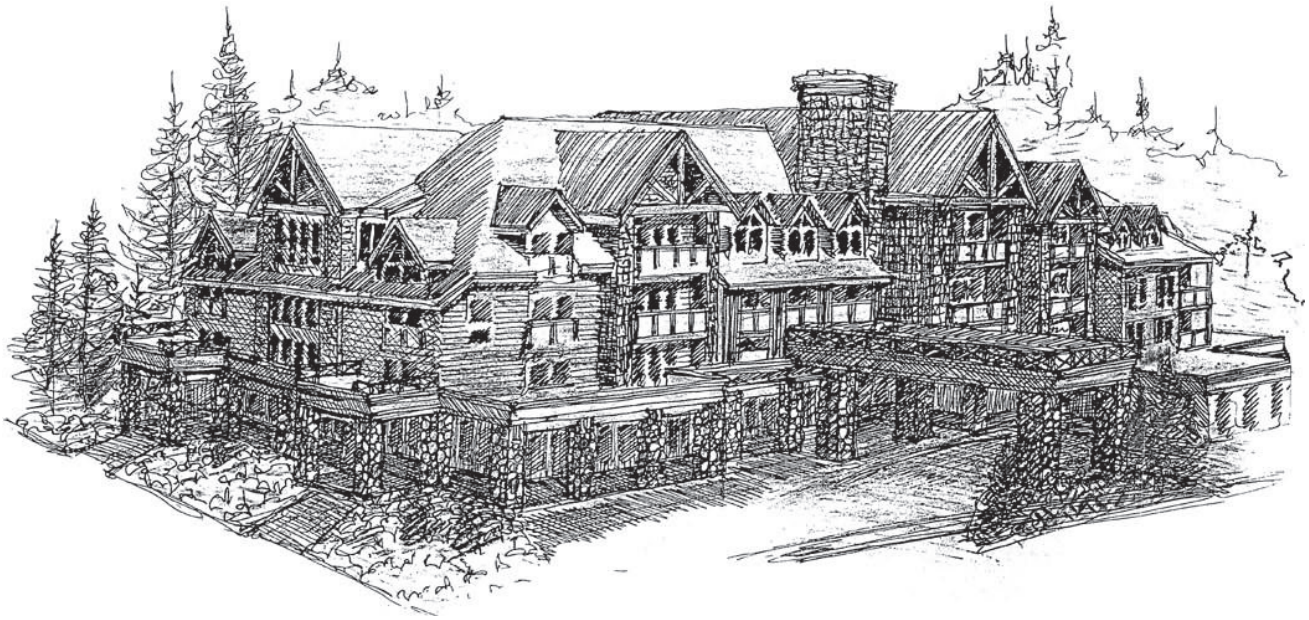
Summary of Principles:

- **Roofs must be steeply pitched and articulated without unnecessary decoration.**

- **Roofs must be designed to be viewed from above.**

- **Hazards of snow and ice accumulations must be provided for in design.**

- **Roofs in the vicinity of the main resort base area should be metal with a copper green colour to provide a coherent design.**



Snow Management from Roofs

Snow accumulation on roofs must be taken into account not only in terms of structural loads but also in terms of the other effects of snow accumulation. Protection must be provided from snow and ice for protruding components such as chimneys and vents. Areas of snow accumulation and of snow removal must be considered and the design accordingly dictated.

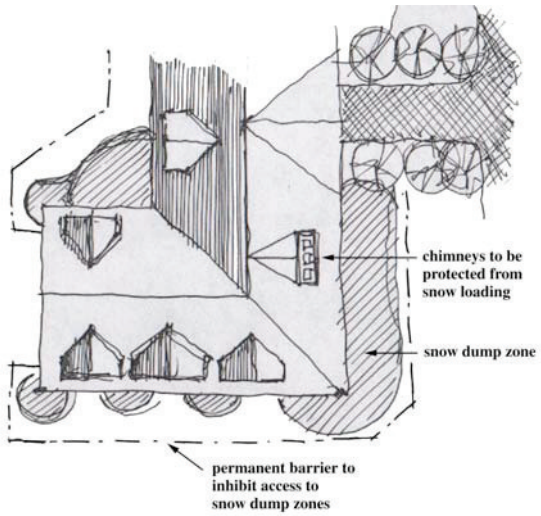
Snow management planning is an important aspect of building design for Crystal Mountain – especially with respect to roof design. Pedestrians must be protected from falling snow either by snow retention on roofs or terraces or by providing for the collection and directional shedding of snow from roofs by the prudent use of gables and dormers.

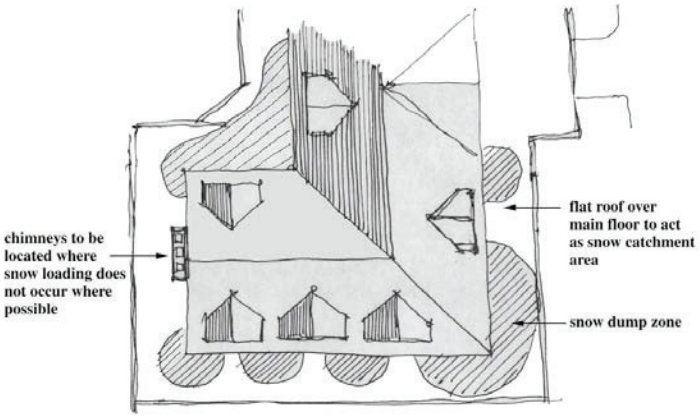
Building entrances for both pedestrians and vehicles must be given special design attention to avoid snow and ice accumulation or injury or damage in those areas.

The weight of snow and ice on a roof, requires that eaves and other appendages be sturdy. Eaves troughs or gutters should be avoided where they are likely to suffer damage from snow and ice. Icicle formation must be avoided or adequately controlled through design. Metal roof materials should be of a substantial gauge to avoid deformity under pressure of ice and snow.

Snow management should be enhanced by provision of "cold roof" design, achieved through adequate insulation and roof ventilation.

Locations for snow dumping must be indicated on building plans submitted to the DRAA. Snow dumping areas should be within the property lines of the private property – which may require accumulation on perimeter arcade roof decks in some instances. Decks and flat areas of snow collection must be designed to provide a visual balance of design as well as fulfilling practical needs.





Chimneys and Mechanical Equipment

- All chimneys must appear on design and construction drawings submitted to the Design Review and Approval Authority and to the authority having jurisdiction.

- Chimneys should have a stone finish where visible from the exterior of a building. Where desired, chimney stacks may be of black painted metal. Unpainted metal such as stainless steel or galvanized chimneys, chimney pots or chimney caps will not be permitted. Other mechanical shafts and vents must also appear on design drawings and be treated appropriately so as to be as unobtrusive as possible. The preferred metal colour will be flat black.

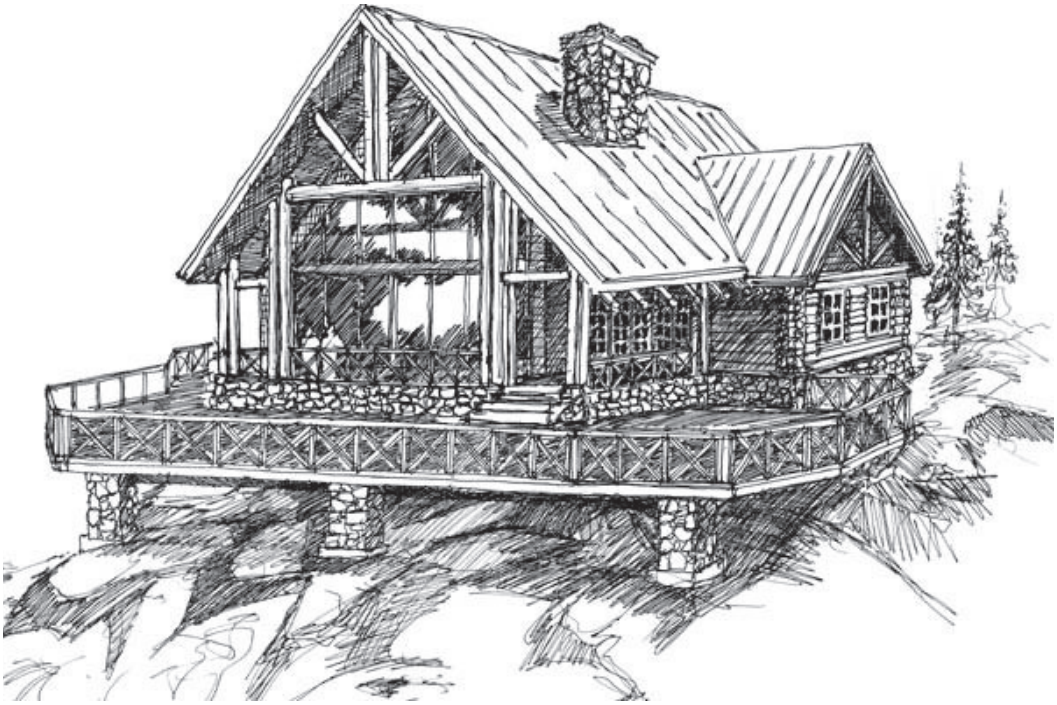
- Elevator penthouses, exhaust vents and fans, air handling units and other equipment must be incorporated into the overall building envelope and design such as within the roof forms.

- All such equipment must be screened from view of public areas, whether on a roof or at grade. Mechanical equipment, ventilation grates or motors should not be adjacent to any main pedestrian, commercial or other public area.

Summary of Principles:

- **Chimneys must be of stone finish and no bright metal chimneys or unpainted metal equipment is to appear on a roof.**

- **Mechanical Equipment is to be screened as part of the building design.**



Windows

- At ground level, commercial area windows should be of modest size, broken by solid wall elements to reflect the structural rhythm of the building.
- Windows in wall areas above ground level should form part of a pattern of punched windows in the building façade.
- Wood framed windows are encouraged.
- For windows above ground level, casement or double hung windows are preferred to transom windows or sliders. Jalousie windows and glass block windows will not be permitted.
- Mullioned windows are encouraged in dormer and gable windows, whether the mullion panes are square, rectilinear or even diamond shaped.

Summary of Principles:

- **Large expanses of undivided glass wall are not appropriate.**
- **Fenestration should include some mullioned windows.**

Wall Finishes and Forms

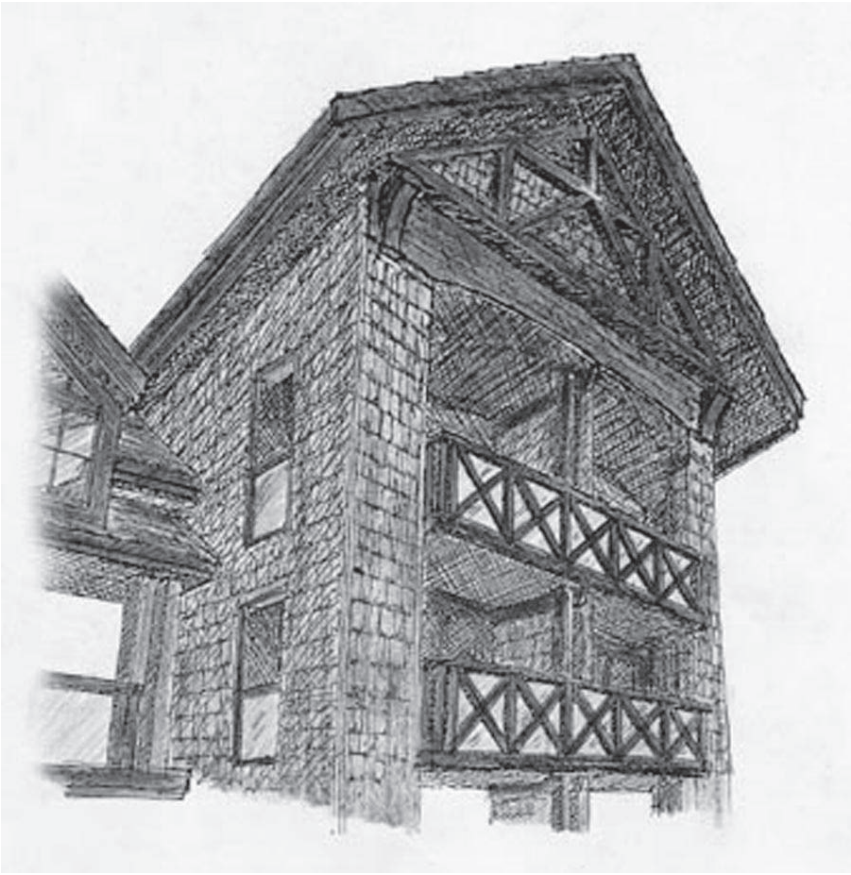
Many good examples of mountain architecture combine different wall finishes, which change from the bottom to the top of the building.

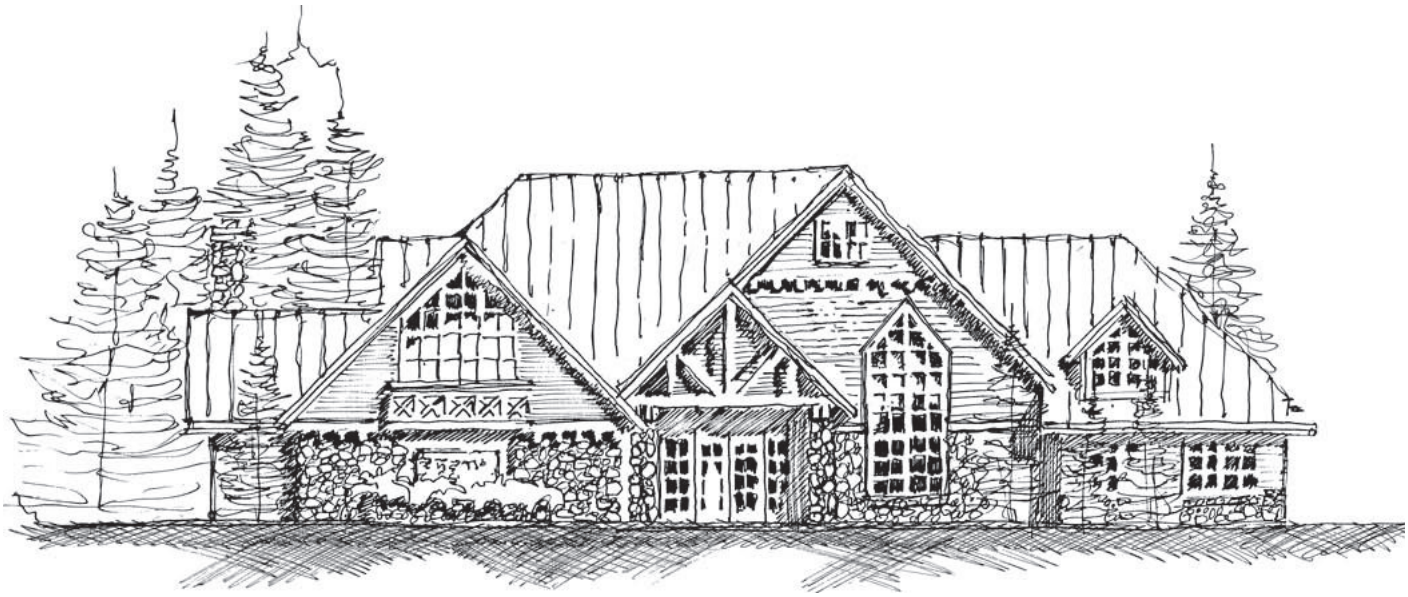
The main floor must create a strong connection to the ground with a solid base rising at least to windowsill height. Although each building will have a different geometry, massing and treatment of elevations, this base will be a continuous cohesive element that provides a visual connection of the buildings to the ground and to each other. It is intended that the base will be constructed with materials that will provide a sense of solidity and mass.

The base of all buildings should be finished in natural stone, randomly rather than geometrically set, at least to the window sill height of the main floor. Stone is encouraged as a finish over the entire height of the main floor. Stone supports are also encouraged to sustain arcade, pergola and porte cochère elements at the ground floor of buildings.

Likewise, heavy timber members should be evident through generous use as support beams for overhangs, pergolas or aspects of arcades, and portes cochères, to reinforce the wood theme of other timber details.

Finishes above the main include the use of treated wood, including vertical board and batten siding, various gauges of horizontal wood siding, or highlights of wood shingles. Stucco and concrete finishes should be restricted to no more than 50 % of wall areas of each façade not occupied by fenestration or





entries (except where required for fire separation or other Code requirements). Fenestration itself should be limited to a maximum of about 50 % of a wall area, except on the ground floor. Curtain wall forms of glass, metal, or concrete panels will not be permitted.

Wall forms should be continuous in commercial areas, the base area and along pedestrian oriented routes to help enclose the public spaces they define. Walls of adjacent buildings should meet at common property lines and actually touch, and public access around buildings should be provided by covered archways of appropriate width, usually at one end of a building.

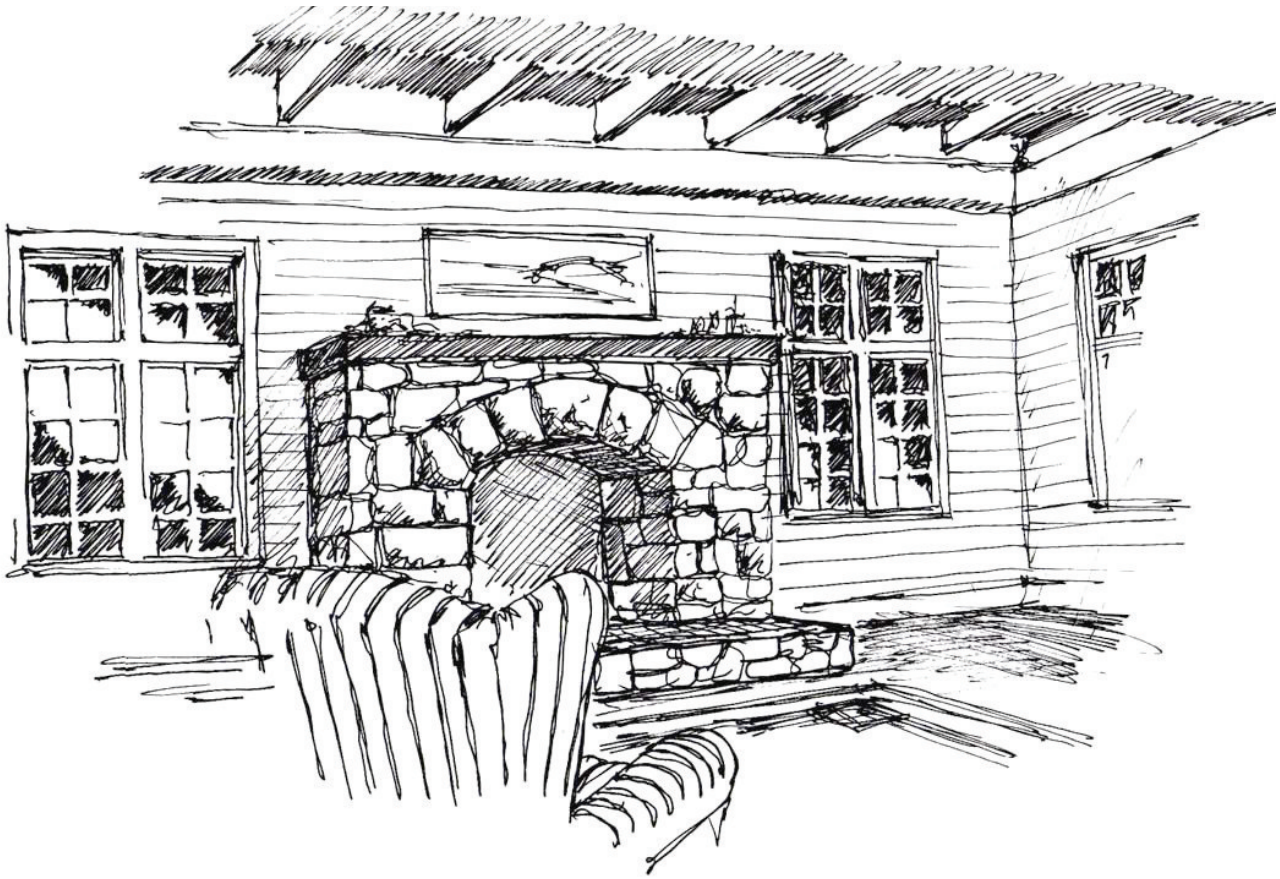
Roof gables and dormers, support brackets, fascias and eave features should reinforce the image of timber construction through form, texture, colour and detail.

Components of building facades such as wood frame doors and windows, will contribute to the timber theme and are strongly encouraged.

On the interior, especially in lobby spaces of hotels and other multiple unit buildings, elements of heavy timber construction should be evident in wood post columns, sawn beams and natural wood detailing in features such as doorways, stair rails, etc.

Summary of Principles:

- **Buildings should have a solid and continuous base preferably of stone.**
- **Upper walls should emphasize wood components.**
- **Curtain wall systems are not acceptable.**
- **Wall forms must be continuous wherever possible to define pedestrian oriented areas.**



Colours

Wood finishes on walls should be stained in quiet natural finishes or subdued earth tones with highlights of other subtle colours. Doors should be of natural wood colours or colours that match window frame colours.

Window frames and mullions in traditional colours of natural wood, brown, black, white, forest green or pompeii red (i.e. a low chroma red rather than a bright orange red) are preferred over other colours. Brass coloured mullions, and anodized or aluminum window and door frame finishes are strongly discouraged.

All colour schemes must be submitted for approval to the Design Review and Approval Authority. Earth tones that are compatible with other buildings will be encouraged. Colours in glaring contrast with other buildings will be discouraged.

Summary of Principles:

- **Colours for walls are to be based on subtle earth tones.**
- **Natural finished wood is encouraged.**

Entry Areas

Entry areas should have a high quality of finish and detail as these areas leave some of the most lasting impressions and are subject to the greatest scrutiny.

Buildings should have main entrances that are easily identifiable and which evoke a sense of entry - again combining the grand and the rustic.

Entries should be weather protected either by overhanging gable eaves, portes cochères, arcades, or veranda elements. Materials about the entry way should again include stone and wood elements.

Summary of Principles:

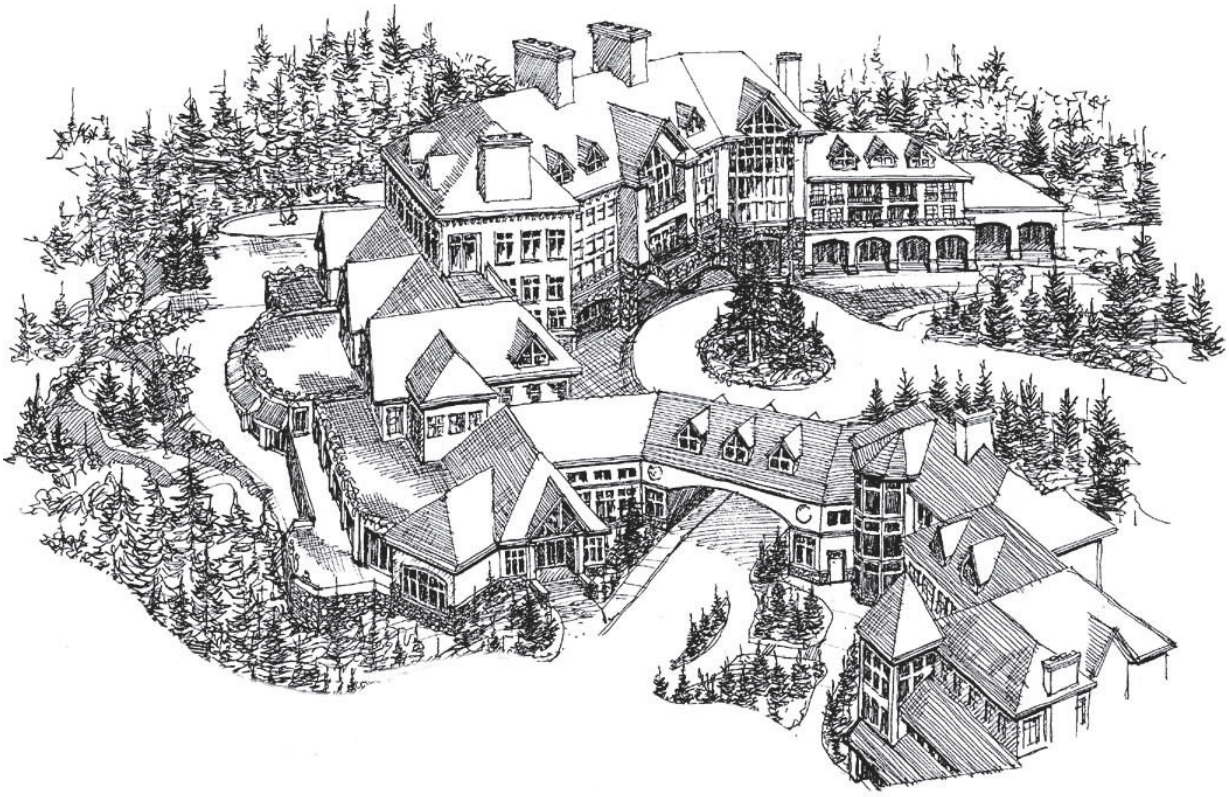
- **Entry areas should be grand, rustic, well detailed and weather protected.**

Building Massing and Components

The shape of a building will be determined by its functional mass. False appurtenances and decorative architectural elements with no function will not be permitted. Decorations should only apply to real functions. It is intended that the style be rustic and solid, with elegance and grace provided by good proportions, good massing and a good relationship to the other buildings. The building mass resulting from the shape of walls, floors and roofs must be broken into smaller scale components to avoid brutal and overpowering proportions. Ornaments and decoration should be used only in the direction of sculpting and finishing the functional building elements.

Summary of Principles:

- **Building massing should be broken down and display good proportions without false architectural features.**
- **Decoration should highlight structure and function.**



Landscape and Streetscape

Landscape elements should reinforce the rustic themes of a park like setting.

Road barriers should not be steel or concrete, but made of simple stone posts supporting horizontal logs. Where fences are necessary they should also be of stone and timber but continuous outdoor spaces are encouraged, rather than fenced areas.

Road surfaces and driveway surfaces should minimize expanses of earth, asphalt or concrete. In private driveway and entrance areas, consideration should be given to crushed gravel and stone or concrete pavers.

Landscape design concept drawings must be submitted for approval. The main criteria to be followed will be the retention or regeneration of the natural landscape, enhanced to create an air of quality to the resort. Sun consideration must be given to decks and patios.

Crystal Mountain may require compliance with more detailed landscape guidelines, which may be prepared before the start of each development area.

New trees and shrubs should reinforce the natural species. Existing trees should be preserved, especially mature evergreen species, care being taken not to harm the roots or stability of the trees. Seasonal highlights may include some deciduous trees. In single-family chalet areas the buildings should be partly hidden by evergreen trees. Natural groundcovers and natural wild alpine flowers should reinforce the natural theme of the resort.

In the more urban areas of the resort base area, seasonal colour may be added through summer window boxes of geraniums or other typical alpine themes that are conducive to a National Parks environment.

Pedestrian interest is an important factor at the ground level of buildings. That interest is retained through a variety of uses, well detailed finishes, transparency and frequent access to building interiors.

Street furniture items should be of rustic materials such as stone and solid wood - in benches, kiosks and barriers.

Some weather protection should be provided at all building entries. In commercial areas, weather protection for pedestrians may be provided by arcades, roofed pergolas, verandas, overhangs, or similar elements.

View of the shops, lighting and transparency, however, are also emphasized. Weather protection should not be oppressive or obscure the

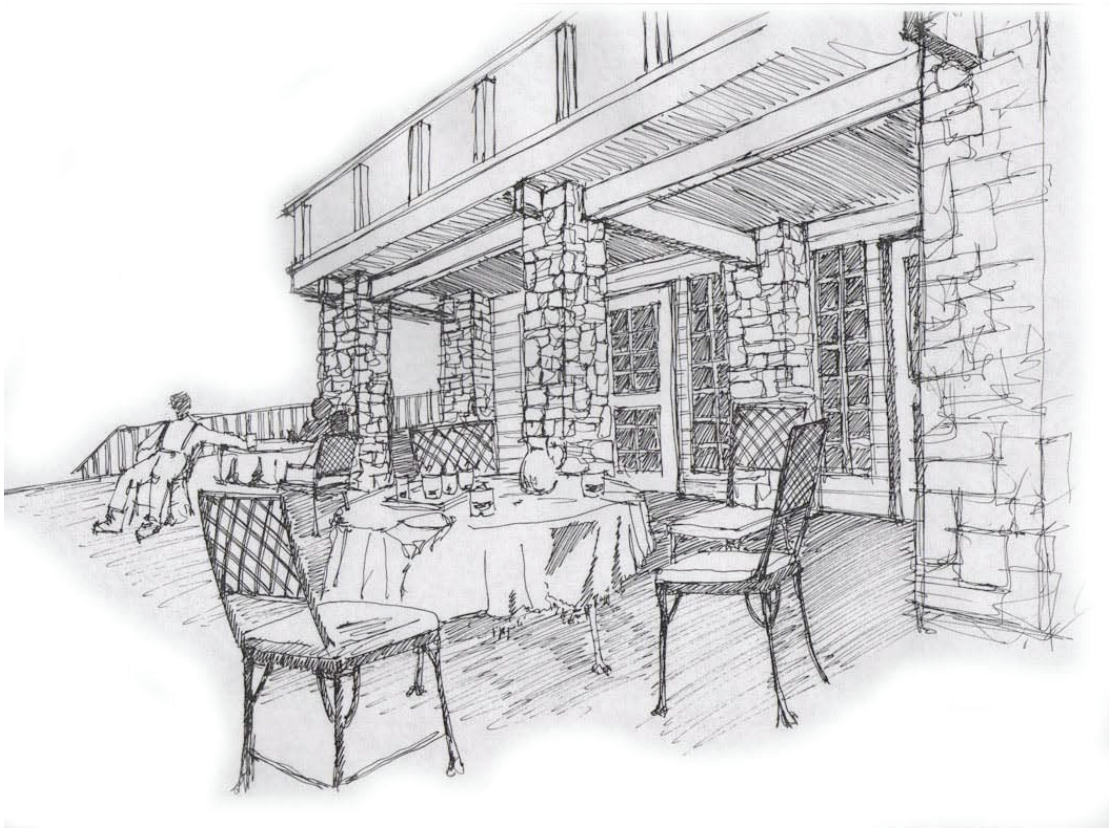
commercial areas. Simple overhangs may be preferred in a variety of locations.

Textured surface treatments for pedestrian walkway and plaza areas should be small in scale, durable and attractive.

Asphalt will not be permitted as a walkway finish. Plain concrete is discouraged. Concrete pavers and paving stones are encouraged.

Summary of Principles:

- **Outdoor areas should allow for sun penetration.**
- **Some mature trees should be preserved where possible.**
- **New planting should reflect native species.**
- **Unnatural ground surfaces should be small in scale.**
- **Street furniture, barriers and fences should all be of rustic natural materials.**
- **Weather protection should be provided at entries and in commercial areas, but this is not intended to decrease transparency.**



Signage

All sign designs must be approved by the Design Review and Approval Authority prior to installation. Signs may only be of solid materials and may only utilize front lighting. Backlighting of exterior signs will not be permitted. Signs extending out from buildings will be solid, in the shape of a banner or large shingle of no more than one meter by one meter. The use of wood is encouraged in signs.

Night Lighting

Night lighting should be adequate for comfort and safe movement, and designed for an intimate, aesthetic effect. It should not be bright and obtrusive and it should only illuminate what needs to be lit. Where possible, light sources should be shielded and directional. All light fixtures must be in keeping with the architectural character. All exterior lighting design and fixtures must be submitted for approval by the Design Review and Approval Authority.

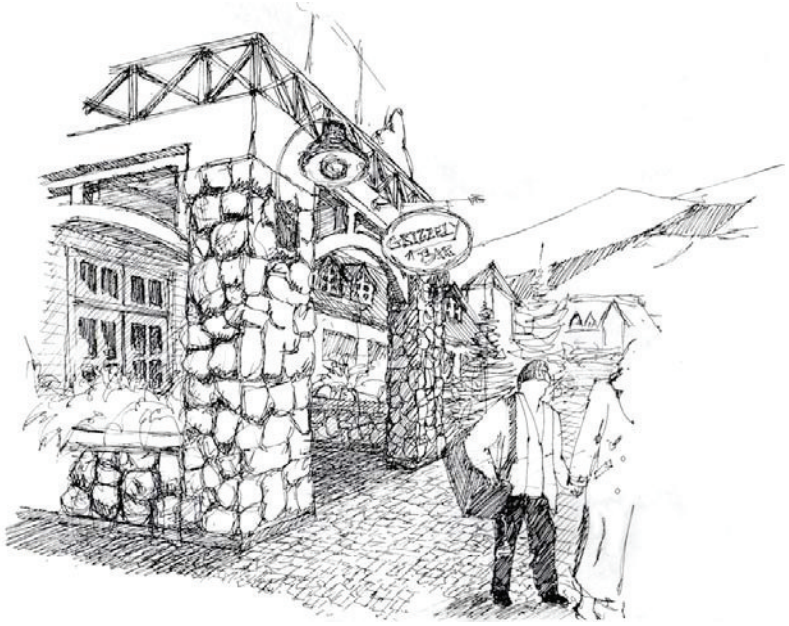
Harsh vapour bulbs in orange, pink, blue, etc., will not be permitted and the preference is for incandescent tones. Street lighting should be attached to buildings where possible to avoid the necessity for large and often unattractive lamp standards.

Acoustical Design

Except for single family chalets, a review of the design by an acoustical engineer may be required prior to approval of design drawings by the Design Review and Approval Authority, to ensure the peach and quiet enjoyment of the resort by vacationing guests.

Energy Efficiency

Energy efficient design is encouraged in all buildings. It is recommended that single-family chalets and townhomes comply with the general directions of the B.C. Hydro PowerSmart program while that program is in place.



Screening and Enclosure of Service Areas

Entry to garages and other enclosed areas must be part of the overall building design. Garage doors and service areas must be unobtrusive and in keeping with the pedestrian, small-scale character of the mountain resort. Storage, mail-box areas, compactors, garbage collection, snow removal equipment, mechanical or electrical equipment, transformers, utility tanks, propane gas meters, solar collectors, antennae, satellite dishes, etc. must be designed appropriately to be contained inside building areas, placed underground, or suitably screened, and must be part of the initial approved design.

Supplementary Guidelines for Hotels

Hotel Image

The hotels within a resort area, as buildings frequented most by the public, will often create the most lasting impression, whether one experiences a resort area for a few hours or a few days. For that reason, the design guidelines will be monitored very carefully for hotels, as their impact is greater than that of the single family chalets, town-houses, or other more private resort buildings.

Hotels within the resort area will fall within one of two broad categories of National Parks architecture. The most prevalent, and generally preferred for hotels up to about 150 rooms, is the grand rustic lodge. The other category is the less common, although perhaps more magnificent style exemplified by the Canadian Pacific chateau hotel.

To complement the outdoor setting, hotel design should incorporate elements of rough or rusticated natural stone. The rustic lodge category will use more heavy timber elements and exterior timber treatment, while the chateau will use more stone. Both will have steeply pitched roofs, with the rustic lodge utilizing roof pitches of about 12 in 12 for the main roof components and no less than 4 in 12 for most other minor roof components. The roofscape of the lodge style may be either symmetrical or strongly asymmetrical, with one main gable dominating the other roof elements. The chateau style is often asymmetric with greater height and a main hipped and dormered roof element dominating the composition.

The chateau style usually employs some roof elements that are steeper than 12 in 12. The roofscape of the rustic lodge generally incorporates both gable and dormer elements in a variety of compositions and with the overall form of the massing being more horizontal than the chateau style. The rustic lodge utilizes horizontal bands of different (mostly wood and shingle) finishes and often employs a horizontal arcade, terrace, or veranda at the base to reinforce the horizontal elements and to protect from snowfall. The chateau style employs more dormers and hipped roof forms. It may have combinations of different exterior finishes but the chateau exterior is generally solid with a base, a middle and cantilevered band below the roof. Its overall proportions usually emphasize the vertical rather than the horizontal.

To be convincing, the lodge style should not normally exceed five or six storeys plus underground levels. The chateau style can effectively be higher, with a main centre block rising up to above 7 storeys. However, care should be taken not to seriously block views from other hotels or buildings behind. Stand alone highrise tower forms are not appropriate and will not be permitted. Higher building design will require an analysis of

view angles for surrounding areas and buildings.

Brutal highrise blocks with token sloped roofs are not permitted. Both the Canadian chateau and the rustic lodge usually have horizontal wings of rooms stretching from a main focal point, and are not point tower forms.

The Canadian chateau is not really a copy of French or Scottish castles, despite allusions to those forms. The chateau style, as used by the Canadian Pacific Railway, is simpler in form, devoid of too many unnecessary turrets, cone topped towers, crenellated parapets, or stepped gables, and those elements may not generally be appropriate. Similarly, a propensity to use Queen Anne style towers with cone roofs is not generally conducive to the more restrained National Parks style image, and such forms may be discouraged.

Generally, caution must be used in designing chateau style hotels, which may, with poor proportions, details or inappropriate materials, appear to be simply grotesque and overpowering rather than grand and dramatic.

Summary of Principles:

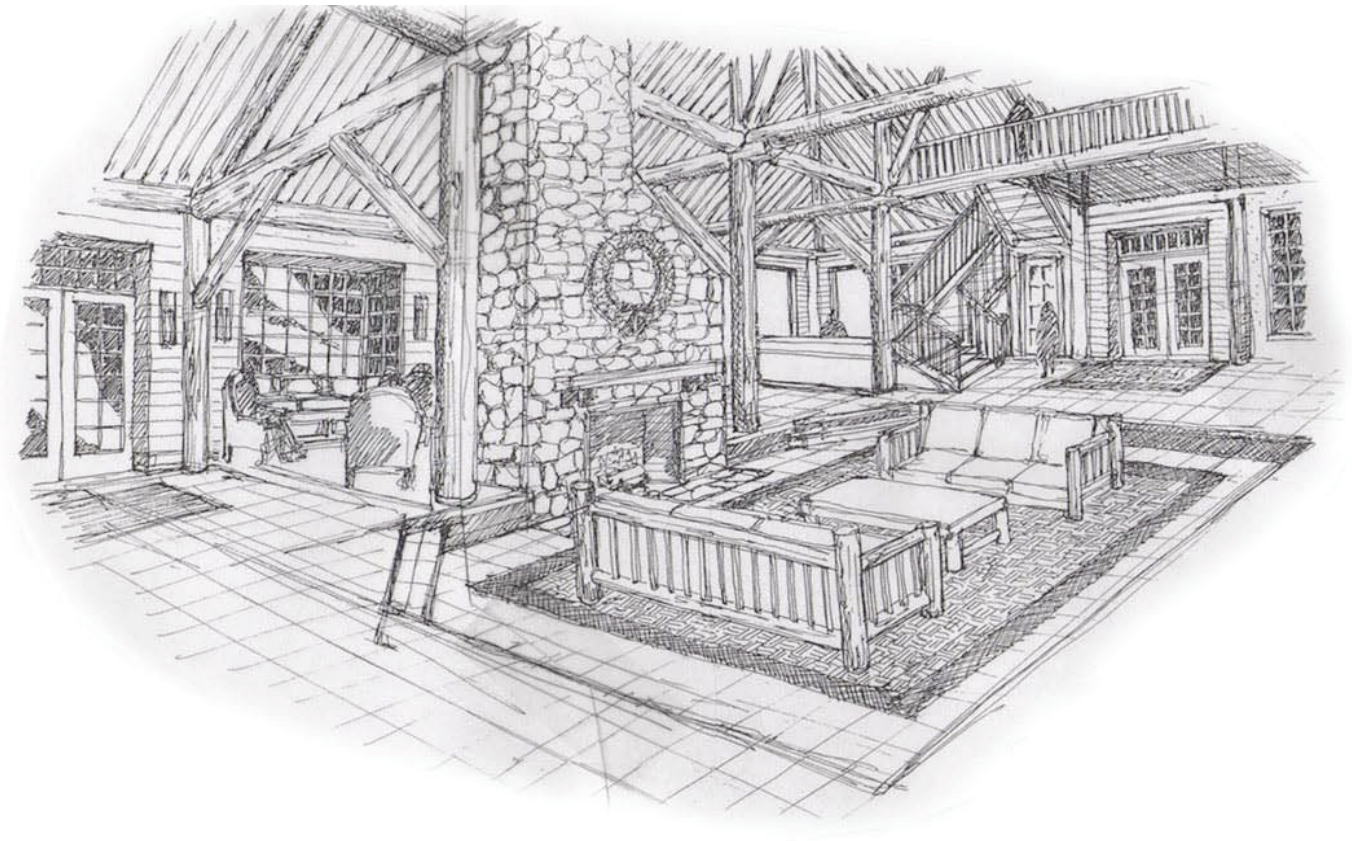
- **Hotels should be based on the image of a large rustic lodge or possibly a small mountain chateau.**
- **Finishes should include natural stone and rough timber.**

Hotel Lobbies

Interior design and the standard of hotel accommodation will vary depending on the target market and on changes in standards and fashion over time. However, the lobby design and character should reinforce the National Parks theme. This may be achieved through elements such as a stone fireplace, natural wood features in the form of beamed ceilings, feature stairs, doorways, wood trim around doorways, and some paneling or cabinet work in the reception area. The lobby areas should evoke a grand impression, utilizing two storey volumes where possible and tall windows capturing the outdoor scenery. View-through lobbies are encouraged.

Summary of Principles:

- **Hotel lobbies should be grand in scale with wood detailing and a fireplace.**



Ground Floor Shopping Areas

Hotels, Condotels and other buildings which incorporate commercial / retail shops or food and beverage services on the ground floor should provide for some access from the exterior to vitalize the streetscape.

Retail shop frontages should be limited to a maximum of about 25 feet in width on the pedestrian oriented exterior façade to provide pedestrian scale interest and rhythm to the streetscape. Restaurants and pubs would perhaps be larger, but may expand behind other street front uses. Frequent access, transparency and a variety of uses are encouraged within all shopping areas.

In pedestrian oriented areas, broad expanses of solid wall should be avoided to provide for both natural light as well as pedestrian scale, interest and rhythm to the streetscape. Frequent access, transparency and a variety of uses are encouraged within all shopping areas.

Signage for shops, as elsewhere, should be front lit and in the form of or similar to banners. Signage for shops should be secondary to the main hotel signage; that is, small and tasteful. Otherwise the general signage guidelines apply.

Summary of Principles:

- **Hotels should have ground floor shopping or food service facilities accessible from the outside pedestrian area.**

Hotel Terraces

Exterior terraces, arcades, and verandas, whether for drinking, dining or appreciating the view, should be incorporated in hotels. They should be planned to capture sun or views of activity nodes or characteristic scenery. Requirements will vary according to the hotel size, location and orientation.

Hotel Balconies

Individual cantilevered balconies are not part of the National Parks heritage design vocabulary and are discouraged. Recessed balconies, galleries, French doors behind flat railings, covered verandas, small terraces, building protrusions and other solidly supported types of balconies and open spaces are encouraged.

Supplementary Guidelines for Townhouses

Exterior Building Character

Beyond the general guidelines for the resort area, the townhouses should be grouped together in multiples of three or four up to a max of six units in an overall composition that appears to be a single structure with a unified form. Each unit should be identifiable through the use of individual entries and some secondary or subordinate roof form such as a gable or dormer that the owners will recognize as part of their own unit. For the majority of the townhouse units, the overall impression should be of a single large home in the characteristic architecture described in these guidelines.

Wall Finishes and Forms

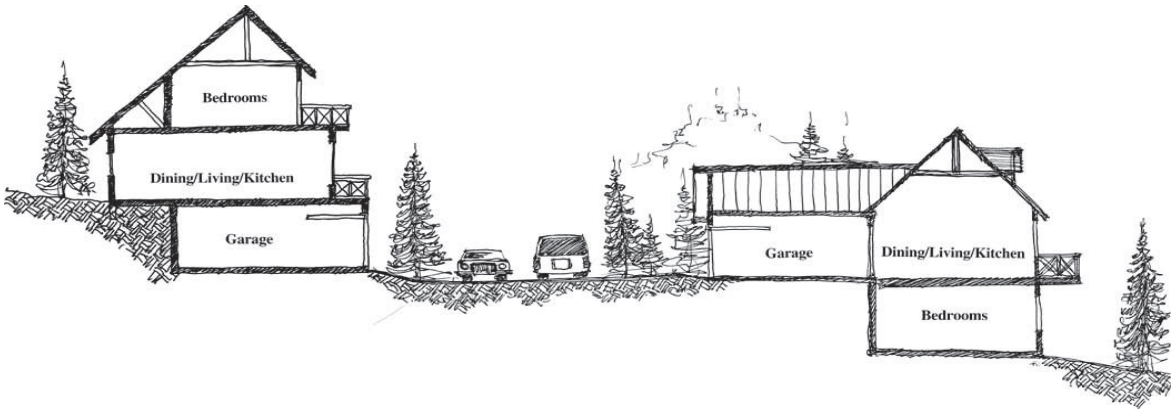
Exterior finishes should include generous amounts of natural finishes, such as natural wood trim and stone finish, which will tie the neighbourhood composition of the townhouse enclave together, even if the other finishes are changed in colour or finish treatment over time by different strata councils or individuals. Window units should likewise be uniform within each grouping of townhouses.

External Spaces

Each individual unit should have a semi-private exterior space such as a patio or deck that is screened from direct overlook by the neighbouring units within the same grouping, whether that screening is achieved through building form, overhanging roof, lattice or pergola elements.

Parking

Parking should be at grade or as close to road level as possible to accommodate winter driving conditions. Garages may be either under the main body of the townhouse grouping or to the side of the grouping. Individual carports or garages as separate elements in front of the townhouse units will not be permitted.

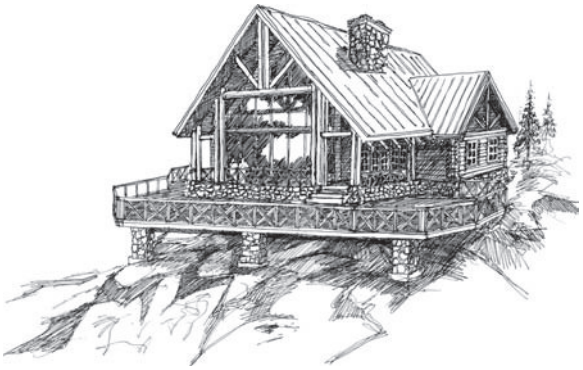


Supplementary Guidelines for Chalets

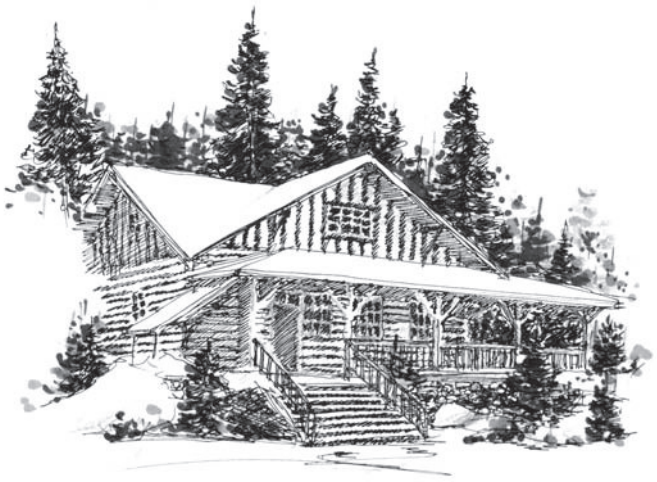
(Single Family Dwellings in Detached Residential Buildings or Duplexes or Bed and Breakfasts Establishments)

In addition to the general guidelines for the resort, individual chalets should respond to the National Parks architectural theme by drawing finishes from a broad selection, which may include logs, shingles and board siding in addition to the other natural wood and stone material available. Metal or vinyl wall finishes are not permitted here or elsewhere in the resort area. Stucco in chalet design is permitted, but not as the prevalent wall finish. Roofs must be of a steep pitch and may include slate roofs, asphalt shingle roofs of approved colour, style and appearance, or painted metal roofs. Roofs must be designed for viewing from further up the mountain in terms of form and freedom from a clutter of mechanical or technological appendages. Consideration should be given to verandas and enclosed garages.

House interiors should provide for secure vermin and animal proof temporary garbage storage, possibly in a freezer unit.



All the design guidelines will apply generally to permitted accessory buildings, such as garages, etc., as well as to the main buildings.



Supplementary Guidelines for Condominiums and Apartments

Apartment and Condominium buildings in the resort area should be of the same form and character as hotel buildings. As condominium units may function as hotel units they are referred to in the Master Plan as condotel units. Exterior finishes should be the same for hotels as for Condominium and Apartment buildings. The supplementary guidelines for hotels should apply generally except with respect to lobby and balcony finishes.

Lobbies

Where most of the units in the building contain individual kitchen facilities and more than one main living space, the buildings are more likely to function as private spaces than semi-public spaces, and the need for large two storey lobby areas with fireplaces accessible to the public will be optional.

Balconies

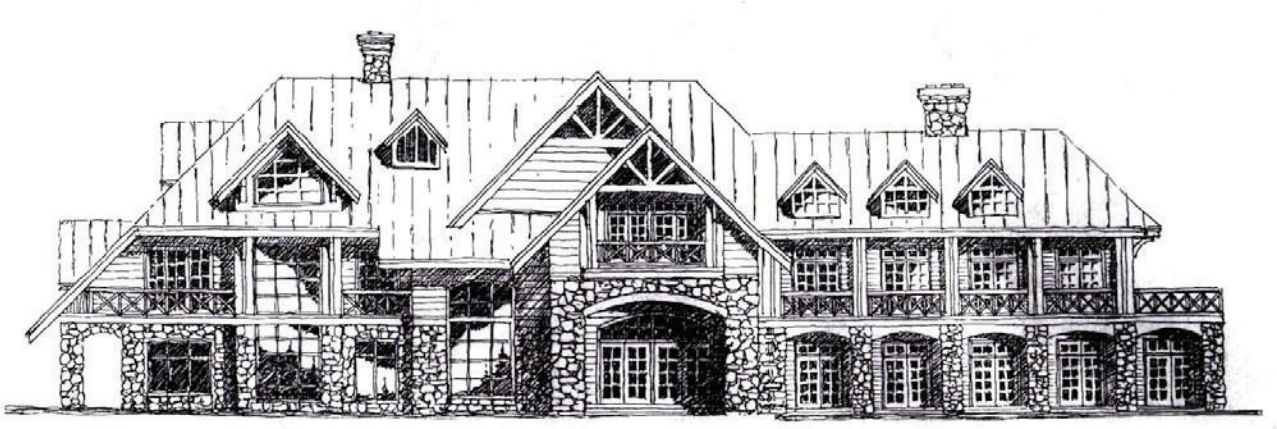
Similarly, there will be a stronger case for individual balconies from the units, in which case the balcony spaces should be semi-enclosed and covered in a form similar to a verandah.

Commercial Bases

The base of the condominium buildings in the core of the base area should contain continuous commercial spaces at grade where adjacent to a street, plaza or right of way that is intended to provide pedestrian oriented commercial outlets to respond to the intent of the Master Plan.

Garbage

In mountain resort areas, special care must be taken with kitchen waste in multi-unit residential buildings such as condominium and apartments. Each multi-unit residential building must provide a predator and vermin proof interior space for garbage collection and transfer, located for easy access by garbage hauling contractors. Use of strong airtight metal doors and freezer storage units is encouraged, yet exterior finishes should employ a minimum appearance of metallic finishes. No external areas are to be used for the storage of garbage. Ventilation for garbage rooms should be through high level vents (such as roof vents) rather than through low level wall vents to further discourage scavenging animals.



Siting Guidelines

Siting setbacks are regulated by minimum distances set out in siting covenants and zoning requirements for each parcel of land. However, the following guidelines are intended to illustrate the desired image of each area beyond the minimum requirements of the zoning bylaw.

For Hotels, Condominiums, and Apartment Buildings

The hotel form should reinforce build-to lines where it fronts on pedestrian oriented streets or where it forms the defining wall of a public open space. Likewise, the form should stretch across all or almost all of its lot width where it is intended to help define either a street or plaza wall. Archways and subtle linkage elements should be used over most access routes to pedestrian plazas to complete the sense of enclosure. Roofed archways, portes cochères, arcades, pergolas and the like may link adjacent buildings.

The building envelope for hotels should comply with the general indications in the Master Plan, which may be amended from time to time.

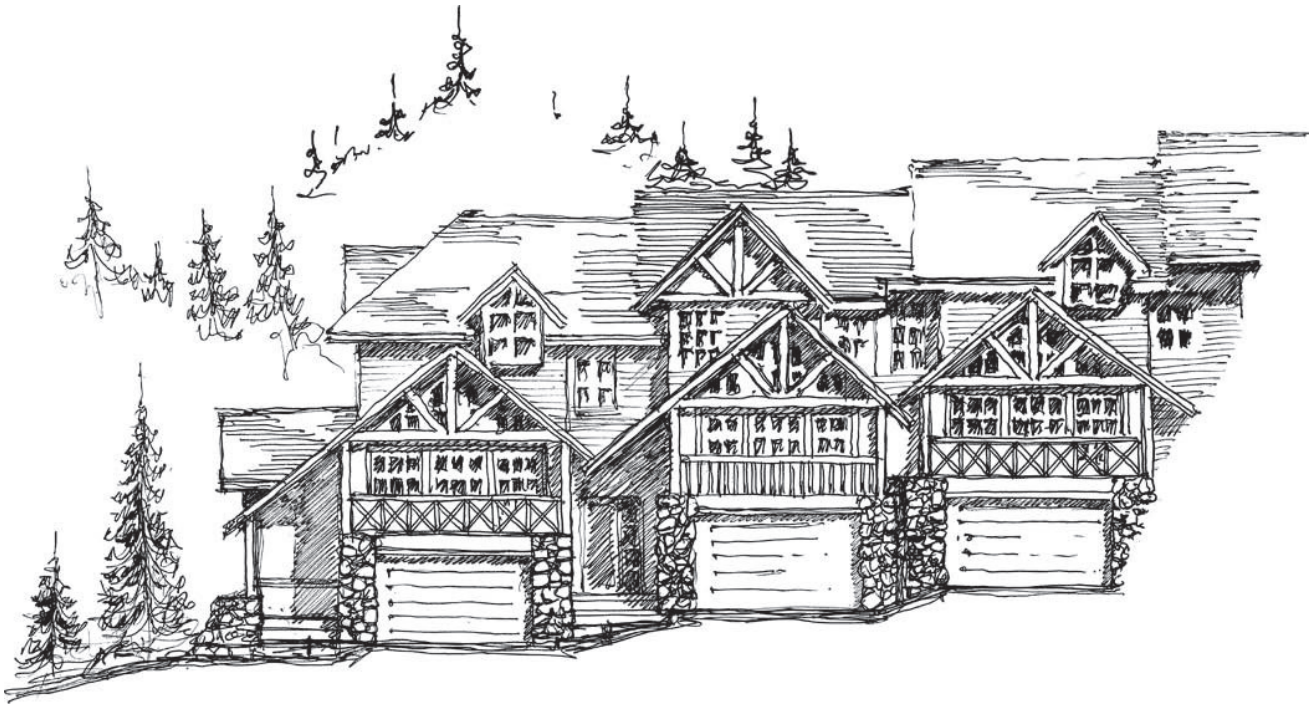
Siting should be based on the main principle of reinforcing the street wall of the adjacent public space, especially at ground level. Where possible, siting should also provide for some private space by way of a terrace or park-like garden that captures the essence of the natural surroundings. Where a hotel or other building fronts on two or more pedestrian oriented streets, plazas or rights of way, it must build up to the approximate edge of all those pedestrian areas and provide the appropriate interface such as weather protection and pedestrian access. Where such buildings are shown in the Master Plan as helping to define only some of the bordering public space, the other building faces should overlook areas of integrated terrace and treed landscape area that includes native tree species, natural alpine ground covers, and a park-like setting.

For Townhouses

The intent is to create clusters of resort homes that contribute to the resort's streetscape, therefore setbacks, which are detailed in the zoning regulations, are relatively close to the resorts' roadways.

For Chalets, Single Family Dwellings, Duplexes, and Bed and Breakfast Operations

Siting for both chalets and bed and breakfast operations should be designed so as to surround individual buildings with abundant stands of trees and to screen them from each other, and partially from the road. The individual buildings are intended to nestle into the landscape rather than to dominate the landscape. Ample setbacks should be provided on all sides of these buildings. Surface parking areas for bed and breakfast operations should be out of view of the road and chalet parking areas should provide screening for vehicles other than cars so they are not visible from the road. Driveways should curve into the site to re-emphasize the romantic country image that the resort is intended to convey, as well as to partially screen the building area of the site. No more than fifty percent (50%) of the site should be cleared for the building site, parking



and access driveway. In order to facilitate this, only large building lots will be made available.

Chalets, Single Family Dwellings, and Duplexes should be no more than three storeys high as defined in the B.C. Building Code and have a building area with a footprint of no more than thirty-five percent (35%) of the lot area as described in the zoning regulations.

A detached garage or carport of up to six hundred (600) square feet of building area of an acceptable design may be permissible based on the fact that lot sizes are relatively large. No other structures, buildings or attachments of any kind will be permitted, except that in planned portions of the development designed for residential living in condominium ownership, special parking arrangements and structures for common use of appropriate design may be permitted.

Dwelling designs will need to be in compliance with siting guidelines and submission for design approval must include a report on the design contribution to the restoration of the landform and the resettlement of the forest, as well as the relationship to the ski runs, where applicable.

Whenever possible, existing features that may exist prior to development should be restored and reinforced after construction. The intent is to fit the buildings to their sites in a way that recreates the natural setting, treating the buildings as an integral component of the site, with fitting landscape that will create the impression of homes naturally nestled in the forest, among the trees of the regrown forest.

Homes should be located to generate the best possible views from the living areas and to capture as much sunlight as possible. Because the plan is mostly for large lots, there is every opportunity

to preserve privacy and avoid loss of view to other dwellings, which will be mandatory. Energy efficient design and water conservation measures will be encouraged.

For Commercial Retail and Related Areas

The siting of buildings in commercial retail areas should have no setback from the pedestrian areas or rights of way except for small external display areas of no more than four feet. In retail areas the buildings may include a base arcade or other similar building element such as a canopy, verandah, covered pergola or overhangs to provide some pedestrian weather protection. View of the shops, lighting and transparency, however, are also emphasized. Weather protection should not be oppressive or obscure the commercial areas. Simple overhangs may be preferred in a variety of locations. The buildings should touch each other at grade to form a continuous street wall and street edge, so that side setbacks are eliminated where feasible, except where required from place to place for thoroughfare or emergency vehicle access, in which case the building forms should step over that access with an arch or visually complete the street wall image by proximity. On the fringes of the central base area, and on the mountainside, some buildings may be appropriate as pavilion forms (for example a restaurant or refuge on the mountain, or an interfaith chapel, information kiosk, ticket booth, etc.), in which case they should be integrated into both the pedestrian environment and natural environment as closely as possible.

Central Parking Areas

The attempt is to provide ample and reasonably visible surface parking areas. By using numerous smaller parking areas there should be an attempt to break up the expanses of the bare parking area as much as possible. When parking areas are laid out in detail they should incorporate areas of retained natural growth and trees and be separated from roads by leave strips of well-maintained native trees and shrubs.

Guidelines for underground parking access are covered under "Screening and Enclosure of Service Area."

Public Outdoor Activities and Spaces

In the resort base area, outdoor space should be provided either on a commercial building site or on a public area adjacent to that site for various activities to enliven the resort.

In sunny areas on public plazas or squares, provision should be made for public outdoor restaurant dining during good weather, by agreement with the ownership or authority having control of that area. Likewise the building owners should cooperate with the mountain operator or mountain resort association to ensure that all public plaza areas have a program of activities including entertainment, displays, and spaces assigned for educational activities, meeting places and starting points for walking and hiking tours. Some provisions should be made at the time of individual building design to accommodate these activities. The building design adjacent to such public pedestrian areas should provide for sun penetration to the public areas,

especially from 12 noon to 2 p.m., wherever reasonably possible.

Summary of Principles:

- **Resort buildings should be linked in the base area and commercial pedestrian areas.**
- **Townhouses should be close to the road.**
- **Chalets and Bed and Breakfast areas should be surrounded by trees.**
- **Commercial areas should abut the street.**
- **Parking areas should be landscaped.**

Interpretation

These Guidelines have been prepared for the proposed development of the mountain resort and should be considered as a permanent design direction of its Master Plan and Official Community Plan (OCP).

The Master Plan referred to in these guidelines is the Ski Area Master Plan under the Commercial Alpine Skiing Policy as approved or adapted from time to time by the Province of B.C. through one of its ministries or agencies. These Guidelines have been prepared reflecting the intent of the Master Plan, but in the event of conflict between these Guidelines and other constraints of the Master Plan and/or of the OCP and the zoning bylaw, the Master Plan and/or the OCP and zoning bylaw must prevail and these Guidelines must be viewed as supplementary.

The Master Development Agreement (MDA) between the Province and the owner is based on the Master Plan, and like the Master Plan may change from time to time. Interpretation of these Guidelines is up to the Design Review and Approval Authority established or named by the resort owner from time to time or by such jurisdiction that is successor to the owner, in accordance with the MDA. These guidelines should be read in conjunction with the terms of related restrictive covenants, the Master Plan, the OCP and the zoning bylaw.

Appendix "B-8"

CRYSTAL MOUNTAIN SKI AND GOLF RESORT

1.0 CONTEXT

The Crystal Mountain Expansion project is an initiative under the BC Commercial Alpine Ski Policy (CASP), the governing policy that is at the basis of the ski area tenure. The ski area is entirely on provincial Crown land.

CASP stipulates that the use of the Controlled Recreation Area of the ski area is granted to the operator under a license. Within the licensed Controlled Recreation Area, the land that is specifically required to operate the ski area (the parking area, the right of way for the lift lines and the ancillary facilities, such as daylodges etc.,) are covered by a lease agreement. The land required for overnight accommodation and tourism services is granted to the license holder as fee simple and may be sold to third parties.

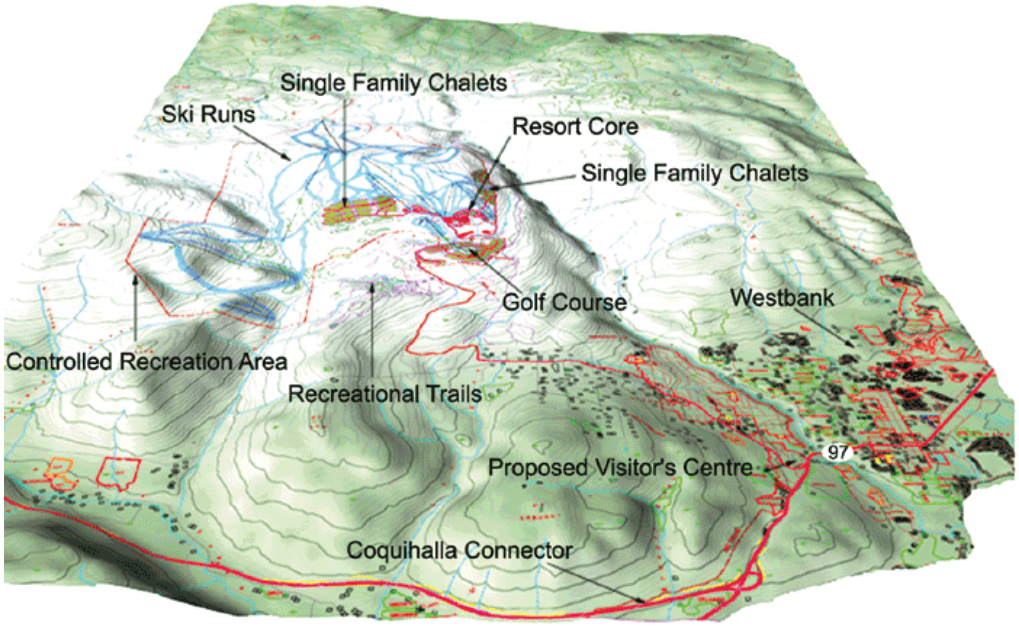
Following acceptance of the Formal Proposal by Crystal Mountain Ski and Golf Resort Inc., the Province provided an Interim Agreement in March 2001 and opened the door to the Master Plan approval process. The ensuing public consultation process lasted from July to November 2001. Government agencies and local government provided their input between July 2001 and March 2002. In May 2002 the Master Plan was approved by the Province.

The Province and Regional District have established a cooperative approval process that works positively with provincial laws and policies and local processes affecting amendments to OCP and rezoning for mountain resorts. The intent is to make the administration of provincial laws and policies, from environmental regulations to B.C. Building Code requirements, easy for both applicants and local authorities. In particular, the OCP is not intended to be an isolated document, but to be the implementation of the Master Plan that flows from the CASP process.

…/2

2.0 VISION

The Crystal Mountain Resort envisions a regional destination that is aesthetically appealing, environmentally aware and that is focused on family recreation, skiing and golfing in a peaceful, forested setting that is adjacent to a growing community within one of the most climatically favoured tourism regions in British Columbia.



3.0 SUMMARY LAND USE

The total resort development area (Figure 1), , or "Controlled Recreation Area" surrounds the existing tenure of Crystal Mountain and covers the area of Mount Last, the lower area of Mount Clements and a knoll south of Mount Last and of Jack Creek. It includes approximately 2,900 hectares, including the skiable terrain surrounding all the ski runs (approx. 550 hectares) and the golf course (approx. 65 hectares). Within the resort is a Base Development Area including the single family chalet area, resort accommodation and the expanded ski base and parking facilities, covering approximately 150 hectares.

The Crystal Mountain Resort Master Plan and Master Development Agreement (December 1, 2006) approved by Province of BC is based upon the basic principles as outlined in the Provincial Commercial Alpine Ski Policy (CASP). These principles were derived from extensive study of local and international resorts, input from the public, government committees, and members of the Regional Boards. It is intended to be the basis for preparing land use, zoning, subdivision, development permit, and servicing applications. Servicing and infrastructure is designed for a planned 3,994 bed units and 6088 day use skiers.

Ultimately, the Master Development Agreement of December 2006 and the documents that are part of it, are intended to be the reference point of the long term future of the ski and golf resort.

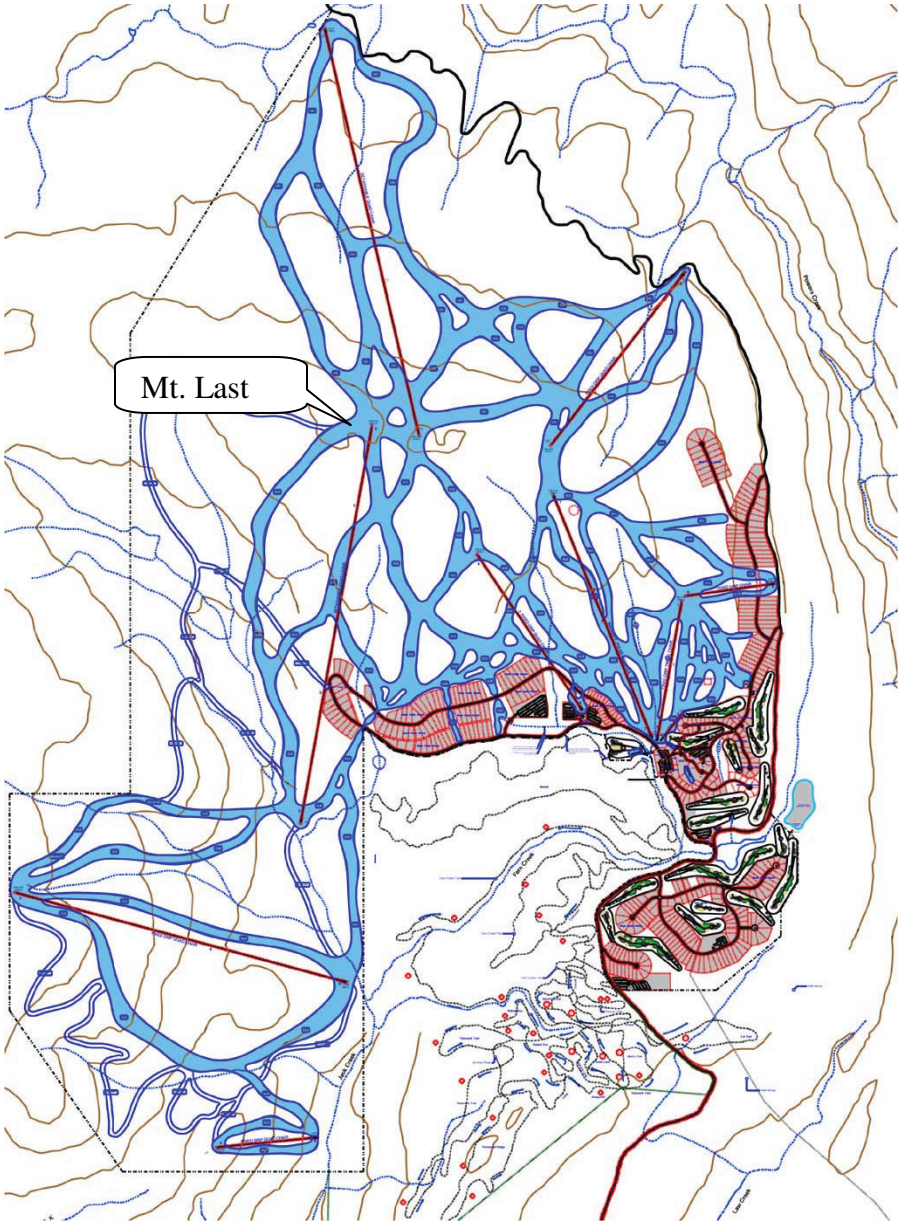


Figure 1 Resort Plan Area

4.0 PHASING

The OCP for Crystal Mountain is intended to provide policy direction for the duration of Crystal Mountain's projected 15 to 20 year build out period as indicated by the Master Plan. The Phasing Plan for residential development is depicted below.

Dwelling Types by Phase					
	Units by Phase				
Unit Types	**1**	**2**	**3**	**Total**	**Buildings**
Single Family Chalets	42	137	208	387	387
Condominiums / Hotel	124	36	0	160	6
Bed and Breakfasts	4	0	1	5	5
Townhomes	139	0	0	139	139
Hotel (Rooms)	0	200	100	300	3
Employee Housing	0	0	10	10	1
Total (all types)	**309**	**373**	**319**	**1,001**	**541**

5.0 UTILITIES & SERVICES

Crystal Mountain Resort Master Plan provides for a mix of public and private utility services. The Jackpine Forest Service access road leading to and beyond the resort will be a public road, designed to Ministry of Transportation standards. Local roads may be a mix of public and strata roads. Proof of water supply for fire suppression, identification of fire response routes to all buildings and undertaking of wildfire reduction activities shall occur at time of rezoning applications. A volunteer fire protection department is proposed, with contribution to a mutual aid agreement with Westside Fire Protection.

Water, storm drainage and waste water services may be by private utility pending approval by provincial agencies, or may include expansion of and connection to existing community services. Provisions for water distribution propose conservation measures, metering and reuse of water for irrigation. Detailed assessment of water supply (water supply plan) will be required at each phase of development. Water conservation and recycling measures, when proven to reduce water demand upon full occupancy of the first phase of development may be considered for purpose of reduced requirements for subsequent phases under the Regional District's Subdivision and Development Servicing Bylaw. Assuming groundwater supply, hydrogeologic studies shall be guided by understanding of the surface-groundwater interaction within Powers Creek watershed.

At each stage of rezoning application, a storm water management plan shall be provided. The first phase of rezoning shall include a detailed terrain stability, surface erosion, and hazard analysis including contingency plans, design of water recycling, design and siting of treatment plant, siltation and irrigation ponds.

Discussions are underway with Westbank Irrigation District and with Westside Fire Protection services. While these negotiations are ongoing, it is anticipated that Crystal Mountain Resort will be fully serviced to resort standards, will contribute to Development Cost Charges and other voluntary developer contributions in effect within the Westside community, and that these provisions will be in place prior to consideration of individual zoning applications.

By full build out, a Kelowna Regional Transit station shall be situated within the resort in a location close to ski school and hotels.

6.0 ENVIRONMENTAL PROTECTION

Environmental analysis conducted within the base development area in 2007 (Figures 2 and 3) identified sensitive ecosystems consisting of watercourses containing fish habitat, wetlands and meadows, and important wildlife habitat that should be protected from the impact of development. Design of the base development, golf course and ski runs will include protection of highly sensitive areas. Where a zoning application demonstrates that development is unavoidable, the impacted lands of high sensitivity(ESA 1) shall be compensated at a 3:1 ratio with lands of similar value; lands of low to medium sensitivity (ESA 2 and 3) shall be compensated at a 1:1 ratio; and compensation shall confirm to No Net Loss principals.

Development Permit Areas for the protection of natural environment are established as follows and development shall be designed in accord with the provisions above, with provincial best management practices (including those pertaining to Old Growth Forests), with development permit regulations and guidelines of the Westside Official Community Plan bylaw, and with recommendations of qualified professional reports.

Wildfire Interface Development Permit Area includes the base development area shown in red on Figure 1.

Hillside Development Permit Area includes all lands within the Crystal Mountain Controlled Recreation Area, Resort Master Plan and Master Development Agreement (December 1, 2006), and lands leased for sediment ponds and treatment plant and reservoir.

Sensitive Terrestrial Ecosystem Development Permit and Aquatic Ecosystem Development Permit Areas include all lands within the Crystal Mountain Controlled Recreation Area, Resort Master Plan and Master Development Agreement (December 1, 2006), and lands leased for sediment ponds and treatment plan and reservoir.

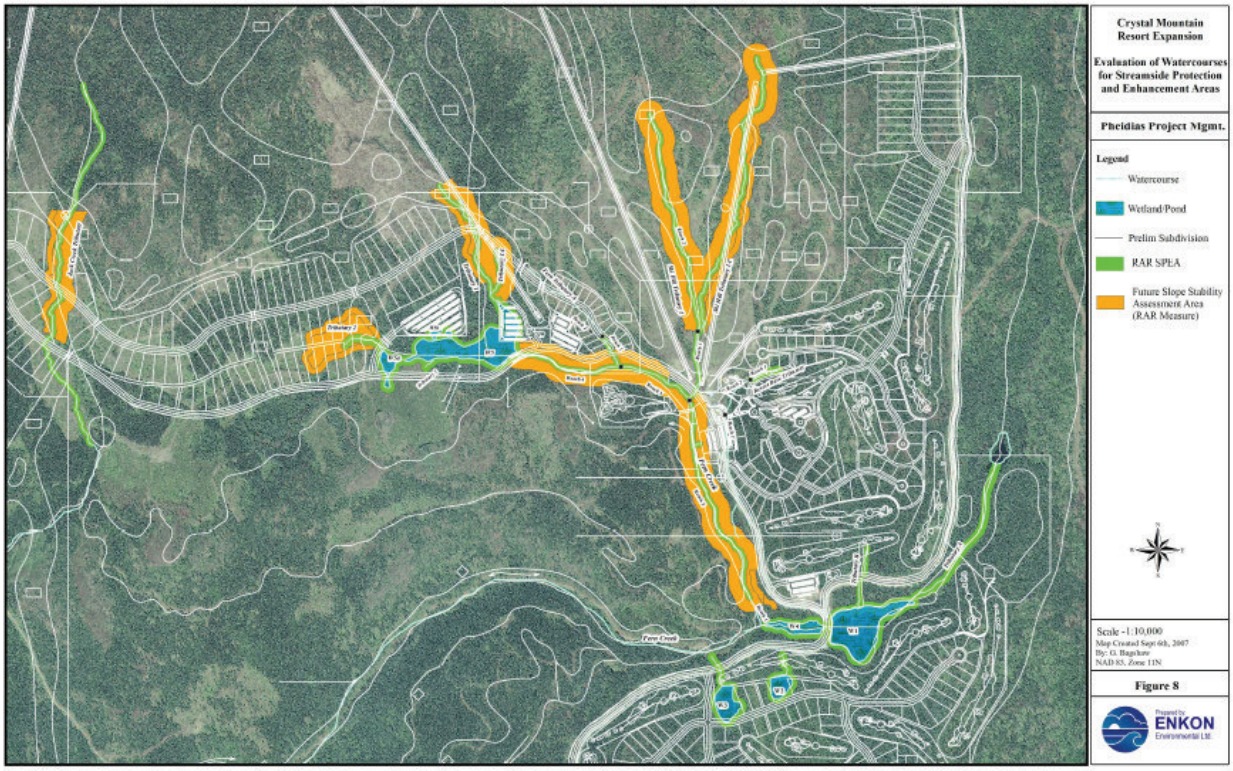


Figure 2: Streamside Protection, Enhancement & Assessment Areas (Enkon 2007)

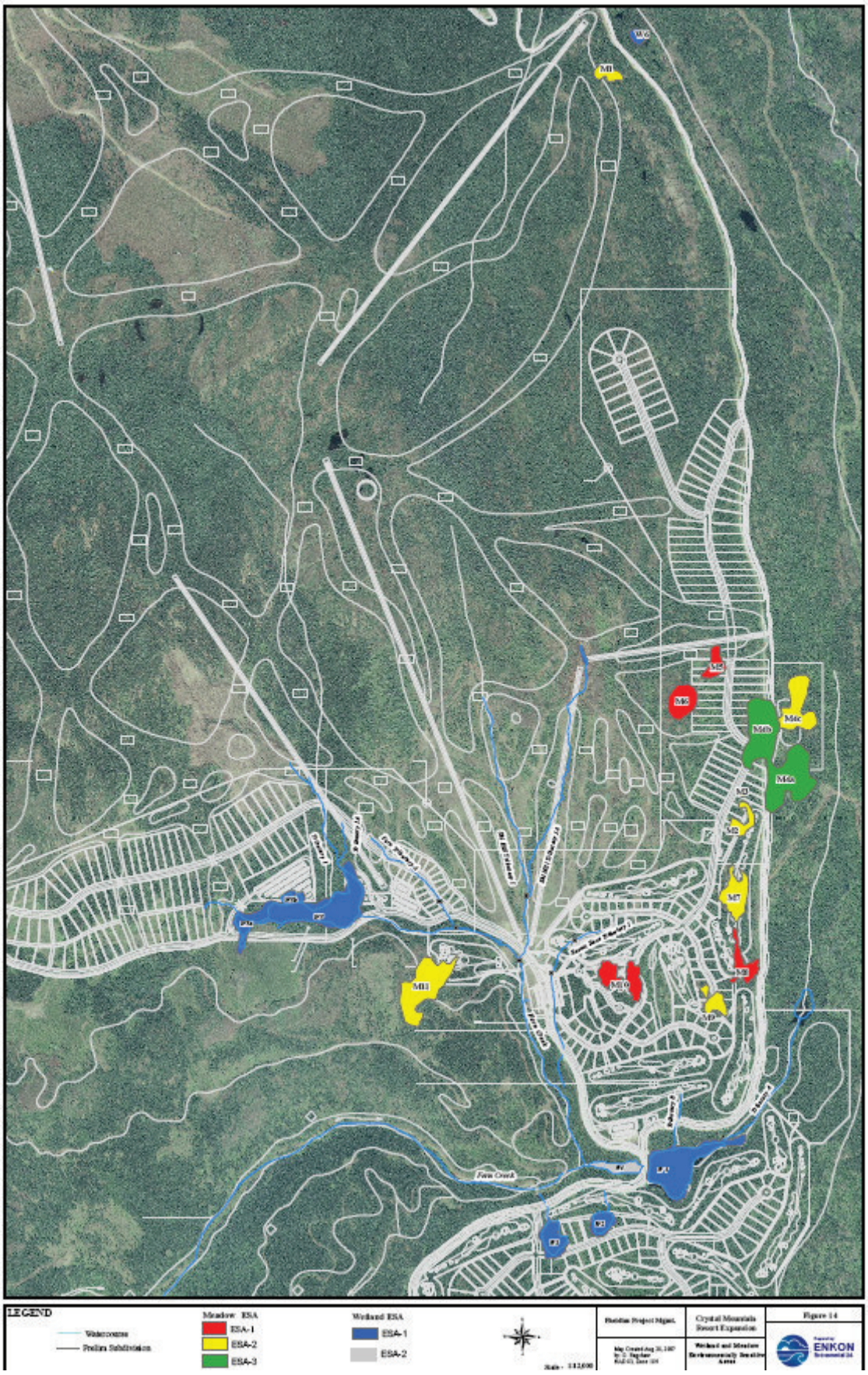


Figure 3: Wetland and Meadow Environmentally Sensitive Areas (Enkon, 2007)

7.0 LAND USE, SUBDIVISION AND DEVELOPMENT APPLICATIONS

Following the approval of the Crystal Mountain Official Community Plan it is expected that rezoning of the first phase to comprehensive development zone including the golf course will take place. In association with this rezoning application, the Regional District and provincial officials will give consideration to the development in accord with designs and recommendations from qualified professionals addressing the following:

- Hydrological assessment on impacts of the golf course irrigation and base development design on channel stability and peak flows in Trepanier Creek and Powers Creek
- Assessment of site specific hydrological loading capacities and site suitability,
- Detailed environmental monitoring plan
- Sediment and Erosion Control Plan
- Storm water management Plan
- Detailed Surface and Groundwater Quality Mitigation Plan
- Spill Prevention and contingency plans,
- Water Master Plan and Water Supply Plan demonstrating hydrological modeling, phased water demand estimates acceptable to the Regional Water Manager, and supply options sufficient for full build out of the resort;
- Fertilizer and Pesticide Management Plan
- Sustainable design principals
- Detailed wildlife management plan
- Old Growth Management Plan
- Visual impact assessment
- Detailed stream mapping
- Detailed fish presence/absence surveys
- Fire response routes to all buildings
- Water supply and storage for fire suppression.

The Regional District will give further consideration to the development in accord with contributions to off site servicing.

Final adoption of any zoning amendment bylaw shall be conditional upon issuance of a Certificate of Public Convenience and Necessity to establish a new or enlarge an existing water service area, issuance of a provincial water license in accord with the Master Development Agreement, establishment of a community fire protection service, and establishment of an alternate route of emergency access.

The Regional District will further consider rezoning as development progresses according to the Master Plan to incorporate the base area lands comprising Phase 2 and Phase 3 of expansion. The province will pursue implementation of the Master Development Agreement and applications for utility services, land transfer and subdivision.

During course of these applications, the province and local government will work in close concert to coordinate requirements and avoid duplication. Further design and detailed agreements will be developed at the appropriate stages to address parking and road design, contaminated site regulations, archaeological site regulation, solid waste management, and relocation of range and any mineral tenures.

Resolution of the boundary between recreation tenures shall occur prior to public hearing of any zoning application where there is a recorded overlap between the Controlled Recreation Area for Crystal Mountain Resort and the Map Notation Area of Telemark Cross Country Ski Club.

A time of creating individual development parcels within the mountain resort community, a covenant shall be registered on title of individual lots noting potential impacts from surrounding crown land resource development and extraction activities including visual impact, dust, traffic and noise. Individual buildings shall be sited and designed to focus on resort attributes and to minimize the impacts on surrounding lands.

8.0 CRYSTAL MOUNTAIN COMMUNITY PARKLAND AREAS

Crystal Mountain Resort will provide to the RDCO the equivalent of 5% or greater of parkland dedication within the resort for future public use. Crystal Mountain agrees to build an estimated length of 2694 meters of a 2.4 meter wide paved asphalt trail to be constructed in three phases within the resort development (see Figure 4 for phasing information). The 2.4 meter wide asphalt trail will be contained within a minimum 7 meter wide parkland tenure zone throughout the resort to further enhance the park space and provide adequate undisturbed parkland between the asphalt trail and adjacent land uses. The combination of land provided and a value added improvements (hard surfacing) will provide a linear park space (trail) for residents of the district to enjoy and use, while keeping building and maintenance costs for taxpayers low. Development and location of the trail with be in accordance with development permit guidelines and provincial Riparian Area Regulations regarding environmentally sensitive (ESA) areas.

Parks Concept

1. Provide a linear park (trail) network for residents and visitors of the resort that connect the major resort areas to all phases of subdivision within the resort.
2. Provide connections to existing Nature Trails on nearby Crown land.
3. Provide opportunity for possible future connections to existing cross-country ski area for winter use.
4. Provide green space in the central resort area to further enhance the “Mountain Feel” of the resort base.
5. Provide a linear park (trail) system in three (3) phases in conjunction with three (3) proposed phases of subdivision. All improvements within the linear park (trail) will be constructed prior to completion of each phase of proposed development

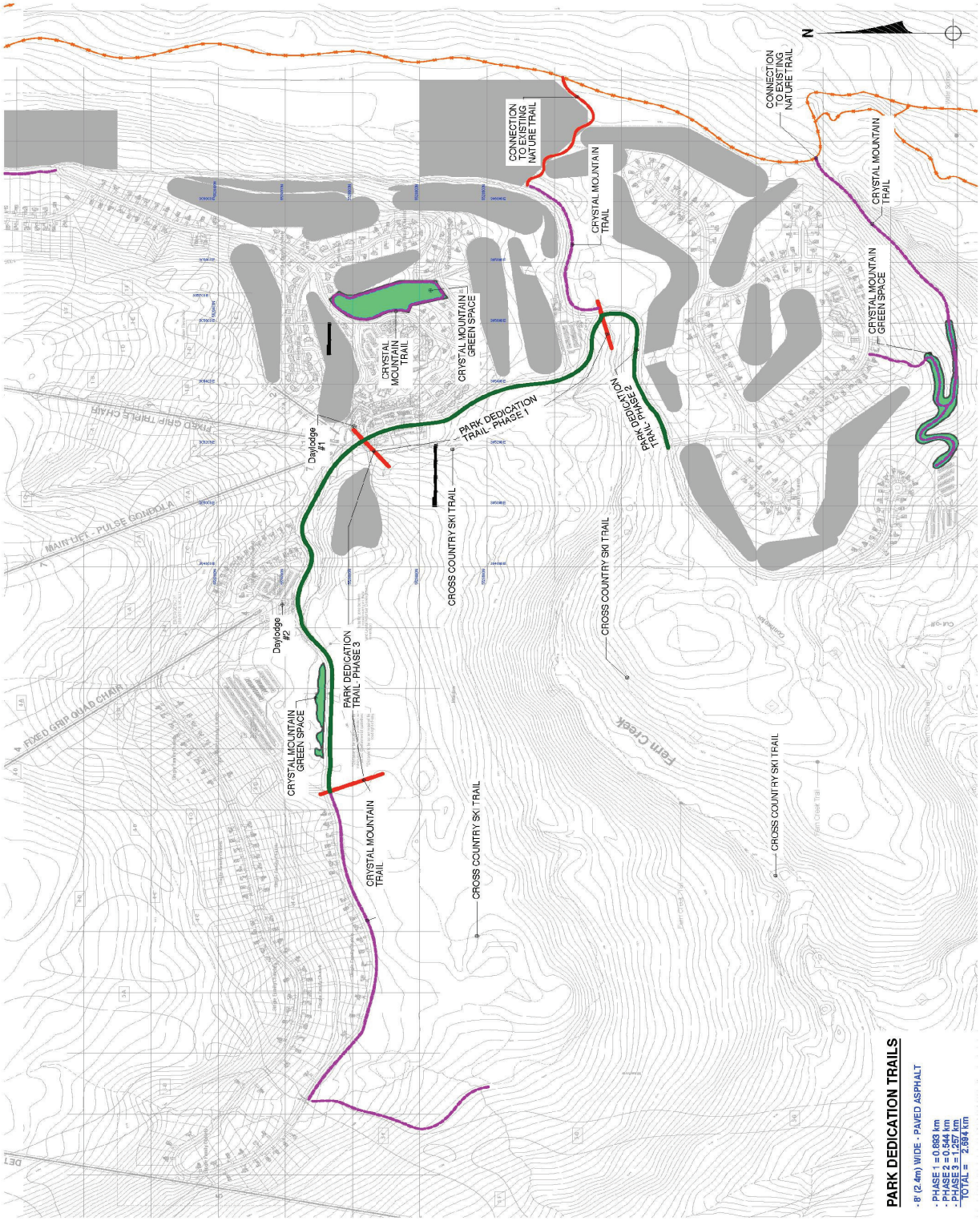
Trail Network

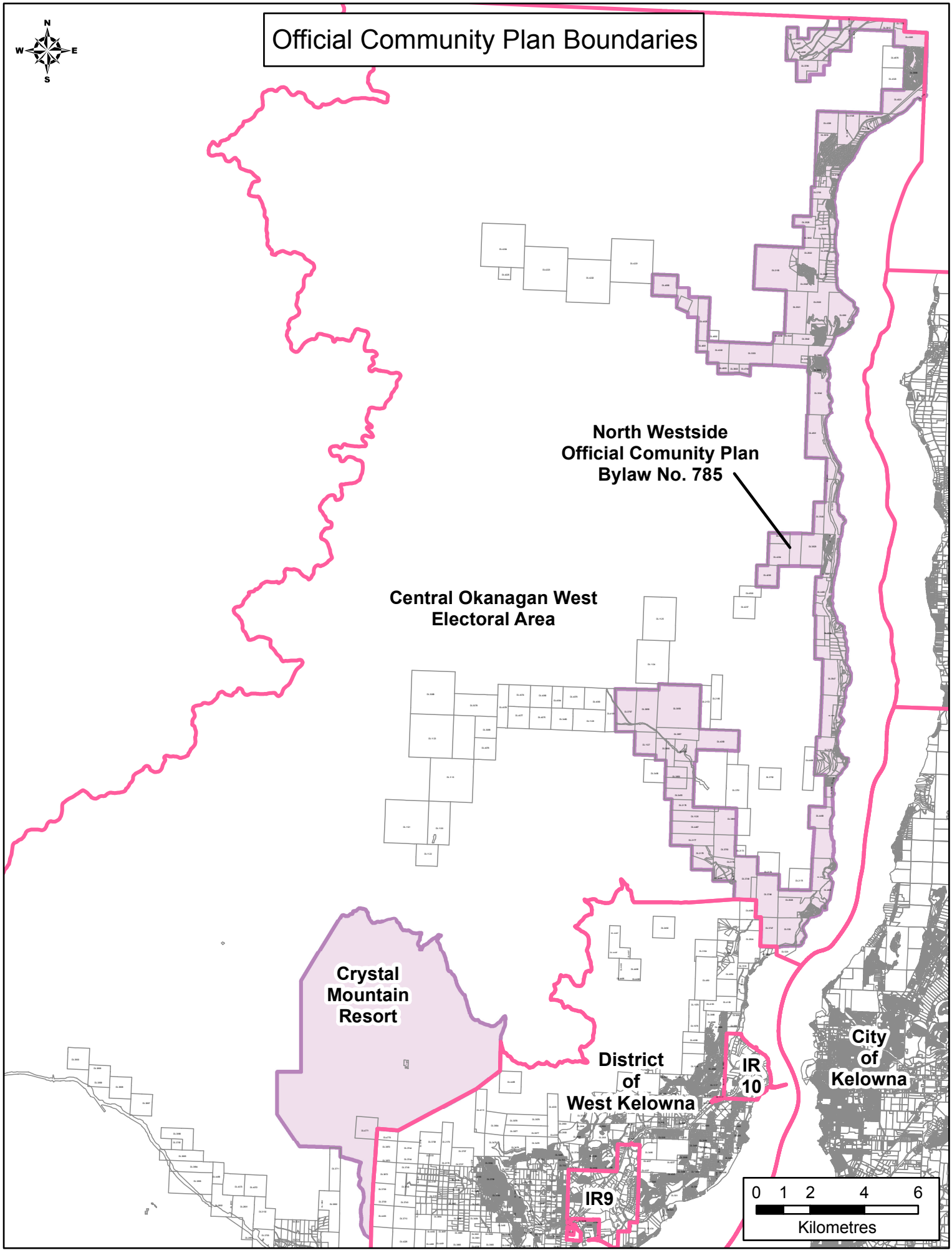
1. RDCO linear parks (trails) will be created within a minimum 7 meter wide park land tenure zone totaling a minimum of 1.88 Ha in size and will contain a minimum 2.4 meter wide paved asphalt trail surface at all times totaling a minimum of 2695 meters in length.
2. RDCO linear parks (trails) that run along side a roadway will have a grade separation as well as a buffer of natural vegetation to enhance the trail experience.
3. Where the trail is adjacent to other forms of land use or Crown tenure, an appropriate post and rail fence will delineate a boundary separation between these lands.
4. Additional undeveloped Green Spaces will be used where available to allow for additional buffering from residential buildings and golf course facilities.
5. Crystal Mountain will connect the proposed (private property) trail network to the RDCO linear parks (trails) system.

Green Space

1. Additional identified Green Spaces will be held and maintained by Crystal Mountain.

Figure 4 Proposed Community Parkland (Trail System)




Official Community Plan Boundaries
N
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North Westside
Official Comunity Plan
Bylaw No. 785
Central Okanagan West
Electoral Area
Crystal
Mountain
Resort
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West Kelowna
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Kelowna
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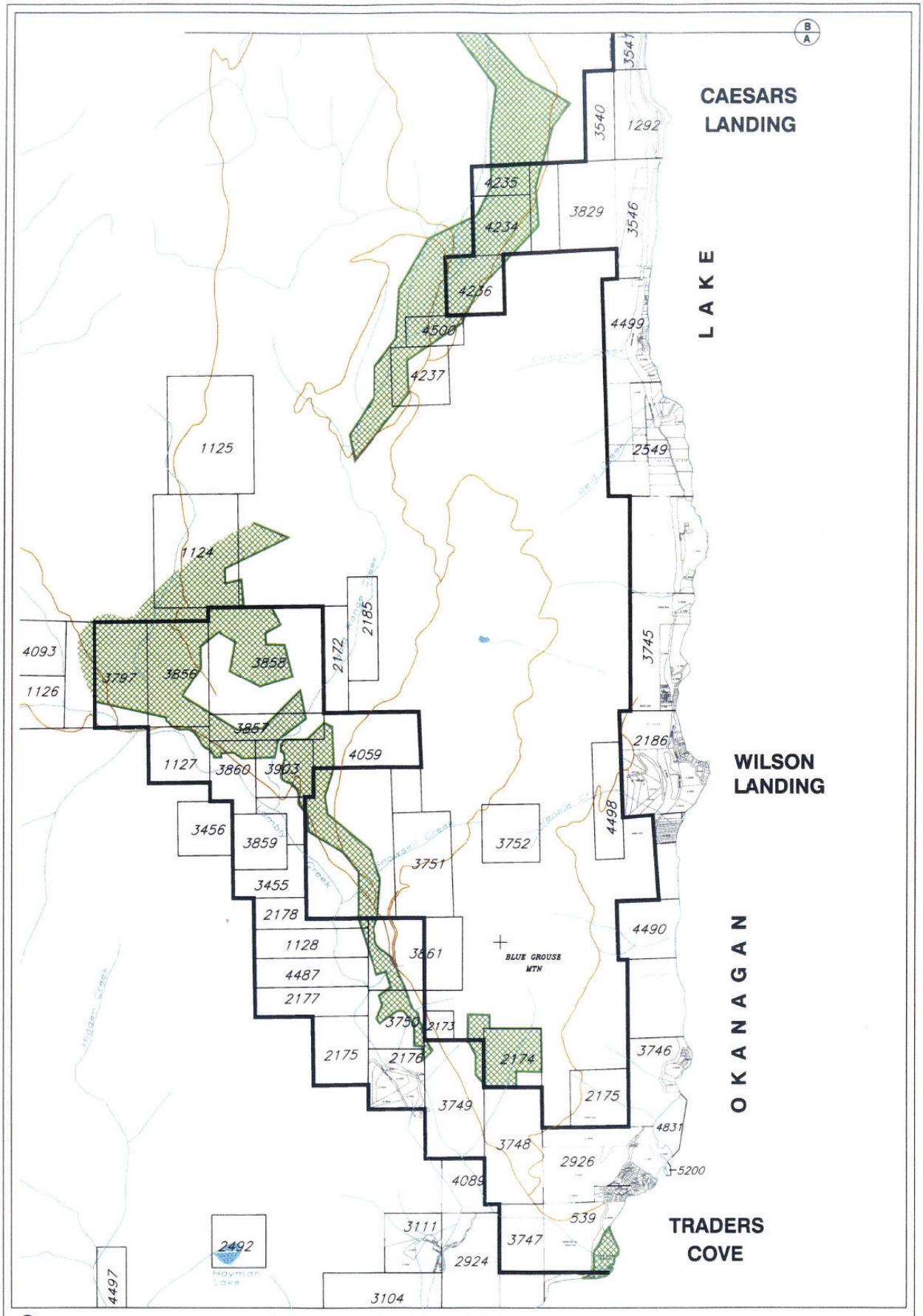


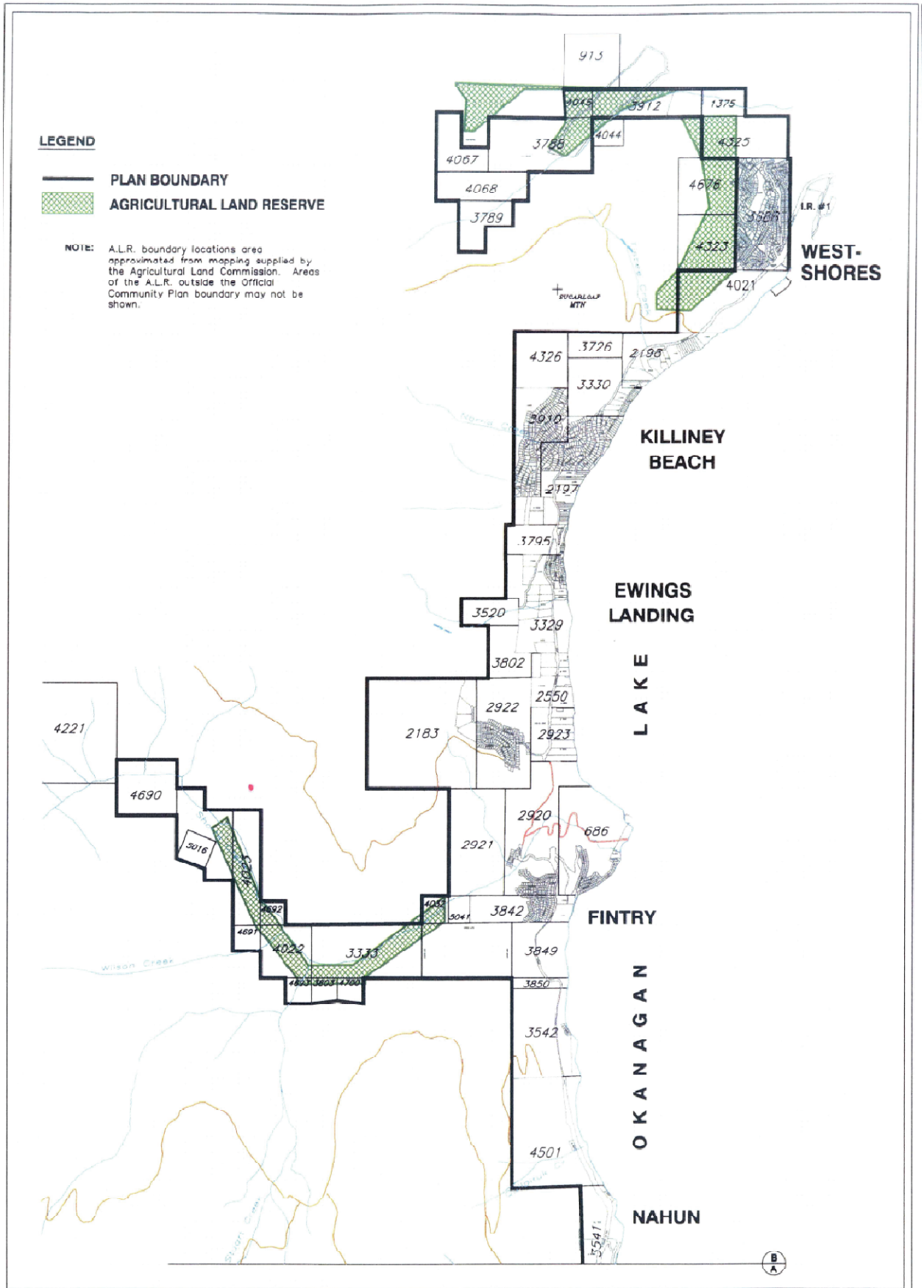
WESTSIDE OFFICIAL COMMUNITY PLAN

Regional District of Central Okanagan

T.R. UNDERWOOD ENGINEERING KELOWNA, B.C.

January 22, 1996

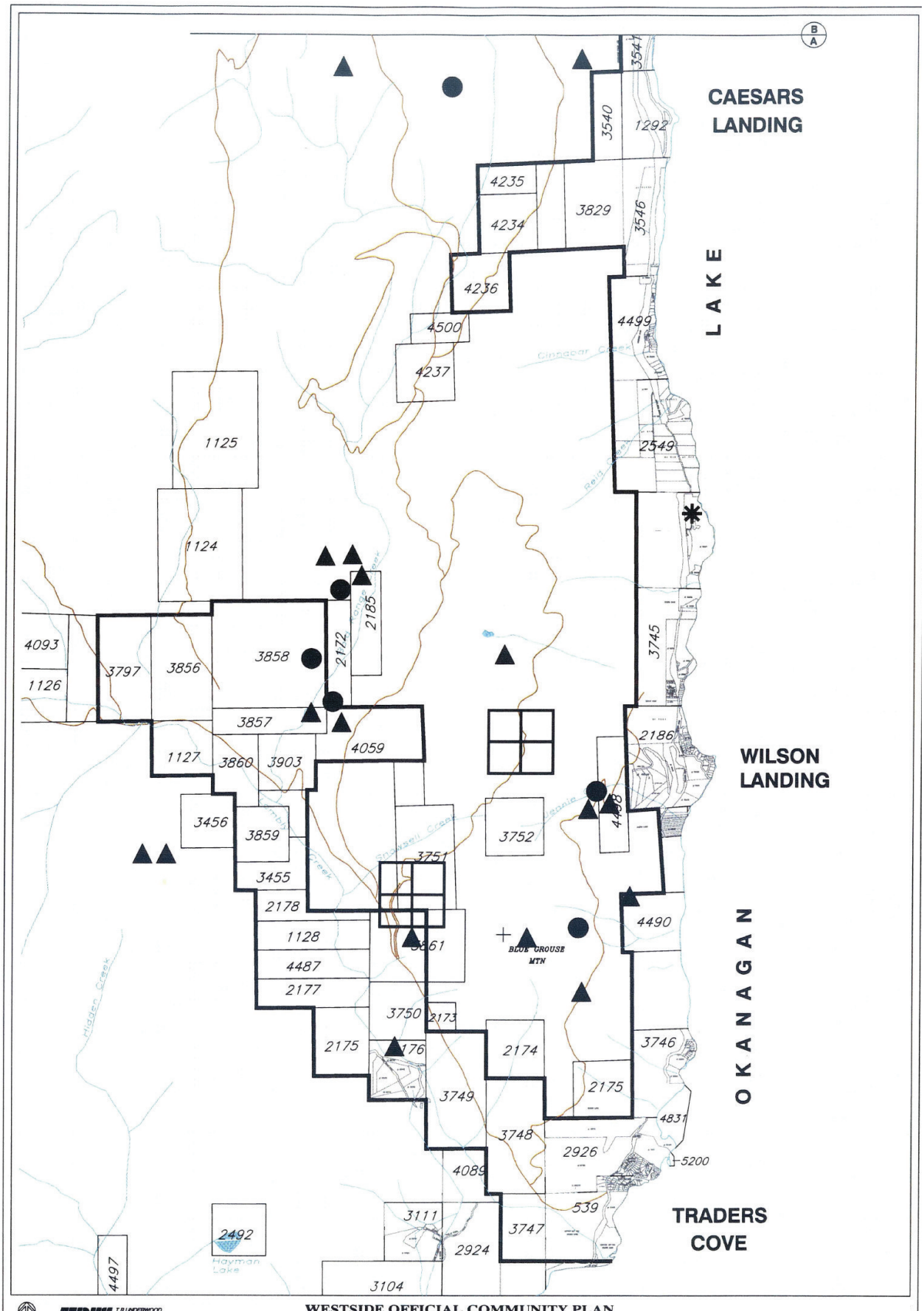
AGRICULTURAL LAND RESERVE AREAS



WESTSIDE OFFICIAL COMMUNITY PLAN

Regional District of Central Okanagan

AGRICULTURAL LAND RESERVE AREAS



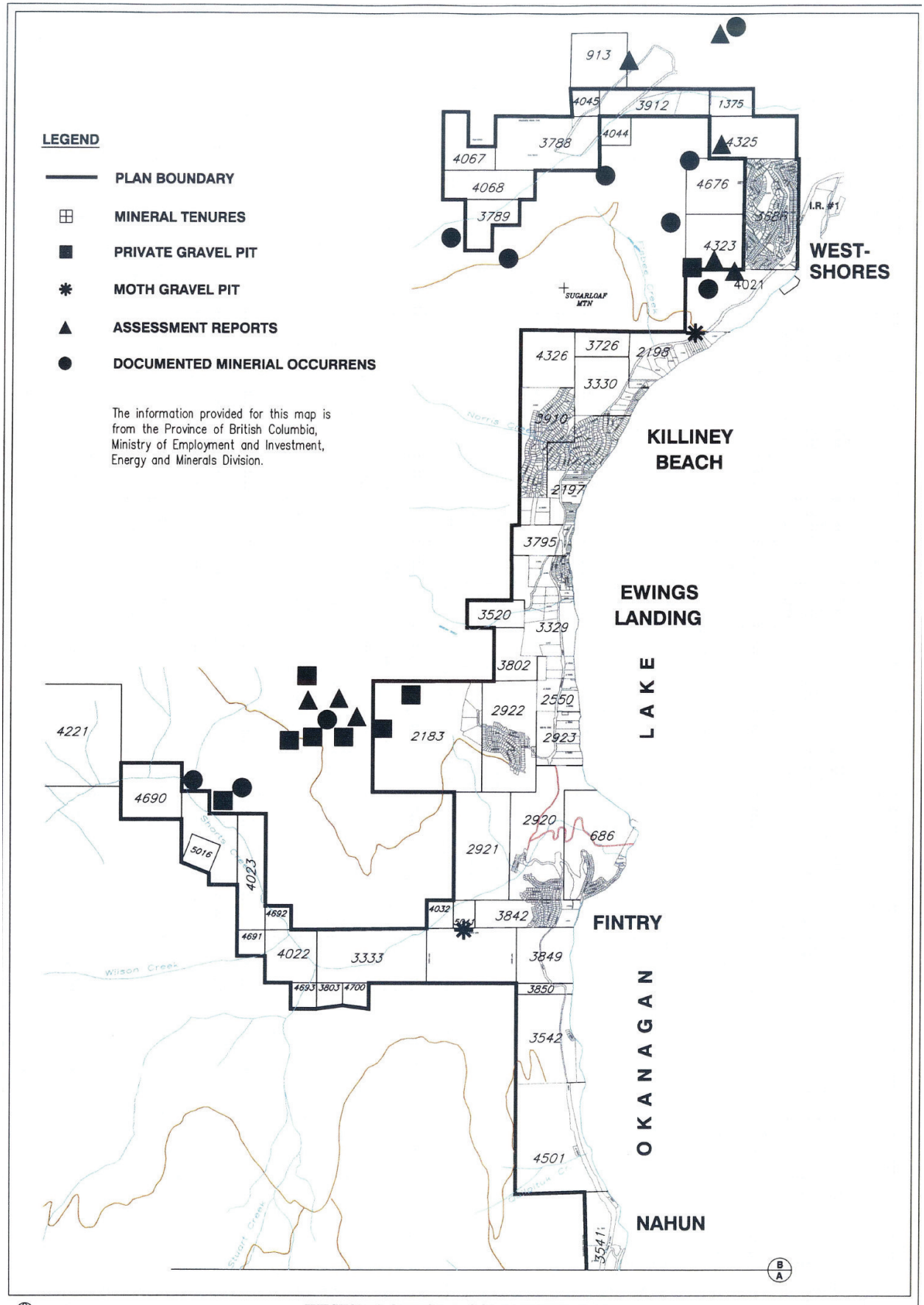
WESTSIDE OFFICIAL COMMUNITY PLAN

Regional District of Central Okanagan

MINERAL TENURE ACTIVITIES

January 31, 1996

T.R. UNDERWOOD ENGINEERING KELOWNA, B.C.

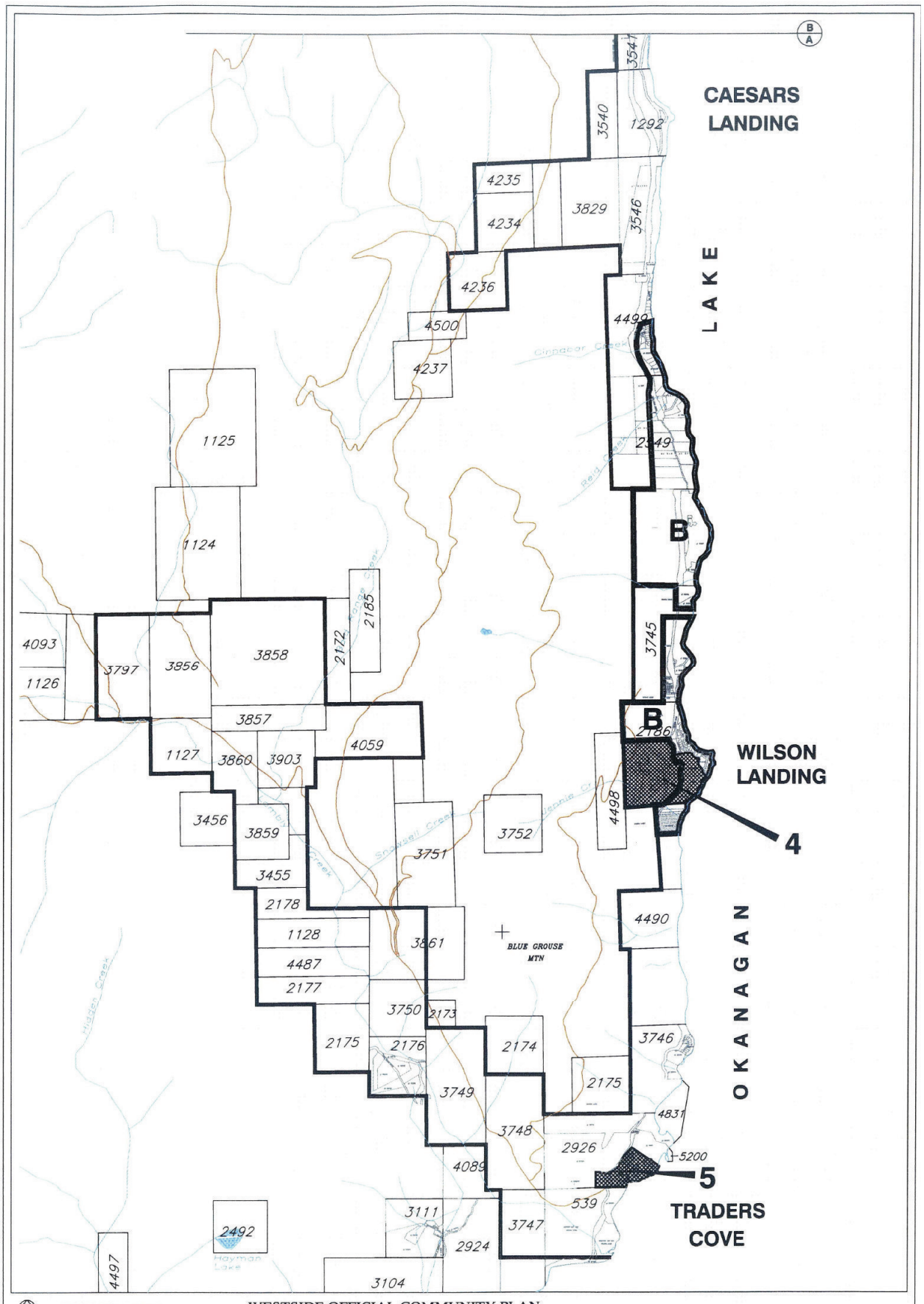


T.R. UNDERWOOD ENGINEERING KELOWNA, B.C.

WESTSIDE OFFICIAL COMMUNITY PLAN

Regional District of Central Okanagan

MINERAL TENURE ACTIVITIES



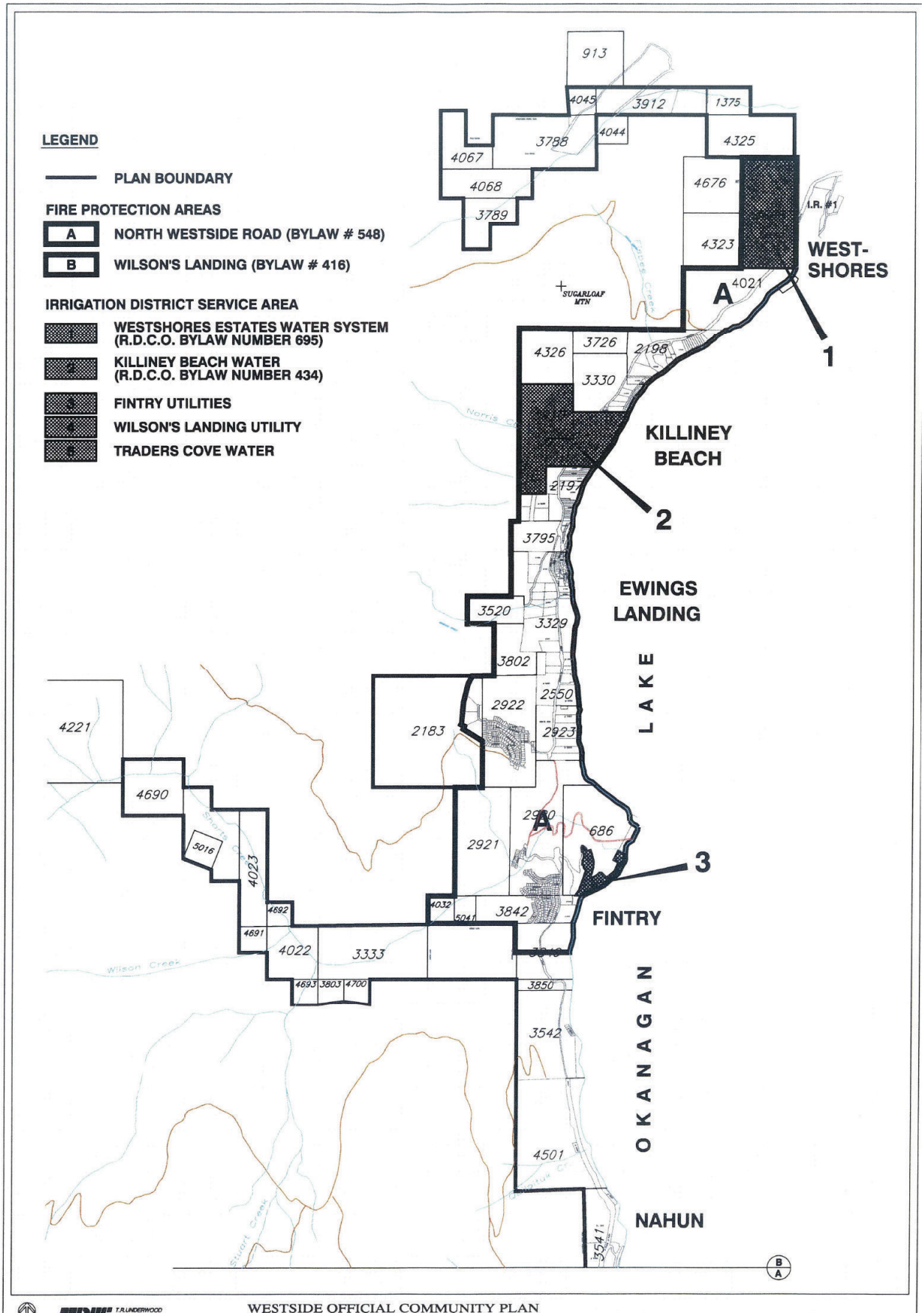
WESTSIDE OFFICIAL COMMUNITY PLAN

Regional District of Central Okanagan

INSTITUTIONAL AND UTILITY SERVICES

January 21, 1998

T.R. UNDERWOOD ENGINEERING KELOWNA, B.C.



WESTSIDE OFFICIAL COMMUNITY PLAN

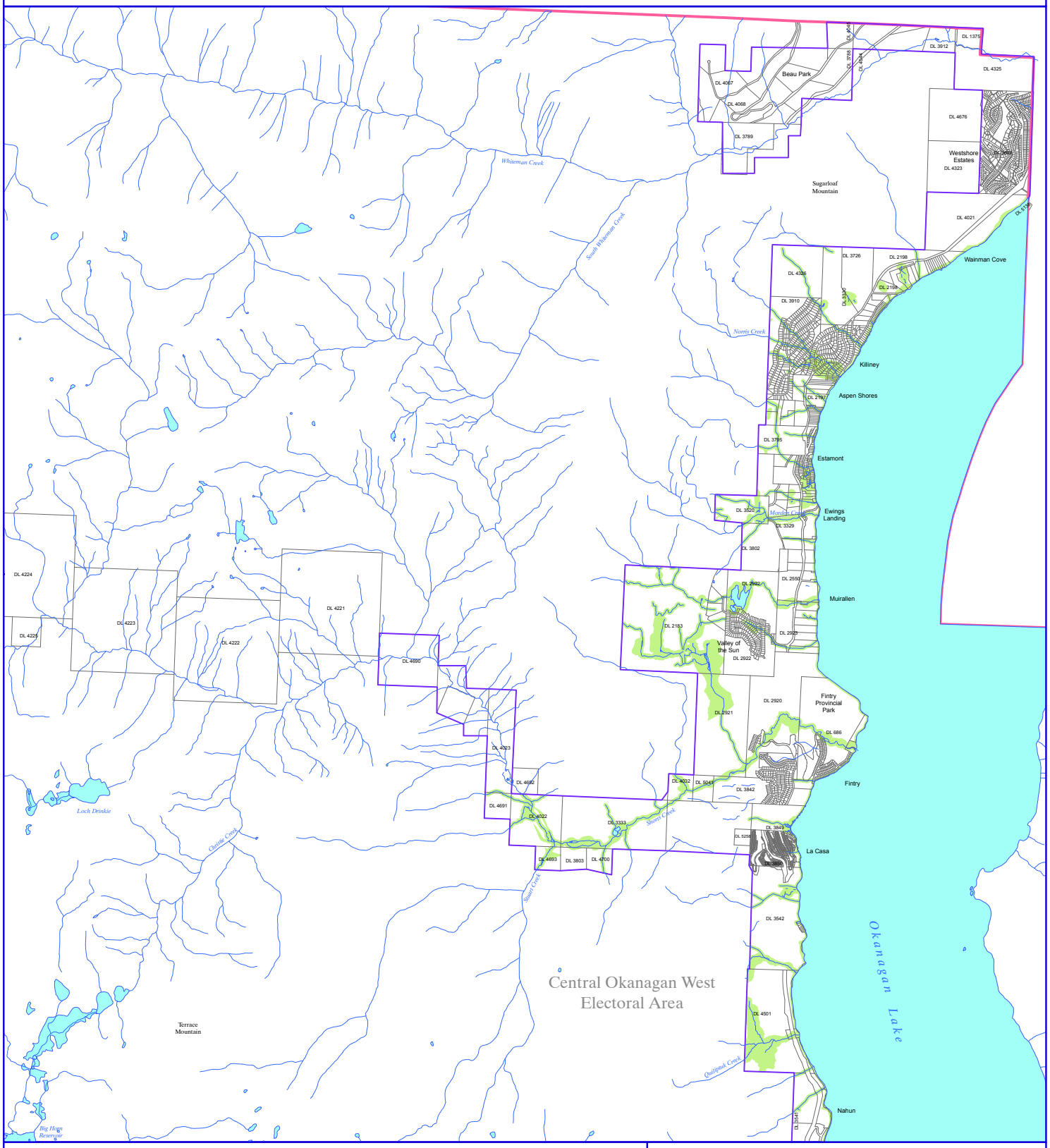
Regional District of Central Okanagan

INSTITUTIONAL AND UTILITY SERVICES

January 21, 1998

T.R. UNDERWOOD ENGINEERING KELOWNA, B.C.

Aquatic Ecosystem Development Permit Areas



Legend

- Official Community Plan Boundary
- Administration Boundaries
- Creeks and Streams
- Lakes, Marses and Wetlands
- Aquatic Ecosystem Development Permit Area

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Kilometres

RDCO
REGIONAL DISTRICT of CENTRAL OKANAGAN

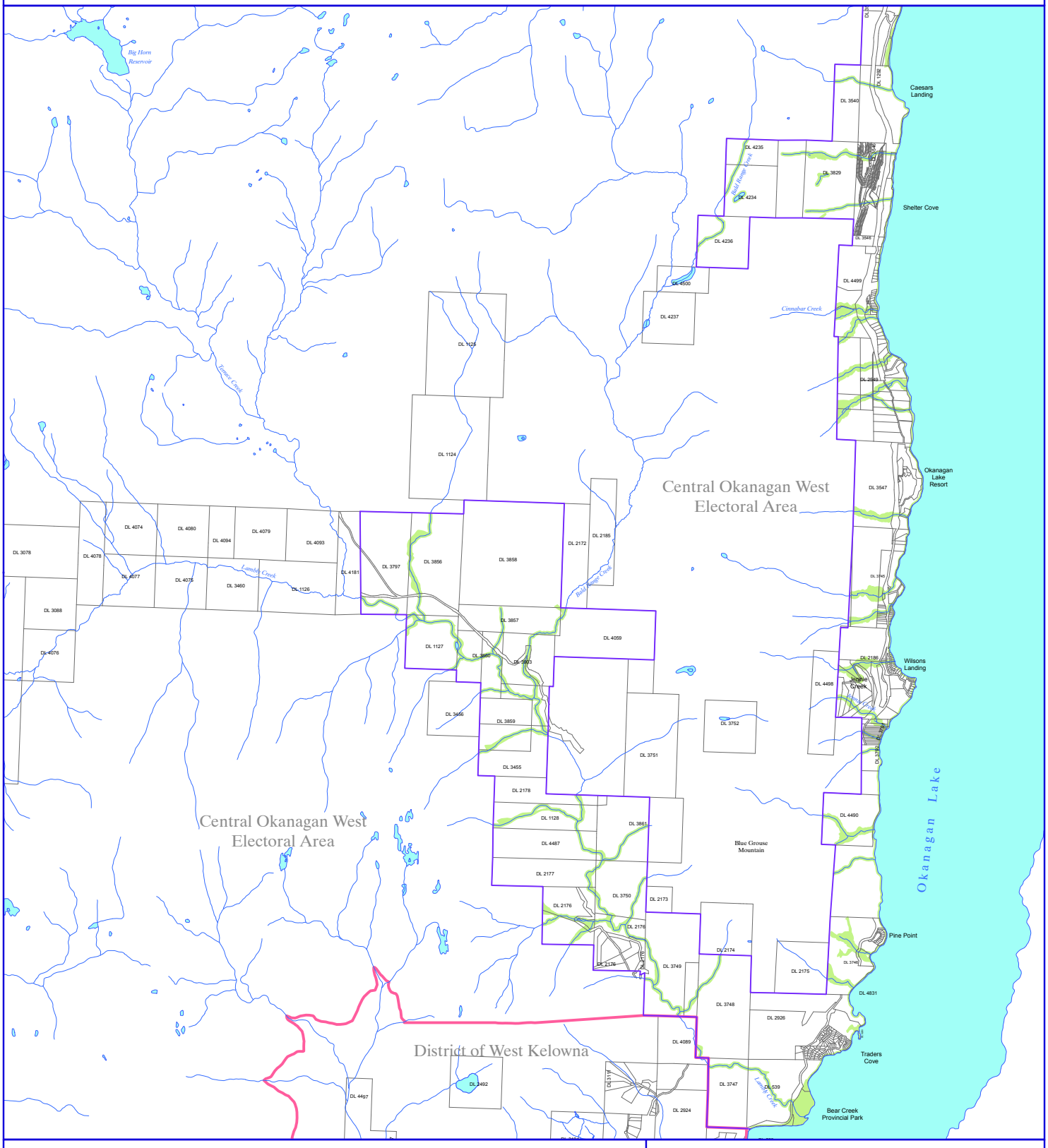
Rural Westside Official Community Plan
Bylaw #1274
Map 3a (North)

Date of Adoption:

Note:
This map has been consolidated for office purposes and includes information that is not part of the official Development Permit map. The Regional District makes no representation regarding the accuracy of this map and users are advised to refer to an updated, accurate copy of the map as required.

Latest Amending Bylaw # xxxx-xx	Consolidated to (date)

Aquatic Ecosystem Development Permit Area



Legend

- Official Community Plan Boundary
- Municipal Boundary
- Creeks and Streams
- Lakes, Marshes and Wetlands
- Aquatic Ecosystem Development Permit Areas

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Kilometres

N W E S

RDCO REGIONAL DISTRICT of CENTRAL OKANAGAN

Rural Westside Official Community Plan
Bylaw #1274
Map 3b (South)

Date of Adoption:

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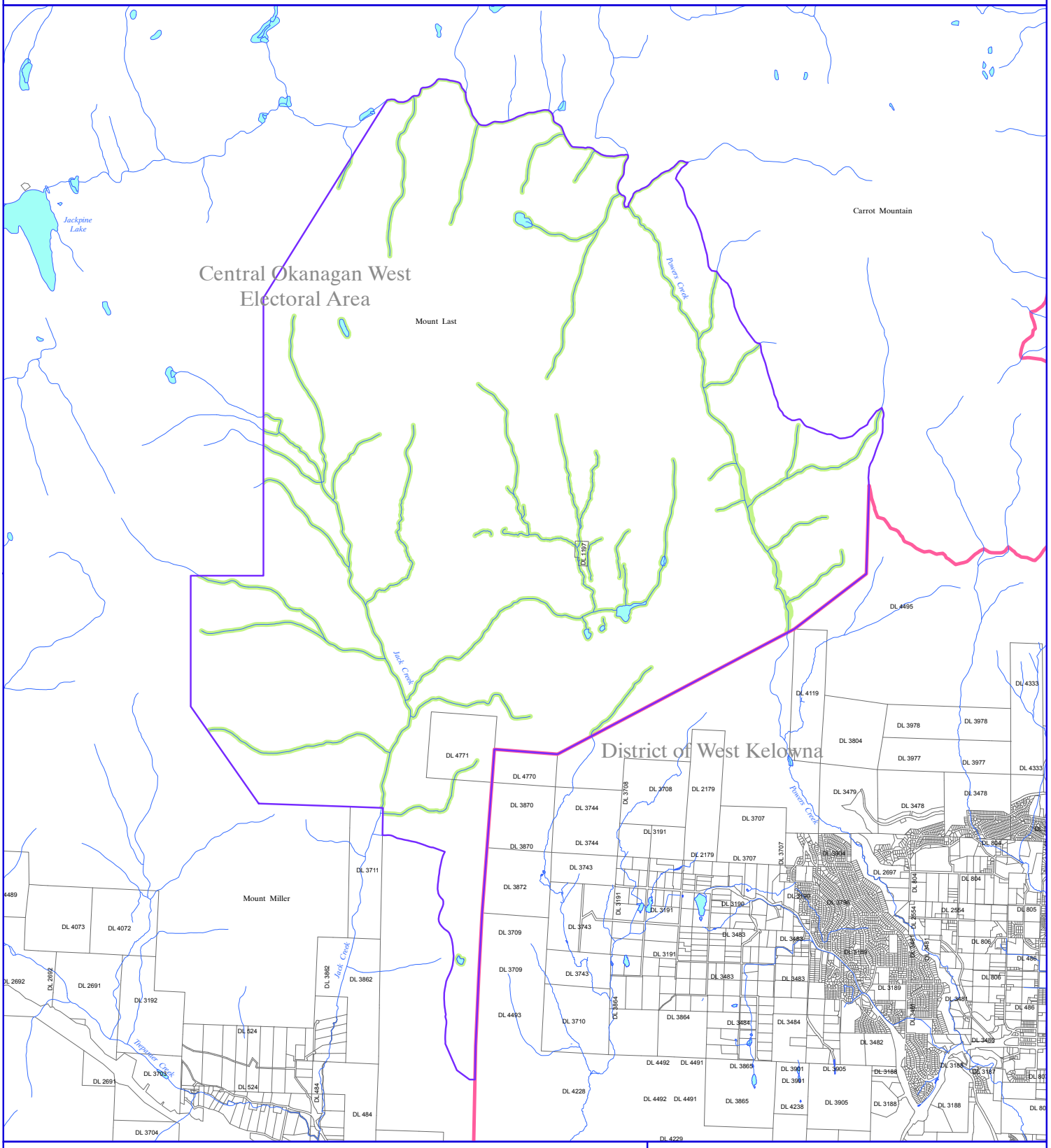
Latest Amending Bylaw # xxxx-xx	Consolidated to (date)

Aquatic Ecosystem Development Permit Area



Legend

- **Municipal Boundary**
- **Official Community Plan Boundary**
- **Creeks and Streams**
- **Lakes, Marshes and Wetlands**
- Aquatic Ecosystem Development Permit Areas

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Kilometres

N W E S

RDCO REGIONAL DISTRICT of CENTRAL OKANAGAN

Rural Westside Official Community Plan
Bylaw #1274
Map 3c (Crystal Mountain)

Date of Adoption:

Note:
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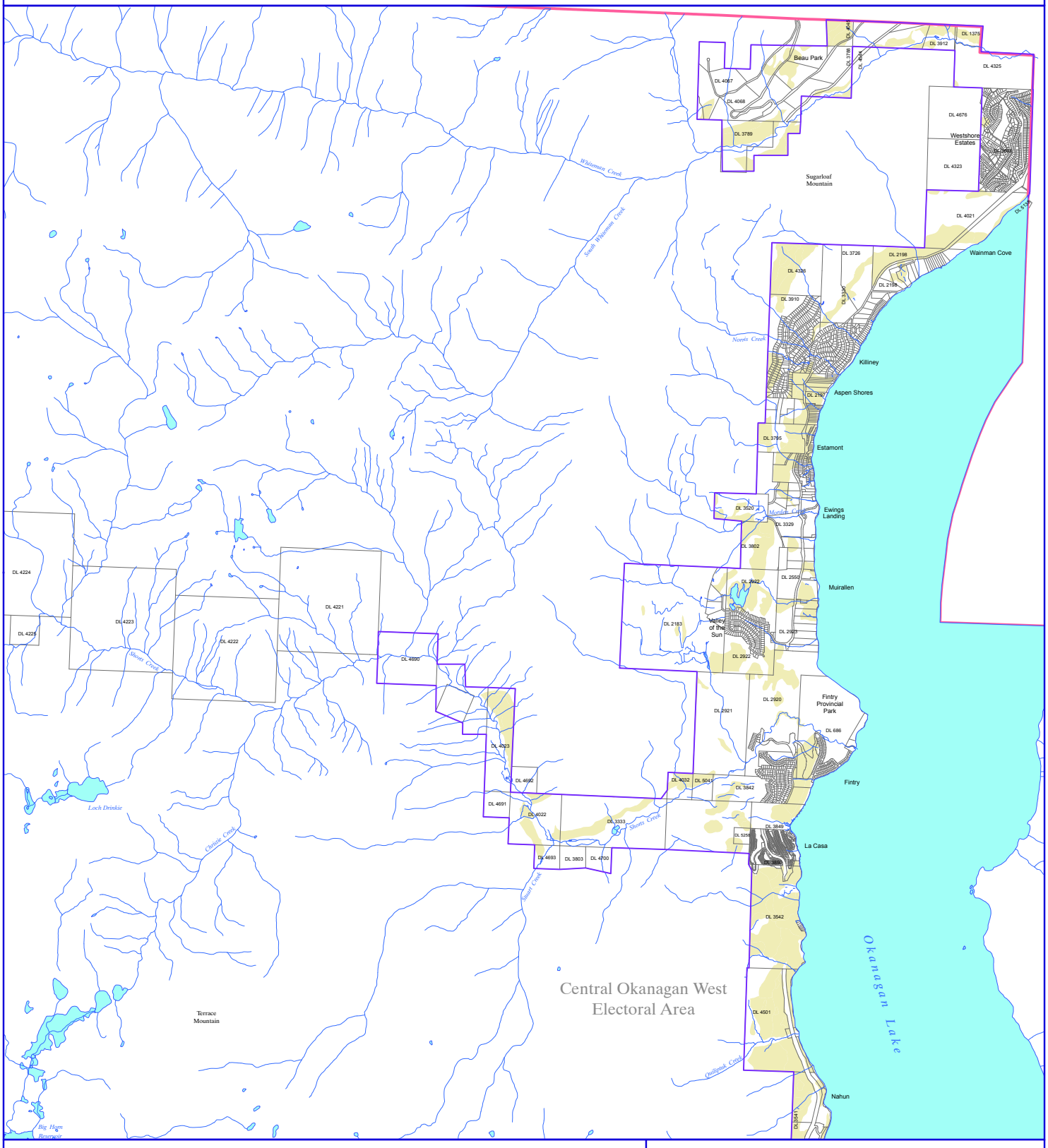
Latest Amending Bylaw # xxxx-xx	Consolidated to (date)

Sensitive Terrestrial Ecosystem Development Permit Areas



Legend

- Official Community Plan Boundary
- Administration Boundaries
- Creeks and Streams
- Lakes, Marshes and Wetlands
- Sensitive Terrestrial Ecosystem D. P. A.

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Kilometres

RDCO REGIONAL DISTRICT of CENTRAL OKANAGAN

Rural Westside Official Community Plan
Bylaw #1274
Map 4a (North)

Date of Adoption:

Note:
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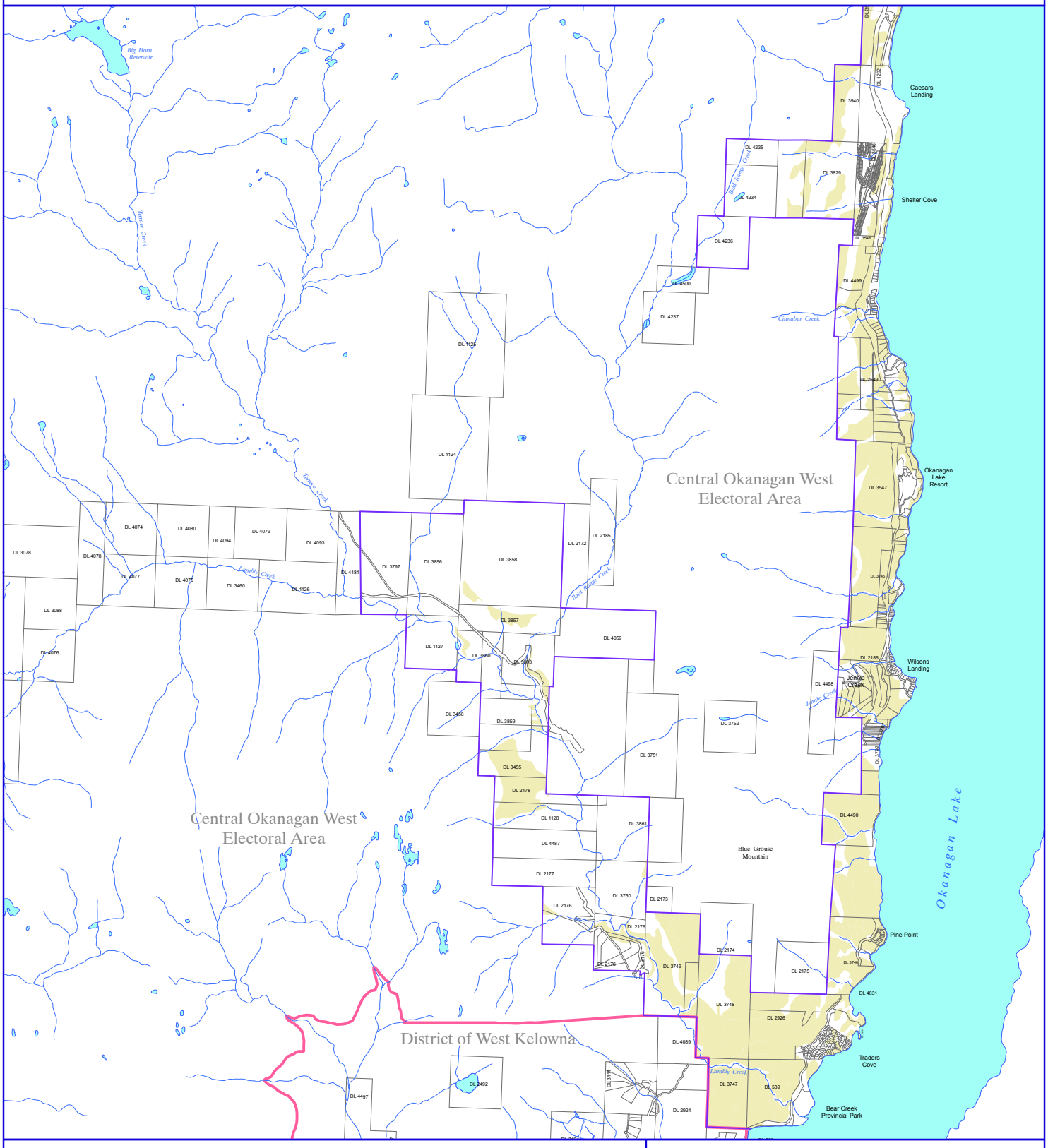
Latest Amending Bylaw # xxxx-xx	Consolidated to (date)

Sensitive Terrestrial Ecosystem Development Permit Area



Legend

- Official Community Plan Boundary
- Municipal Boundary
- Creeks and Streams
- Lakes, Marshes and Wetlands
- Sensitive Terrestrial Ecosystem D. P. A.

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Kilometres

RDCO REGIONAL DISTRICT of CENTRAL OKANAGAN

N W E S

Rural Westside Official Community Plan
Bylaw #1274
Map 4b (South)

Date of Adoption:

Note:
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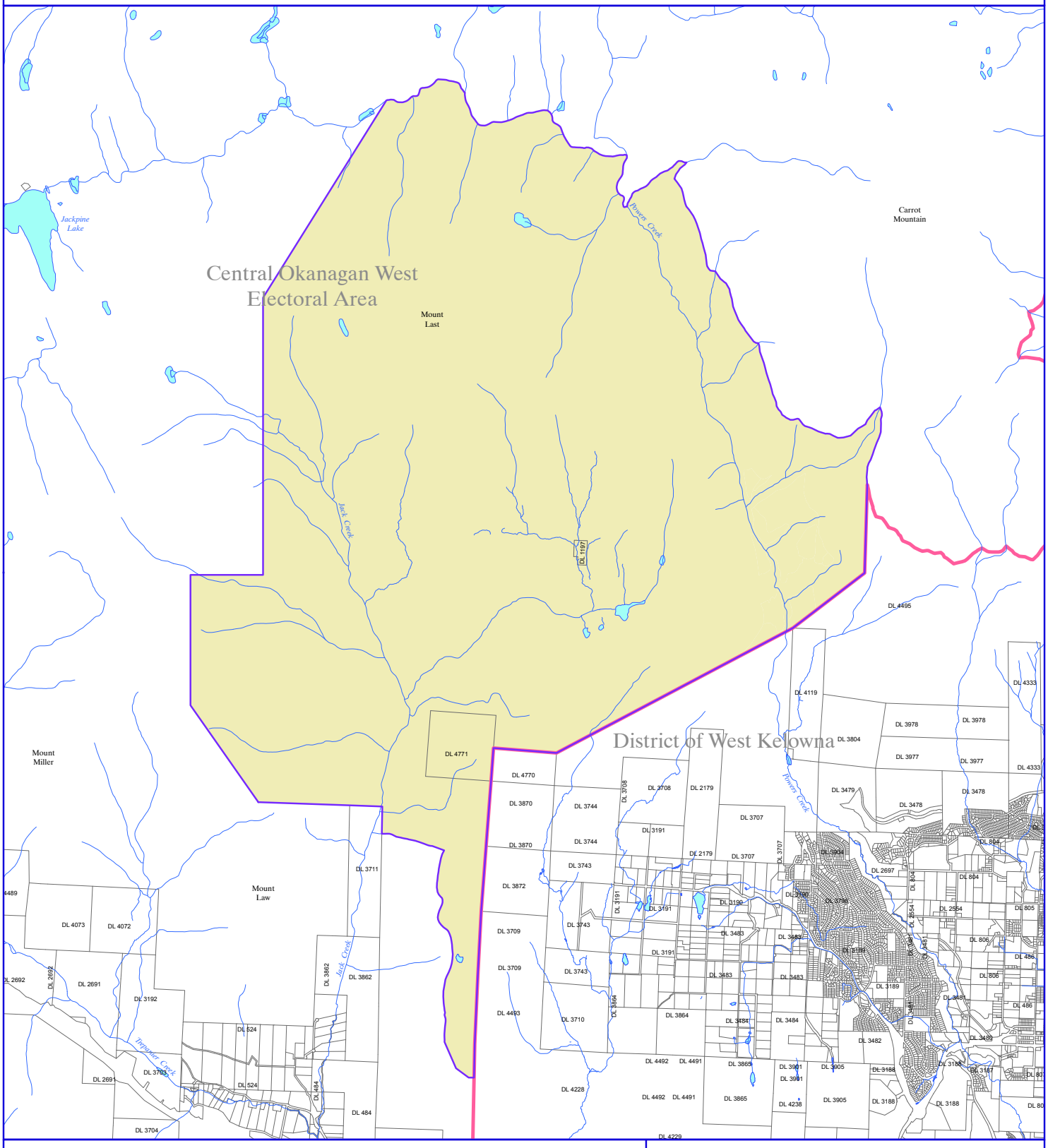
Latest Amending Bylaw # xxxx-xx	Consolidated to (date)

Sensitive Terrestrial Ecosystem Development Permit Area



Legend

- Municipal Boundary
- Official Community Plan Boundary
- Creeks and Streams
- Lakes, Marshes and Wetlands
- Sensitive Terrestrial Ecosystem D. P. A.

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Kilometres

N W E S

RDCO REGIONAL DISTRICT of CENTRAL OKANAGAN

Rural Westside Official Community Plan
Bylaw #1274
Map 4c (Crystal Mountain)

Date of Adoption:

Note:
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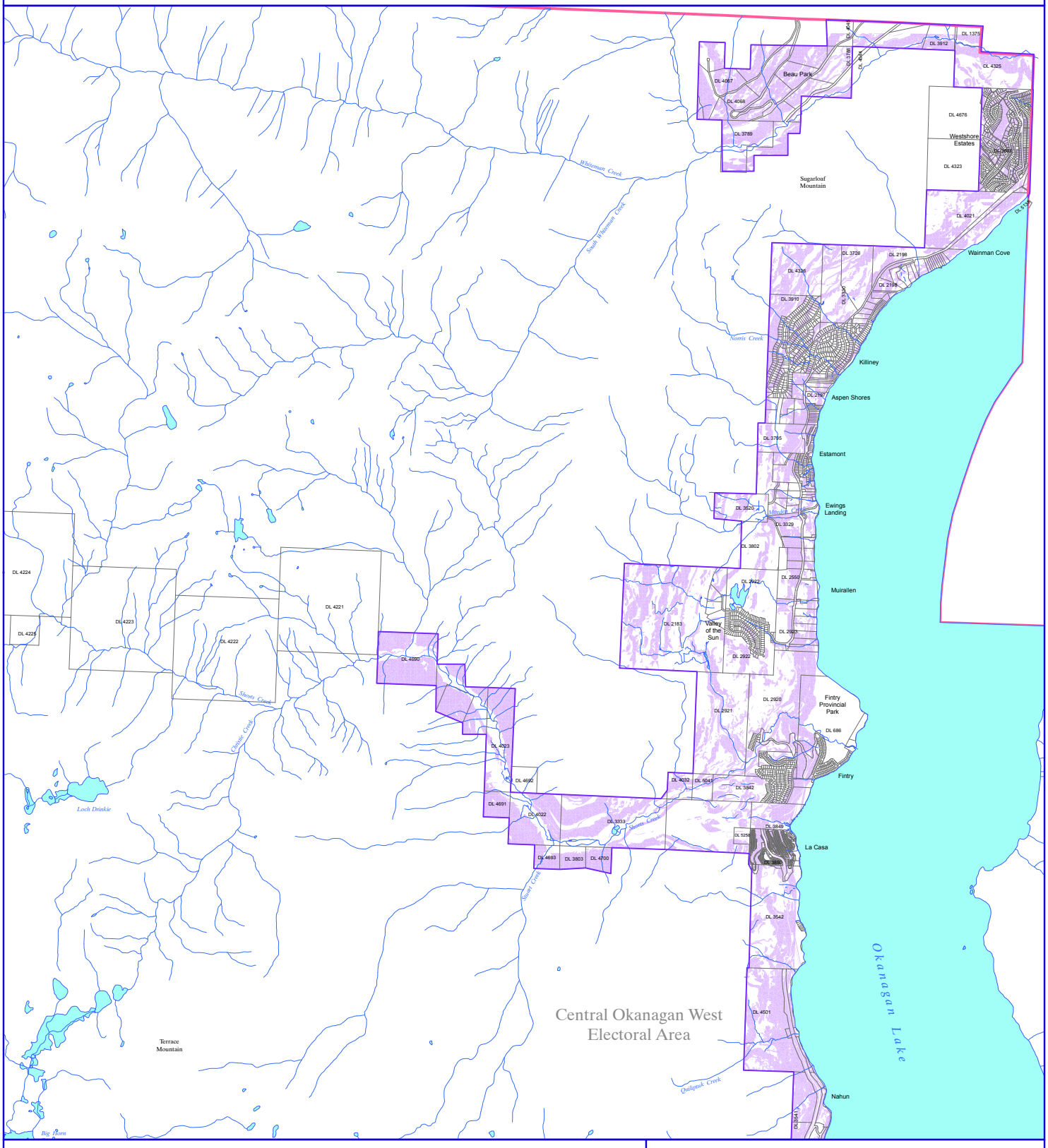
Latest Amending Bylaw # xxxx-xx	Consolidated to (date)

Hillside Development Permit Areas



Legend

- Official Community Plan Boundary
- Administration Boundaries
- Creeks and Streams
- Lakes, Marshes and Wetlands
- Hillside Deveopment Permit Area - Slope 30% and greater

1 0.5 0 1 2 3 4 5

Kilometres

N W E S

REGIONAL DISTRICT of CENTRAL OKANAGAN

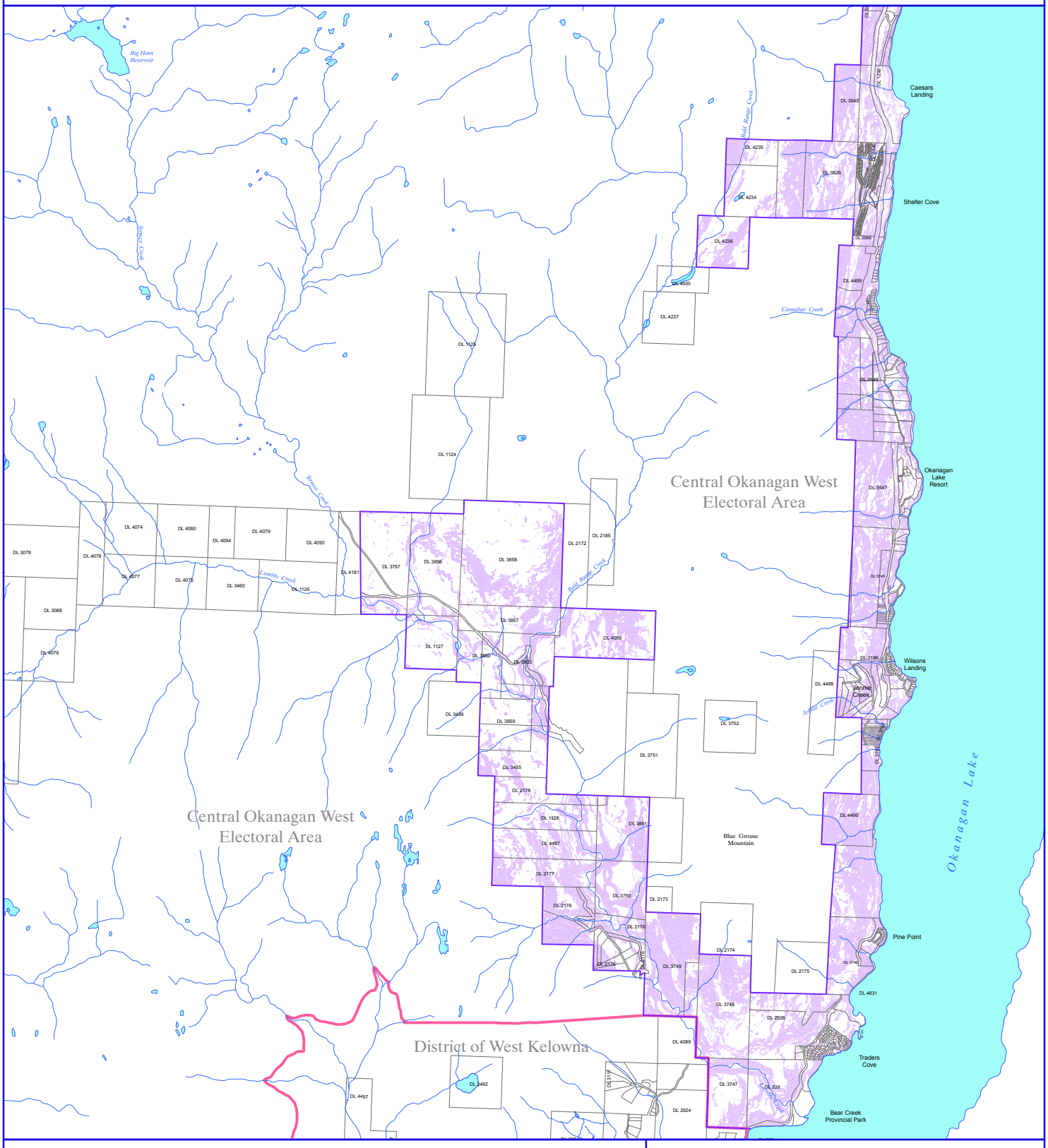
Rural Westside Official Community Plan
Bylaw #1274
Map 5a (North)

Date of Adoption:

Note:
This map has been consolidated for office purposes and includes information that is not part of the official Development Permit map. The Regional District makes no representation regarding the accuracy of this map and users are advised to refer to an updated, accurate copy of the map as required.

Latest Amending Bylaw # xxxx-xx	Consolidated to (date)

Hillside Development Permit Area



Legend

- Official Community Plan Boundary
- Municipal Boundary
- Creeks and Streams
- Lakes, Marshes and Wetlands
- Hillside Development Permit Area - Slope 30% and greater

1 0.5 0 1 2 3 4 5
Kilometres

N W E S

REGIONAL DISTRICT of CENTRAL OKANAGAN

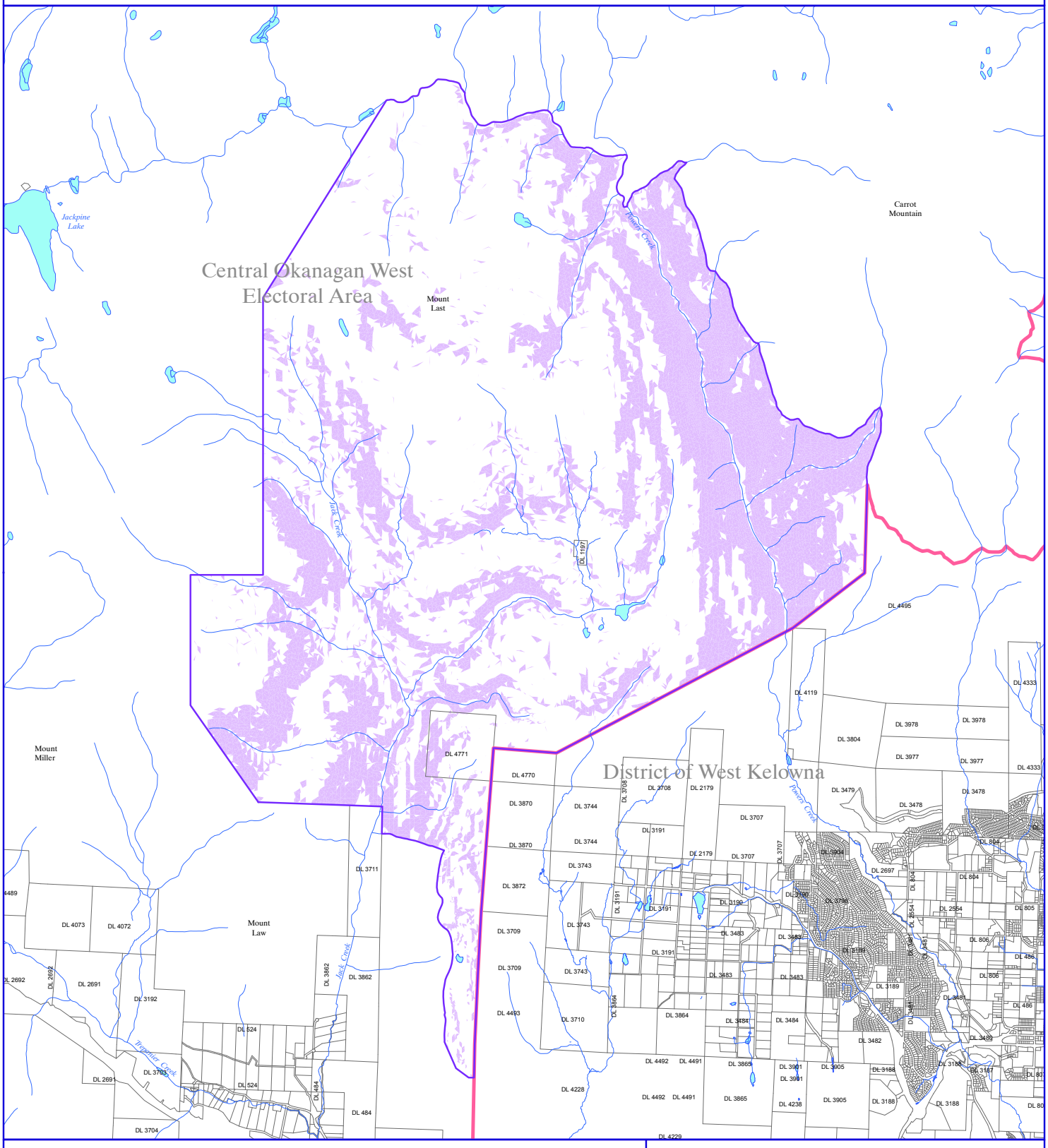
Rural Westside Official Community Plan
Bylaw #1274
Map 5b (South)

Date of Adoption:

Note:
This map has been consolidated for office purposes and includes information that is not part of the official Development Permit Area map. The Regional District makes no representation regarding the accuracy of this map and users are advised to refer to an updated, accurate copy of the map as required.

Latest Amending Bylaw # xxxx-xx	Consolidated to (date)

Hillside Development Permit Area



Legend

- Municipal Boundary
- Official Community Plan Boundary
- Creeks and Streams
- Lakes, Marshes and Wetlands
- Hillside Development Permit Area - Slope 30% and greater

1 0.5 0 1 2 3 4 5
Kilometres

N W E S

REGIONAL DISTRICT of CENTRAL OKANAGAN

Rural Westside Official Community Plan
Bylaw #1274
Map 5c (Crystal Mountain)

Date of Adoption:

Note:
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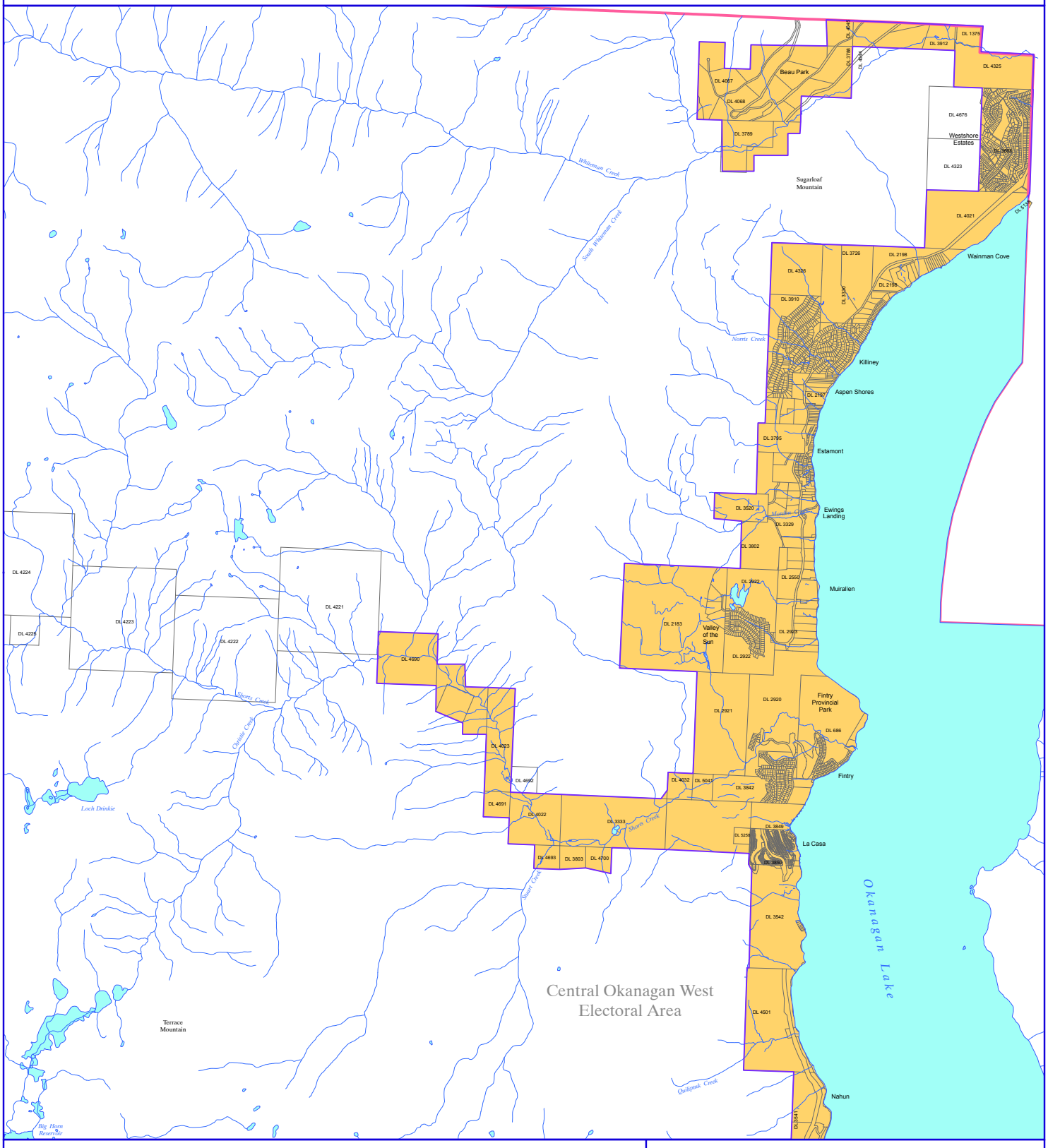
Latest Amending Bylaw # xxxx-xx	Consolidated to (date)

Wildfire Interface Development Permit Area



Legend

- Official Community Plan Boundary
- Administration Boundaries
- Creeks and Streams
- Lakes, Marshes and Wetlands
- Wildfire Interface Development Permit Area

1 0.5 0 1 2 3 4 5
Kilometres

REGIONAL DISTRICT of CENTRAL OKANAGAN

Rural Westside Official Community Plan
Bylaw #1274
Map 6a (North)

Date of Adoption:

Note:
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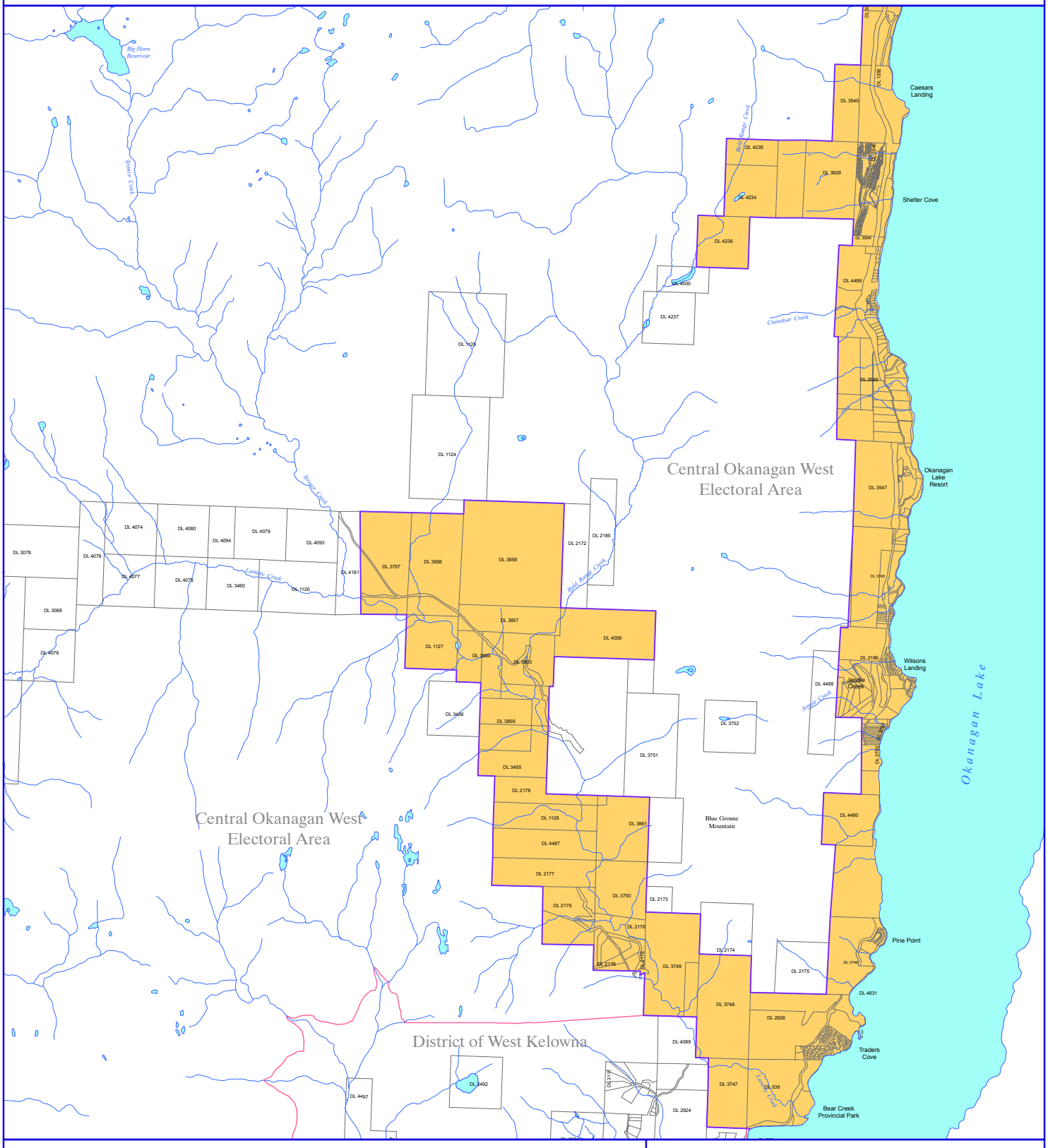
Latest Amending Bylaw # xxxx-xx	Consolidated to (date)

Wildfire Interface Development Permit Area



Legend

- Official Community Plan Boundary
- Municipal Boundary
- Creeks and Streams
- Lakes, Marshes and Wetlands
- Wildfire Interface Development Permit Area

1 0.5 0 1 2 3 4 5
Kilometres

N W E S

REGIONAL DISTRICT of CENTRAL OKANAGAN

Rural Westside Official Community Plan
Bylaw #1274
Map 6b (South)

Date of Adoption:

Note:
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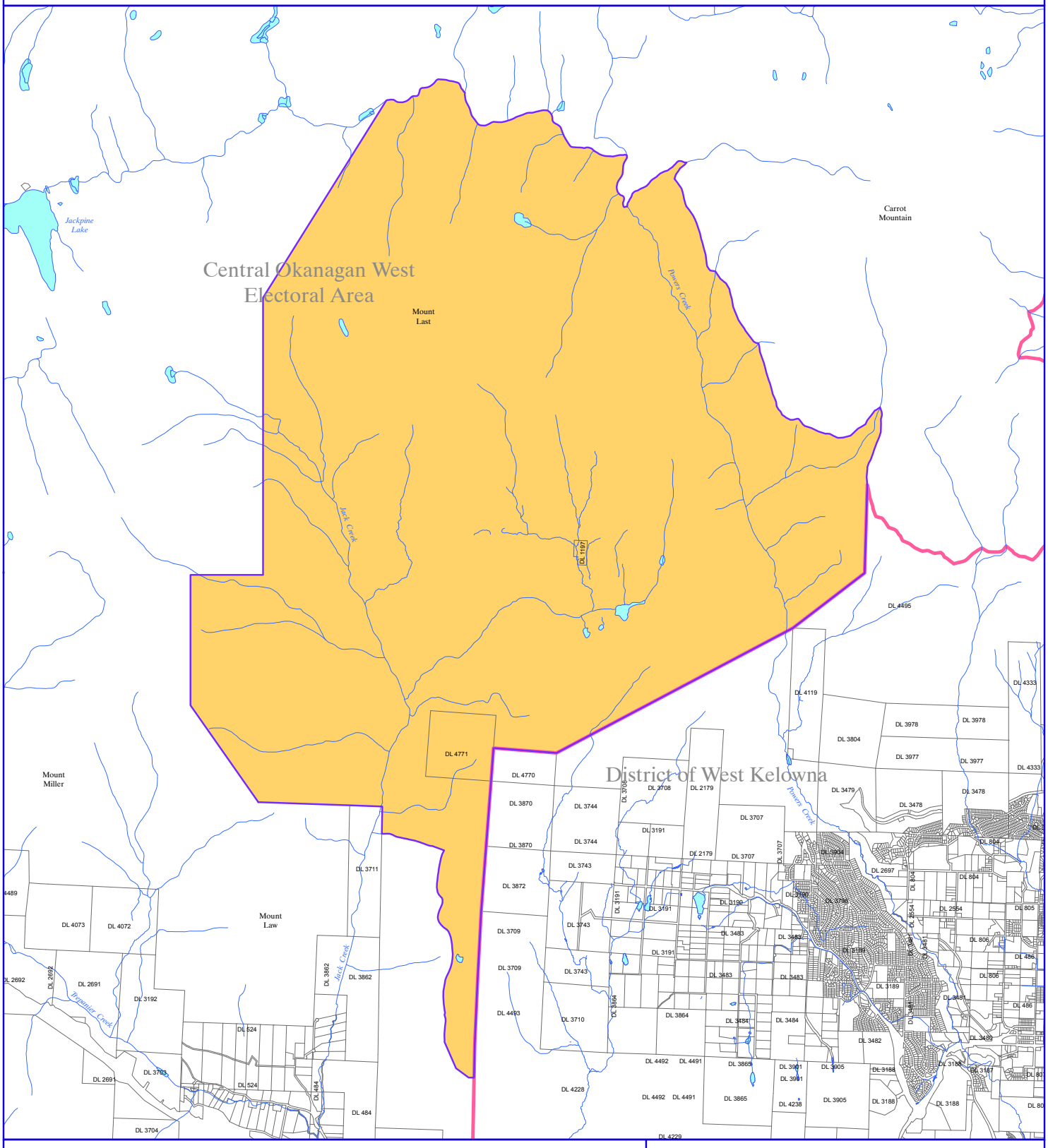
Latest Amending Bylaw # xxxx-xx	Consolidated to (date)

Wildfire Interface Development Permit Area



Legend

- Municipal Boundary
- Official Community Plan Boundary
- Creeks and Streams
- Lakes, Marshes and Wetlands
- Wildfire Interface Development Permit Area

1 0.5 0 1 2 3 4 5
Kilometres

RDCO REGIONAL DISTRICT of CENTRAL OKANAGAN

Rural Westside Official Community Plan
Bylaw #1274
Map 6c (Crystal Mountain)

Date of Adoption:

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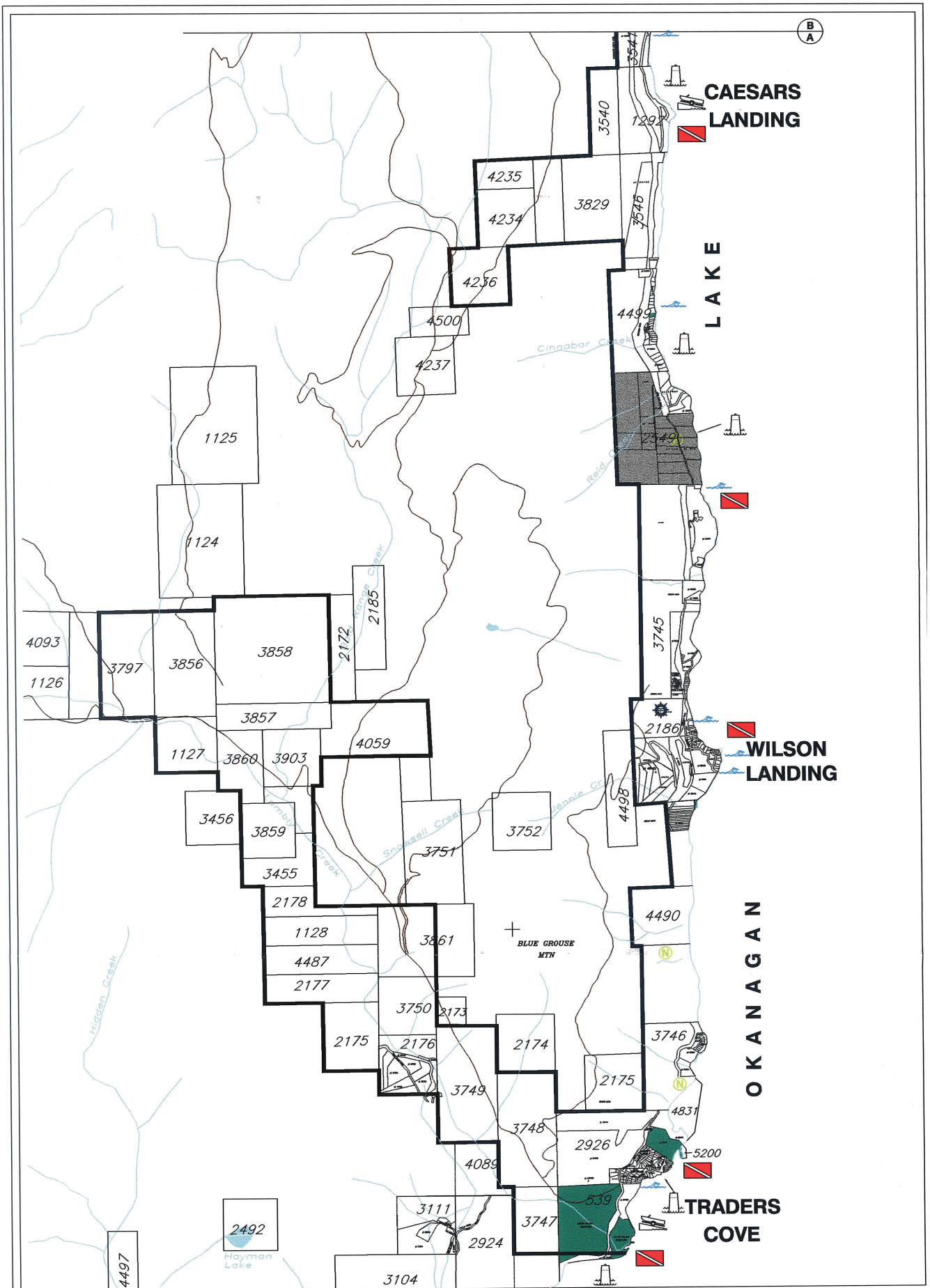
Latest Amending Bylaw # xxxx-xx	Consolidated to (date)



WESTSIDE OFFICIAL COMMUNITY PLAN

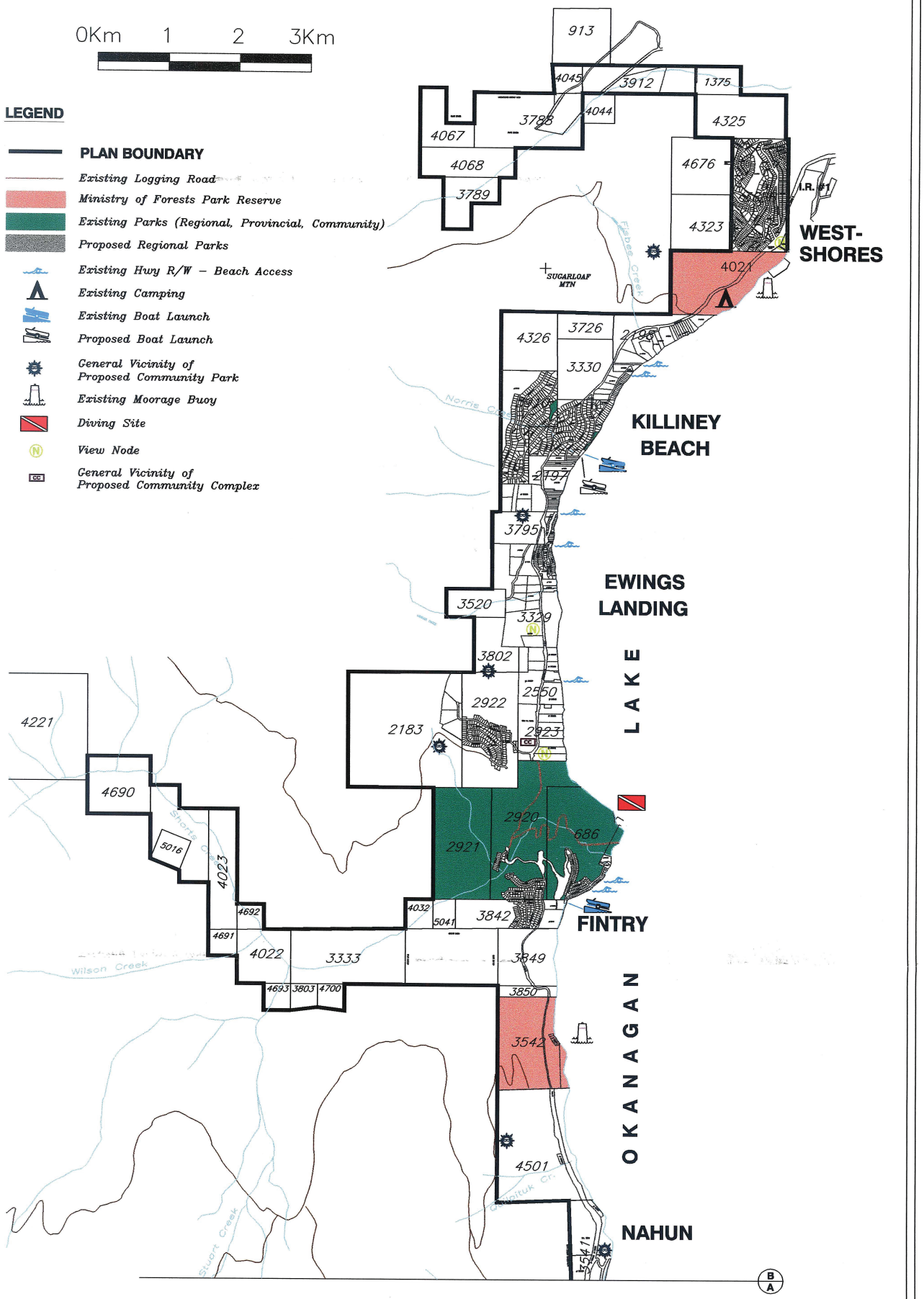
Regional District of Central Okanagan

T.R. UNDERWOOD ENGINEERING KELOWNA, B.C.

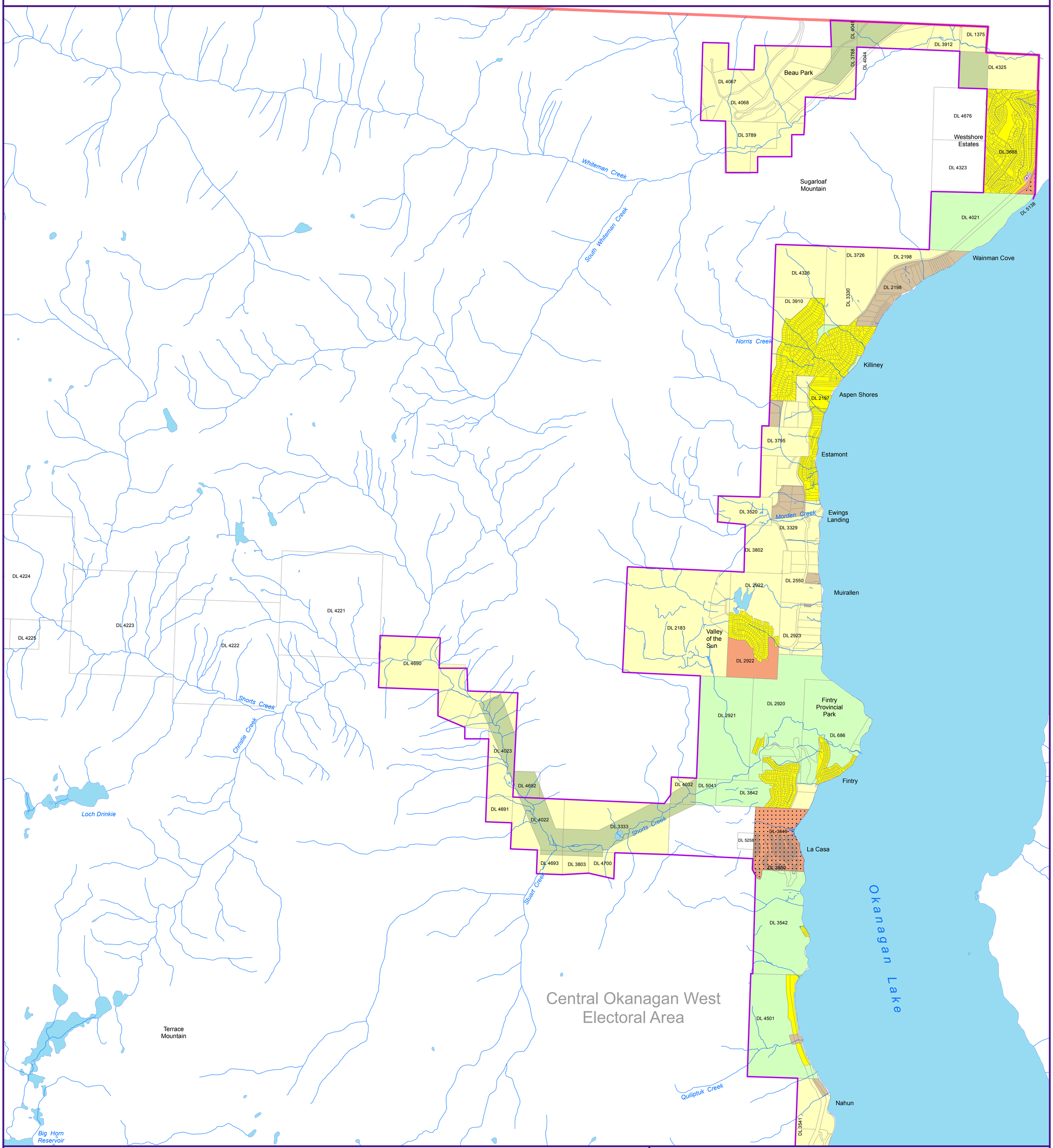
January 21, 1998

MAP 7

PARK AND RECREATION AREAS


0Km 1 2 3Km
LEGEND
PLAN BOUNDARY
Existing Logging Road
Ministry of Forests Park Reserve
Existing Parks (Regional, Provincial, Community)
Proposed Regional Parks
Existing Hwy R/W – Beach Access
Existing Camping
Existing Boat Launch
Proposed Boat Launch
General Vicinity of Proposed Community Park
Existing Moorage Buoy
Diving Site
View Node
General Vicinity of Proposed Community Complex
WEST-SHORES
KILLINEY BEACH
EWINGS LANDING
FINTRY
NAHUN
OKANAGAN LAKE
SUGARLOAF MTN
I.R. #1
Fitzbee Creek
Norris Creek
Shorts Creek
Wilson Creek
Stuart Creek
913
4045
3912
1375
4044
3788
4325
4067
4068
3789
4676
4323
4021
4326
3726
3330
3795
3520
3329
3802
2922
2550
2923
2183
4221
4690
5016
4023
2920
686
2921
4692
4691
4032
5041
3842
4022
3333
3849
4693
3803
4700
3850
3542
4501

Future Land Use



- Official Community Plan Boundary
- Administration Boundaries

Future Land Use

- AGRICULTURE
- COMMERCIAL
- COMMERCIAL RESORT
- RESORT STUDY AREA
- INSTITUTIONAL AND UTILITY SERVICES
- LARGE HOLDING
- MULTIPLE FAMILY / INTENSIVE RESIDENTIAL
- PARKS AND RECREATION
- RESIDENTIAL - LOW DENSITY
- RURAL RESIDENTIAL
- Development Permit Area

1 0.5 0 1 2 3 4 5

Kilometres

N W E S

RDCO REGIONAL DISTRICT of CENTRAL OKANAGAN

Rural Westside Official Community Plan
Bylaw #1274
Map 8a (North)

Adopted : December 13, 2010

Note:
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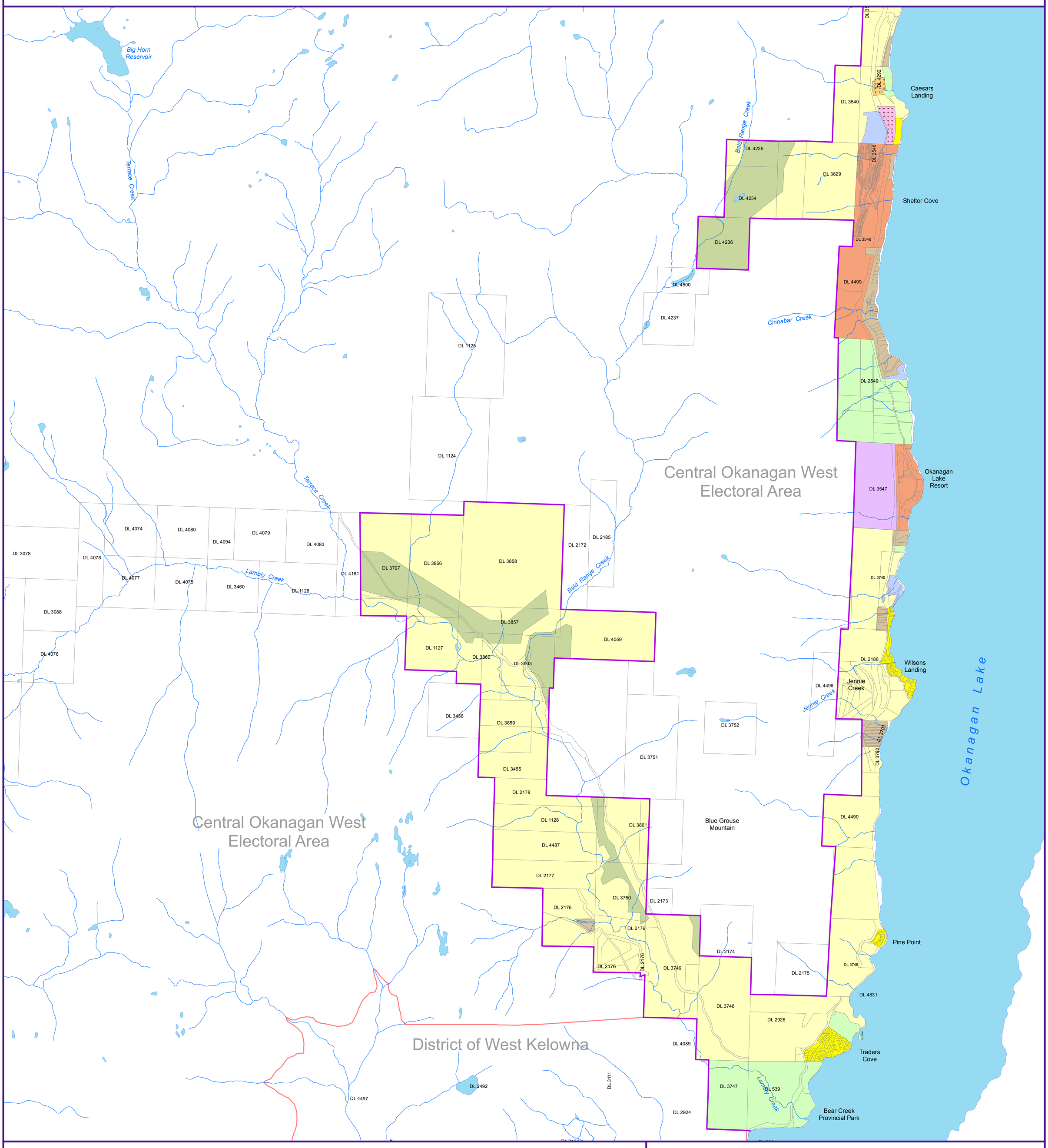
Latest Amending Bylaw # 1274-03	Consolidated to April 28, 2014

Future Land Use



REGIONAL DISTRICT of CENTRAL OKANAGAN

Rural Westside Official Community Plan
Bylaw #1274
Map 8b (South)

Adopted : December 13, 2010

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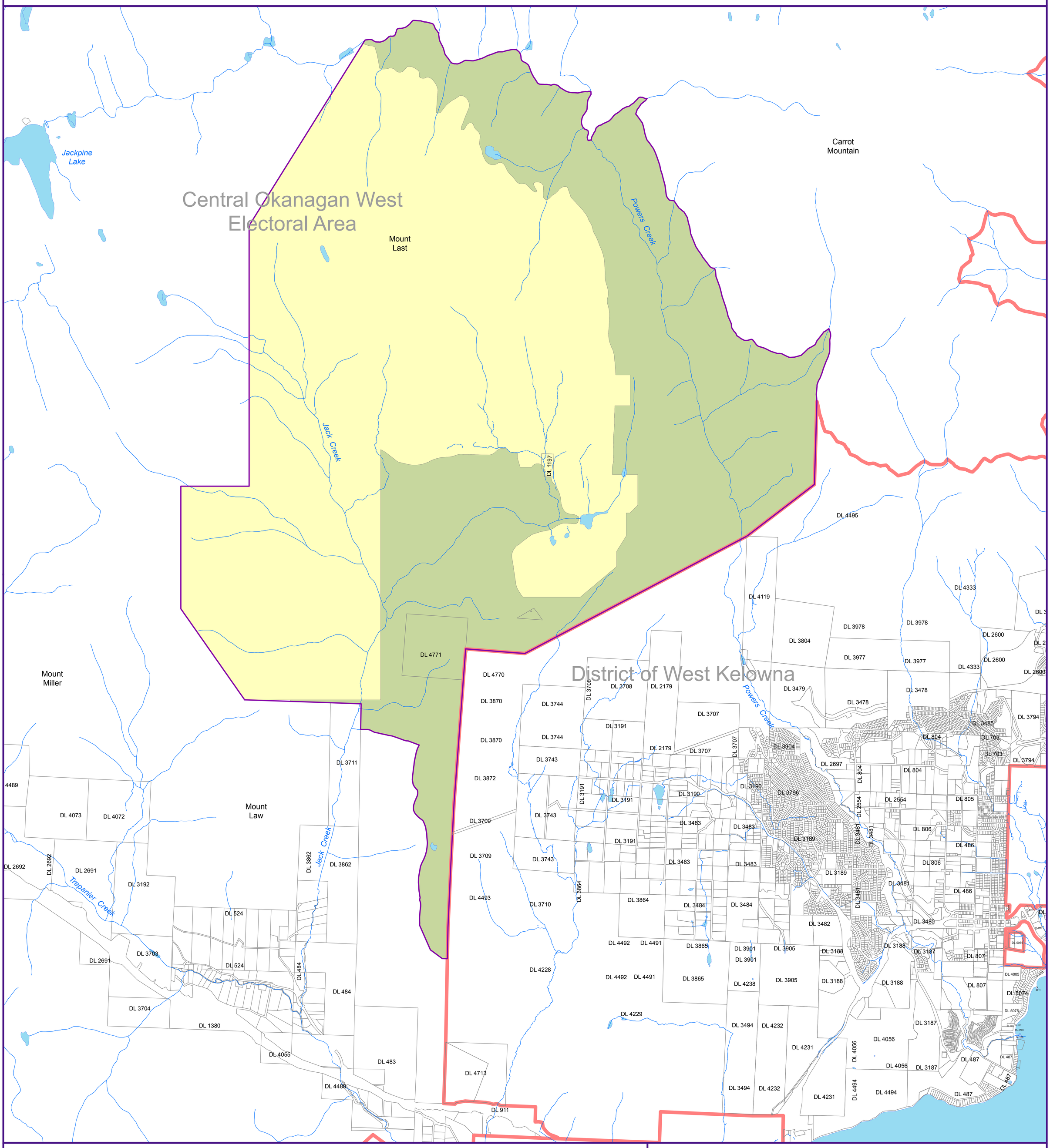
Latest Amending Bylaw # 1274-03	Consolidated to April 28, 2014

Future Land Use



Legend

- Official Community Plan Boundary
- Creeks and Streams
- Lakes, Marshes and Wetlands
- Municipal Boundary

Future Land Use

- CRYSTAL MOUNTAIN RESORT
- RURAL RESOURCE

1 0.5 0 1 2 3 4 5

Kilometres

N W E S

REGIONAL DISTRICT of CENTRAL OKANAGAN

Rural Westside Official Community Plan
Bylaw #1274
Map 8c (Crystal Mountain)

Adopted : December 13, 2010

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Latest Amending Bylaw # 1274-03	Consolidated to April 28, 2014

Summary of Amendments

BYLAW #	DESCRIPTION OF AMENDMENTS	DATE OF ADOPTION
1274-01	District Lot 5266, and Block B, Plan KAP67076, District Lot 3542 all of ODYD from Parks and Recreation to Commercial - Resort. (File: Z10/03)	April 18, 2011
1274-02	District Lot 4501, ODYD Except Plans B1329 and 36131 AND That part of District Lot 4501, ODYD, shown on Plan B1329 except part now road on Plan 36131 from Large Holding to Residential – Low Density, Rural Residential, and Parks and Recreation. (File: Z07/26)	October 24, 2011
1274-03	Lot A, Plan KAP65996, District Lot 3546, ODYD from Commercial – Resort to Rural Residential. (File: Z14/01)	April 28, 2014