DISTRICT OF BARRIERE

BYLAW NO. 85

Amended by: Bylaws No. 197, No. 207

A BYLAW TO ADOPT THE DISTRICT OF BARRIERE OFFICIAL COMMUNITY PLAN

WHEREAS the Council of the District of Barriere wishes to repeal Bylaw No. 1446, 1995, cited as The Barriere Official Community Plan, and wishes to adopt a new Official Community Plan under Section 876 of the Local Government Act;

THEREFORE the Council of the District of Barriere, in an open meeting assembled hereby enacts the following:

1. CITATION

This bylaw may be cited as the "District of Barriere Official Community Plan Bylaw No. 85".

2. ADOPTION OF OFFICIAL COMMUNITY PLAN

The plan, titled *District of Barriere Official Community Plan,* set out in Schedules A, B, C, D, & E to this bylaw, is adopted and designated as the Official Community Plan for the District of Barriere.

3. SEVERABILITY

In the event that any provision of this Bylaw is found by a Court of competent jurisdiction to be invalid for any reason, then such provisions shall be severable from, and have no effect on the validity of the remainder of this Bylaw.

4. REPEAL

Bylaw No. 1446, 1995, Barriere Official Community Plan, as amended is repealed.
Read a first time the **19th** day of **October, 2011.**
Read a second time the **7th** day of **November, 2011.**
Read a third time the **7th** day of **November, 2011.**
Adopted the **7th** day of **November, 2011.**

Original signed by,
Mike Fennell
Mayor

Original signed by,
Colleen Hannigan,
Chief Administrative Officer

Certified to be a true and correct copy of
Bylaw No. 85 cited as
"District of Barriere Official Community Plan"
as adopted by the Council of the
District of Barriere this **8th** day of **November, 2011.**

Original signed by,
Colleen Hannigan, Chief Administrative Officer

District of Barriere
Bylaw No. 85

SCHEDULE A

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PART 1- INTRODUCTION

WHAT IS THE OFFICIAL COMMUNITY PLAN?

An Official Community Plan (OCP) is the primary long-range planning tool used by municipalities to guide their growth and development over a set period of time. The Provincial Government authorizes municipalities to adopt community plans pursuant to the provisions of Part 26 of the *Local Government Act* which states:

> *An official community plan is a statement of objectives and policies to guide decisions on land use planning and land use management, within the area covered by the plan, respecting the purposes of local government*.

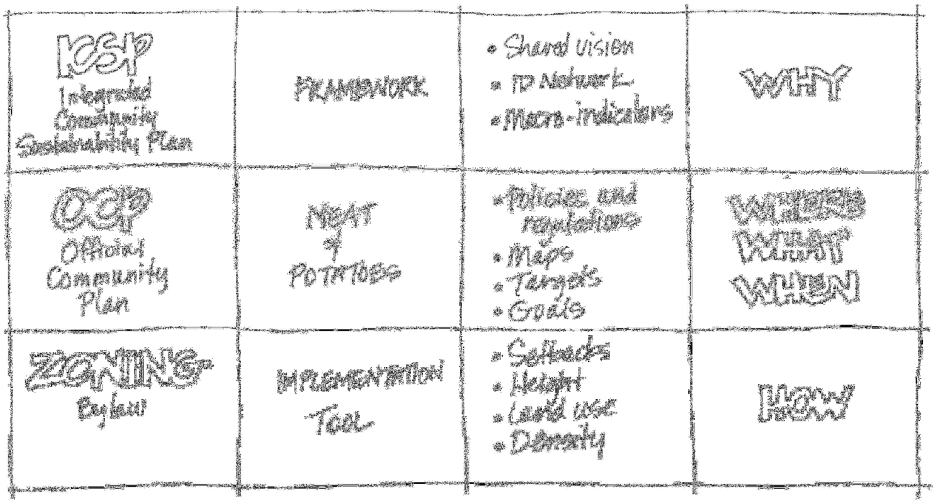
In addition, an OCP must contain policy statements and map designations respecting the following:

(a) Residential development and housing needs over a period of at least five years;
(b) Commercial, industrial and institutional and other types of land uses;
(c) The location and area of sand and gravel deposits suitable for future extraction;
(d) Restrictions on the use of environmentally sensitive and hazardous lands;
(e) The approximate location and phasing of any major road and infrastructure systems; and
(f) The location and type of present and proposed public facilities.

The OCP provides guidance to: economic, environmental, physical design and development; economic, environmental, and social well-being; and provision of amenities, services and transportation systems.

Once adopted, an OCP serves as a foundation for all policies, regulations and decisions pertaining to land use and development in a municipality. In approving the OCP, the District of Barriere has considered the interests of the individual landowners and residents within the plan area and balanced those interests with the needs of the community as a whole. The OCP is intended to provide guidance on land use and development issues within the plan area using a 25 year planning period, with 5 year reviews.

CREATING THE DISTRICT OF BARRIERE'S OCP



The District of Barriere retained the services of Focus Planning to assist in reviewing and updating the Official Community Plan (OCP) along with the development of the BE BARRIERE Integrated Community Sustainability Plan (ICSP). As public consultation and input is required in the development of an OCP, the District of Barriere requested that community involvement be undertaken above the normal level required in the creation of these integrated documents.

Early in the planning process a community-based committee was selected to represent different demographics of the Barriere community and act as the experts with regards to holding events, engaging various groups and helping identify key assets and challenges within the community. The members of the Barriere Integrated Community Sustainability Education Committee (BICSEC) are as follows:

Councillor Rhonda Kershaw – Committee Chair
Mayor Mike Fennell
Councillor Virginia Smith
Councillor Ward Stamer
Councillor Glen Stanley
Tina Donald – Simpcw First Nation Representative
Margaret Houben – Citizen at Large
Bill Humphreys – Citizen at Large
Colleen Hannigan – CAO
Nora Johnson – Finance Officer

With the assistance of BICSEC, the Focus Planning project team collectively identified key areas of interest and issues for the development of Barriere's first '*made in Barriere for Barriere*' Official Community Plan.

All relevant documents and information were reviewed to develop a solid understanding of the current development, infrastructure and land use patterns within the District of Barriere. Background documents and relevant data were analyzed including, growth information (population, demographics, school enrollments, building permits, etc.), physical information (developable land and undeveloped land available), and infrastructure information (traffic volumes and capacity for water and sewer). Elements of these documents were brought forward for consideration in the planning process and were integrated to create OCP policies.

As part of the public engagement process the results from two community consultation survey questionnaires were reviewed to assist in establishing the Barriere community vision. The first was a Community SWOT (strengths, weaknesses, opportunities, and threats) Analysis and the second, a Community Sustainability Survey.

The District of Barriere also hosted numerous events to gain diverse community input. Public events included a project invitation meeting, Barriere Energy Fair, Barriere Youth Sustainability Challenge, Mini Documentary, Rodeo Round-up and a "Be Barriere" website designed to highlight input and insights gained throughout the process and ignite strong participation from community residents.

The OCP will continue to incorporate community involvement through a community-led OCP Advisory Committee during implementation and beyond.

RELATIONSHIP TO OTHER PLANNING DOCUMENTS

The District of Barriere had a current OCP document that was compiled and developed by the Thompson-Nicola Regional District (TNRD). The District was incorporated December 4th, 2007. This new OCP will provide Barriere with the baseline information to move forward in their vision of becoming a sustainable community. The ICSP is an over-arching framework for action that articulates the longer-term sustainable vision for Barriere. It is a starting point containing a draft of short, medium and long-term actions that contribute to a resilient, sustainable future. ICSPs have a longer planning horizon than OCPs, and often contain a monitoring program that measures progress toward/away from those actions. The policy that is articulated in the OCP is implemented on the ground through the application of the Zoning Bylaw. The Zoning Bylaw is the prescriptive application of the Official Community Plan that outlines the types and extent of use within various land use designations.

1.1 TRENDS

AGING POPULATION

Most of North America will experience the impacts of an aging population. This aging of society is often associated with the significant number of baby boomers who are now in their late 50s and early to mid-60s. There are significant implications associated with population aging including, impacts to housing, labour markets, health care and recreation. Specifically, seniors are anticipated to live longer and more independent lives. In terms of housing requirements, the general shift is away from collective and

institutional housing and towards the privacy of independent (i.e., private) housing. Within private housing, other shifts are occurring, with increasing propensities to remain in ground oriented owner-occupied dwellings and to live in apartment owner occupancy, and a diminishing propensity to live in rental apartments. Additionally, as mobility decreases over the senior's portion of the life-cycle, proximity to amenities and services will be a priority. I.e. the design of communities will need to facilitate easy access to services and amenities. From an economic standpoint, more people will also not be active members of the workforce, but will be consumers of local products and services. [1] Specific services for this particular age group will be required.

ENROLLMENT RATES

The number of students enrolled in Barriere schools has fluctuated in recent years. In 2011 a reported 227 children were enrolled in Barriere Elementary. This is slightly lower than the 243 children enrolled in the 2006/2007 school year. At the secondary level, enrollment has decreased from 220 students in 2006 to 177 in 2010. The number of children beginning Kindergarten has fluctuated from 29 children in 2006, to 33 children in 2010 and to 21 children in 2011 respectively. (Source: School District #73)

RURAL TO URBAN MIGRATION

Statistics Canada reports that there is a large rural-to-urban migration of youth aged 20-24 that is currently taking place, as youth leave their rural communities to pursue educational and economic opportunities.

CLIMATE CHANGE

There is a growing recognition and awareness that climate change is occurring due to human-based activities. Weather variability, intensity of storms and natural phenomenon, growing conditions, water supplies, pests and disease and integrity of wildlife habitat are all factors that are changing. The United Nations Framework Convention on Climate Change (UNFCC) has defined climate change as "a change in climate due to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods."[2] Additionally, the Stern Review, which was released in 2005, looks at the economics of climate change if we continue on business as usual. The Review concludes that early action on climate change will far outweigh the costs and it will cost much more to address it later.

There are two joint strategies used towards climate change action:

1) Climate Mitigation (making changes in the current system to lessen or avoid the output of CO2 and/or mechanisms that will capture the existing CO2 in the atmosphere, with the goal of bringing the levels of CO2 back to an appropriate level, 350 ppm); and
2) Climate Adaptation (making changes on-the-ground, which allow society to adapt to the new climate). One of the key reasons the climate is changing is due to the continual increase of carbon into the atmosphere, in the form of $C0_2$, largely from burning fossil fuels for the purposes of transportation, manufacturing, heating, cooling, resource extraction and energy production (both electricity and fuels). There is a need to identify and pursue ways of planning for the future that use these strategies to move towards a sustainable way of life that avoids the systematic increase of CO_2 and other greenhouse gases into the earth's atmosphere.

Protection of the natural environment within and around the District of Barriere is critical to the maintenance of its water supplies, ecosystem integrity and livability. The OCP recognizes that people are part of the ecosystem and the economy and society are dependent and fully integrated into the environment in ways

[1] Urban Futures, (2006) Baxter, David and Andrew Ramlo. Seniors Housing Demand in British Columbia Over the Next Thirty Years, p.28.

[2] "The United Nations Framework Convention on Climate Change". 21 March 1994. http://unfccc.int/essential_background/convention/background/items/1349.php.

that maintain or enhance the environment, rather than degrade or remove its ecological services it provides to the larger biosphere. The OCP recognizes that the municipal boundary is a jurisdictional measure of scope and that the ecological processes extend beyond these borders, and acknowledges the responsibility to be sustainable stewards in all spheres of long-term planning activities.

The Climate Action Charter was supported by the District of Barriere. The Charter is a cooperative initiative between the Provincial Government, Union of British Columbia Municipalities and local governments which acknowledges the importance of proactively addressing climate change and the role that the partners can contribute in order to reach common goals and reduce greenhouse gas emissions.

The OCP integrates policy directions that will contribute to the District of Barriere's pursuit of the common goals identified within the Charter. The OCP integrates policies that focus and concentrate development in a land use pattern that provides for a range of densities and supports opportunities for mixed use development. In addition, support for the creation of non-motorized oriented networks and the integration of pedestrian oriented design may reduce the dependency on the automobile within the community. The OCP also recognizes the importance of following a waste management strategy that integrates a waste reduction strategy and promotes recycling. A Water Conservation Plan is underway along with the installation of smart water meters for all properties, in addition to the use of a summer Water Patrol who monitor adherence to summer watering restrictions

PART 2 - COMMUNITY VISION & GOALS

2.1 THE VISION

The material used to develop the vision statement was co-created during the Action Plan Round Table event. Individuals were asked to look forward 25 years and describe what the look and feel of Barriere would be in the future, and what they expected to be present for them and/or future generations.

BARRIERE'S VISION STATEMENT

> *In 2030, the District of Barriere provides a unique and memorable experience for residents and visitors. A District gateway announces your arrival in Barriere, the entrance to the North Thompson Valley's outdoor playground. Take a trip along Barriere Town Road and you will be tempted to stop, picnic, and listen to the music emanating from the band shell while your children play in the water park or take in a ball game at one of the diamonds located in the large expanse of green space that has been preserved in the heart of the community. Continuing on you will probably pass cyclists and scooters heading downtown for a friendly cup of coffee. The downtown is easily identifiable with its memorial benches, decorative lighting and well-kept storefronts. It is bustling with activity as people walk from store to store exploring specialty shops and doing their weekly grocery shopping. Take one of Barriere's many pathways and you will be able to explore the Simpcw First Nation's Cultural Centre and traditional nature walk along the river. From the heart of Barriere you can begin to explore the wilderness of the beautiful North Thompson Valley.*

2.2 SUSTAINABILITY DEFINITION & GOALS

The development of the District of Barriere Official Community Plan (OCP) is guided by sustainability principles and goals developed through the BE BARRIERE Integrated Community Sustainability Plan (ICSP). Sustainable development is often defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

Principle characteristics of Smart Growth include the following:

- Create a range of housing opportunities and choices
- Create walkable and accessible communities
- Promote the creation of a strong sense of place
- Emphasize the need for a mix of land uses
- Preserve open space, agricultural land and critical environmental areas
- Provide a variety of transportation choices
- Strengthen and direct development towards existing developed areas and communities
- Integrate transit oriented design including alternative transportation methods
- Create opportunities for public engagement and involvement
- Plan on a broad scale

BE BARRIERE SUSTAINABILITY GOALS

1. STRENGTHENING SMALL COMMUNITY CHARACTER

Barriere's unique features highlight the District as a regional destination while supporting a rural atmosphere. This thriving, active, and family oriented community promotes activities that contribute to Barriere's distinguished small community character. Barriere is a great place to raise a family, grow a business and retire. The diversification in arts, culture and activities contribute and strengthen the character and theme of the community.

2. CREATING A VIBRANT DOWNTOWN

The downtown is vibrant, attractive and healthy. Community activities and businesses are focused in the heart of the District. This area is identifiable by the cohesive, well defined and uniquely designed streetscape. Development is at a moderate scale and the downtown is accessible to everyone.

3. PROMOTING ECONOMIC DEVELOPMENT AND DIVERSIFICATION
The strong business and industrial base in Barriere contributes to a diverse and thriving economy. Local businesses provide for the daily needs of residents and support tourism and large parcels located along the highway serve as desirable locations for service-based enterprises.

4. MOVING AROUND THE COMMUNITY
Active transportation is the primary mode of transportation within Barriere while vehicles are used for trips to destinations outside of Barriere. Multi-use activities are a form of active transportation, such as cycling, walking and rollerblading that encourage a healthy lifestyle. Traveling between neighbourhoods along a well maintained pathway system evokes a sense of connection between residents, the built environment and natural areas within the community. A community transportation system provides regular access to Kamloops for residents that choose to visit friends, family or take a shopping trip.

5. BUILDING OUR INFRASTRUCTURE
Infrastructure, including roads, sewer and water are all well maintained and reliable. The District ensures that a high value is provided for services associated with community infrastructure.

6. ENHANCING QUALITY AND AESTHETICS
Barriere is a beautiful place to live and to visit. The community is situated in a valley of breathtaking mountains, surrounded by nature. It also acts as a gateway to an area of many pristine lakes. The streets are clean and well kept, and buildings provide a sense of character and quality. The community of Barriere and Simpcw First Nation collaborate together to develop and participate in a mutually beneficial partnership.

7. ACTIVE LIVING
Barriere is a destination for active living through all seasons. Whether you're a child, parent, business professional or senior, there are an abundance of activities at a community park or surrounding area to suit your interests. Nature is at your fingertips as you walk, ski or ride along one of the many safe, accessible trails within and connecting Barriere to the rural landscape. You can enjoy life at a leisurely pace, experience time slowing down as you visit the rivers or explore one of the many tranquil lakes nearby. The community offers a variety of indoor and outdoor sports and recreation opportunities. There are many things you participate in within the community that will support lifelong active living.

8. HEALTH AND SOCIAL SERVICES
Community services are available to young families, seniors, and residents in all other stages of life. Stable services and facilities have allowed Barriere to grow as a diverse and well-rounded community.

9. GROWING GREEN
Since its inception, Barriere has been a green community characterized by fresh air, clean water, low energy use, and a diverse natural environment with rich biological diversity. Residents of Barriere, business operators and municipal staff live and operate in a way that contributes to sustainable development. Eco-friendly practices have made Barriere a leading environmental community.

10. PROTECTING THE COMMUNITY
Barriere is a safe place to live. Residents feel protected from both criminal behaviour and natural hazards. The local ecosystem has been preserved so current and future generations can enjoy nature and live in a healthy environment.

2.3 BARRIERE CONTEXT

LOCATION

Commonly referred to as the "Gateway to the North Thompson" the District of Barriere is located in the Lower North Thompson Valley 64 kilometres north of Kamloops along Highway #5 (the Yellowhead Highway). Barriere is within the Thompson-Nicola Regional District (TNRD) and the region surrounding the District is Electoral Area O. Barriere is situated on the east side of the North Thompson River where it meets the Barriere River. Barriere is 12.44 square kilometres and has an elevation of 373 meters above sea level at a latitude of 51º 11'N.

Barriere is the largest urban area within Electoral Area O and serves as the service center for Little Fort, Darfield, Louis Creek, McLure, and the Simpcw First Nation community of Chu Chua.

REGIONAL CONTEXT- Thompson-Nicola Regional District

Thompson Nicola Regional District (TNRD) was incorporated as a regional government in 1967. TNRD is governed by a Board of Directors consisting of ten elected rural directors (each representing an "Electoral Area"), and fifteen municipal council members, representing eleven member municipalities (each appointed by their respective municipal council). One mandate of a Regional District is to provide specific region-wide services in partnership with municipalities within the Regional District when there are benefits for all with a regional-wide delivery system.

Section 866 of the *Local Government Act* requires that Official Community Plans include a regional context statement in regional districts that have a Regional Growth Strategy. The TNRD Regional Growth Strategy was adopted by the Board of the TNRD as By-law 1767 in May of 2000. The purpose of a regional context statement is to demonstrate ways in which the District of Barriere's planning and land use policies link and work towards the goals and objectives established by the Thompson-Nicola Regional District (TNRD) Regional Growth Strategy (RGS). The RGS is not a land use plan, but rather a strategy for achieving a sustainable future for the region. The RGS defines areas where different types of land uses and development growth will be focused as well as where development will be controlled.

The key components of the TNRD Regional Growth Strategy are to:

- Contain urban/rural sprawl by building on the existing network of diverse regional centres. Direct growth into established centres. Promote policies of infill and intensification. Ensure adequate levels of servicing are provided.
- Broaden the economic base through diversification and expansion. Support and encourage existing resource industries while promoting new economic development opportunities.
- Protect and enhance the environment through the adoption and co-operative use of stewardship principles.
- Protect the open space and rural character of the region and unique heritage features.
- Implement the RGS through the establishment of ongoing co-operative processes.

The District of Barriere has policies in this OCP that align and support the goals of the TNRD's Regional Growth Strategy, as shown in the following table.

Table 1: Barriere OCP Alignment with the Thompson Nicola Regional District's Regional Growth Strategy

RGS Policy	District of Barriere Policy Alignment	Reference
Contain urban/rural sprawl by building on the existing network of diverse regional centres. Direct growth into established centres. Promote policies of infill and intensification. Ensure adequate levels of servicing are provided.	The District of Barriere supports this by promoting and encouraging mixed use developments and higher densities within existing developments and focusing growth near existing services and amenities.	Policy 3.1.1 and 3.1.2 p. 24
Broaden the economic base through diversification and expansion. Support and encourage existing resource industries while promoting new economic development opportunities.	The District of Barriere supports this by pursuing local manufacturing and processing of unique food, and wood products; increasing tele-communications and attracting home-based tech businesses; and encouraging research and development; continual learning and education; and pilot projects and demonstrations.	Policy 3.4.2, Page 42
Protect and enhance the environment through the adoption and co-operative use of stewardship principles.	The District of Barriere supports this by supporting the creation of local stewardship guidelines; encouraging environmental stewardship programs, public education, awareness and participation; identifying, and protecting environmental resources for the long term benefit; restricting pesticide use; and liaising with local stewardship organizations for local knowledge.	Policy 3.2.13, p.34
Protect the open space and rural character of the region and unique heritage features.	The District of Barriere supports this by encouraging the use of spaces for public participation, education and enjoyment of culture through the planning and design of buildings, open spaces and public areas, including the street environment.	Policy 3.3.2, p. 40
Implement the RGS through the establishment of ongoing co-operative processes.	The District of Barriere supports this by encouraging and facilitating effective partnerships between community organizations, businesses and all levels of governments.	Policy 3.1.9, p. 27 Policy 3.1.14 (a,b), p. 28 Policy 3.2.3, p. 32 Policy 3.2.15 (a), p. 36 Policy 3.2.25, p.39

HISTORY

The Simpcw are a division of the Secwepemc, or Shuswap, who occupied the drainage of the North Thompson River upstream from McLure to the headwaters of Fraser River from McBride to Tete Jeune Cache, over to Jasper and south to the headwaters of the Athabasca River. The Simpcw speak the Secwepemc language, a Salishan language, shared among many of the First Nations in the Fraser and

Thompson River drainage. The Simpcw traveled throughout the spring, summer and fall, gathering food and materials which sustain them through the winter. During the winter months they assembled at village sites, in the valleys close to rivers, occupying semi underground houses. Archaeological studies have identified winter home sites and underground food cache sites at a variety of locations including Finn Creek, Vavenby, Birch Island, Raft River, the confluence of Clearwater and North Thompson rivers (in the Secwepemc language called 'Styelltsucw"), Chu Chua, Barriere River, Louis Creek, McLure and Tete Jeune.

The Simpcw traditionally were noted for their hunting ability. In the summer months much of their time was spent in hunting camps in the mountains above the North Thompson and upper Fraser rivers. Both river systems provided salmon, which were caught in weirs, nets and by spear. Both meat and fish were smoked or dried then stored for consumption. Numerous plant foods were also collected and preserved for winter use. There was active trading, and sometimes warfare with the Sekani and Cree people. Presently Simpcw people practice many of their traditions while learning and working in modern society.

Today about half of the 628 Simpcw people live on the North Thompson Indian Reserve at Chu Chua just north of Barriere and on the Louis Creek Reserve. The Simpcw First Nation band employs many members. The administration is governed by the Band council, oversees the social, educational, and economic development of the membership. With other Secwepemc communities, the Simpcw are taking steps to have their aboriginal right to their traditional territory recognized by provincial and federal governments. Simpcw people value their positive relationships with non-Native people in the North Thompson and Robson Valleys. To this end, the Simpcw have a Memorandum of Understanding (MOU) and Protocol agreement with the District of Barriere to work together cooperatively. They also recognize that their key strength lies in maintaining links to their traditional heritage and look forward to securing a place for their children in contemporary society that they can embrace with pride.

The first Europeans to the area were fur traders in the early 19th century. The North Thompson Valley saw an extensive trade in furs and wood in the 1850s. Prospectors came to the region on their way to search for gold in the Caribou in the 1860s and European settlement began just before the turn of the century.

The history of the name "Barriere" dates back to the early days of fur trading. French Canadian fur traders were the first to settle in the late1800's. While following the trail along the North Thompson River, the traders came to the Barriere River which was in flood. The location was then called "La Barriere" due to the fact they could not go any further. The community was officially named in 1914; however, early inhabitants of the area often referred to it as "The Barriere" (Barriere and District Heritage Society).

The CN Rail's main line was established in 1914 through the valley and in 1932, a road was completed between Kamloops and Clearwater. By the early 1960s, the construction of the Yellowhead Highway was well underway. Completed in 1970, the highway fuelled an influx of businesses and residents to the area.

Forestry has continued to be an economic driver in Barriere, however, in 2003, the community was hit hard by a major forest fire that swept through the area and destroyed both homes and industry including the Louis Creek Sawmill, a large local employer. Today, forestry still plays a major role along with tourism and agriculture. In recent years, the North Thompson has also experienced an emerging mining sector.

In June of 2007, the community voted to become an incorporated municipality and on December 4th, Barriere became one of BC's newest municipalities. Barriere is a community with its own unique and special character, offering a small-town-feel in a natural outdoor setting.

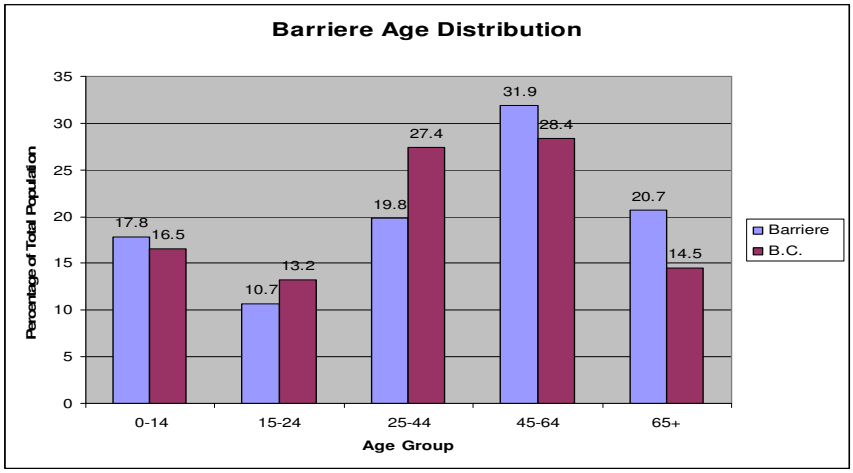
DEMOGRAPHICS

According to the statistics certified by the Province at the time of incorporation, 1723 people resided in Barriere on December 4th of 2007. The District of Barriere is experiencing an aging trend, with a high percentage of persons over 65 years of age. The 2006 Census identified the number of persons aged 65 and older represents 23% of Barriere's population; the provincial average is 14%. 17.8% of residents are under

the age of 14. Community residents between the ages of 15 and 24 represent the smallest age group at only 10.7% and residents between the ages of 45 and 64 represent the largest age group at 31.9%.

From 1996-2006 the population of Barriere and the surrounding area showed a decline in population. The 2006 Census reported a population decrease of 6.1% from 2001-2006 and an 8.6% decrease for the entire TNRD Electoral Area O of which Barriere was a part before being incorporated as a municipality. These decreases suggest area residents are relocating to urban centres. Population estimates by BC Stats for Barriere for 2010 show an estimated population of 1712 residents, which is a 1% decrease from the 1723 residents living in Barriere at the time of incorporation. However, the District of Barriere, TNRD and all of the North Thompson are experiencing an in-migration of older age groups. Although Barriere is a secondary destination for migrating seniors compared to the Okanagan, the Shuswap or Vancouver Island, this sector is likely to continue to grow in the future, opening new opportunities and challenges to serve the needs of the retirement sector. Migration into the area is largely due to the relative affordability of the area, climate and recreational opportunities. The North Thompson Economic Development Strategic Plan (2005) predicts the proportion of seniors to increase by approximately 50 percent in the years ahead, going from one in ten residents in 2001 to one in seven by 2014.

Table 2: Barriere Age Distribution



LAND USE PATTERNS AND THE BUILT FORM

Perhaps the most basic influence on current land use planning is the character and distribution of existing land uses and the interaction with the physical environment.

Residential land uses in the District of Barriere include single-detached housing and mobile dwellings. Mixed commercial uses are concentrated along both sides of Highway 5. The commercial service core of Barriere is located on the east side of the highway in a fairly central location. The District's emphasis on revitalizing and improving the downtown core is a good step towards their goal of being a sustainable community.

HOUSING

The District of Barriere offers a quiet living experience in a picturesque setting. Mountains and hillsides along the North Thompson River serve as a backdrop to quality community living. The area caters to a wide range of lifestyles but offers a limited range of housing options. A wider range of housing options can address a wider range of affordable housing needs.

BARRIERE HOUSING AFFORDABILITY INDEX



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Household/Family Composition (median)	($)	# of households /families	Projected Growth (households)		Allowable Rent/ Owner Payments ($)	Max. Allowable Home Purchase ($)
			per year	*25 years*		
Lone person household	**$18,298**	360	5.4	135.0	$338	$70,522
Lone-parent families	**$29,619**	105	1.6	39.4	$640	$133,520
Gross median household	**$33,747**	1,325	19.9	496.9	$750	$156,492
Couple households w/out children	**$37,968**	580	8.7	217.5	$862	$179,980
All census families	**$40,952**	960	14.4	360	$942	$196,585
Couple households w children	**$55,500**	255	3.8	96	$1,330	$277,541

35 yr amortization, heat & hydro, 5% down, 4.8% interest rate, average value of owned dwelling = $213,358



Current Baseline

Avg. home price (Nov. '07 - Nov. '08)*	$213,358
Avg. rental*	$800 - $850
Vacancy rate*	<1%

Sources: Community Futures Community Profile, Census Stats Canada

The housing affordability graph from the Community Futures Community Profile (2009) above shows the allowable rents and home ownership purchase price in the District of Barriere. Based on the average median income for all households, the maximum allowable rent is $750 per month, and a maximum allowable home purchase price is $156, 492. However, the average price for a home is $213, 358, which is higher than most household compositions can afford, except couple households with children, which can afford up to $277,541. This is also the case for rental units which on average range from $800-850 per month, and is slightly out of reach for most census households.

Diversity of housing typologies and tenures is essential to a healthy community. OCP's can direct the development of diverse housing types to accommodate the various housing needs of existing, as well as future residents, and to meet the changing needs of the various age groups of residents. The average number of people per household in Barriere is 2.4 compared to the 2.5 provincial average. The built form in Barriere is predominately mid to late century and is constructed of wood, brick and pre-fabricated building materials.

There are approximately 800 dwellings in Barriere (source: District of Barriere). According to data from the 2006 census prior to incorporation, approximately 83% are privately owned compared to the 69.7% provincial average, while 15% of Barriere residents rent. Approximately 85% of these units are single-detached homes which are significantly higher than the provincial average of 49%. The remainder of the Barriere housing stock consists of semi-detached houses (2%), mobile homes (10%) and apartments under 5 storeys (5%).

Note: totals have been rounded up by Statistics Canada Census 2006 Community Profile, which equals slightly more than 100%.

EDUCATION

The education community in the District of Barriere is alive, vibrant and an integral part of the community. Barriere Elementary and Barriere Secondary are overseen by School District #73 which services Barriere, Kamloops and the Thompson area. The motto of School District #73 is "working together for quality public education." The Barriere schools offer grades K through 12.

Barriere Elementary school feeds into Barriere Secondary school and in 2011, 227 children enrolled in Barriere Elementary and177 in Barriere Secondary respectively. The full range of provincial curriculum is offered at the secondary school level. Enrollment rates are illustrated below in Table 3: Barriere Enrollment Rates (2006-2011). Barriere also has a StrongStart early learning program for ages 0 to 5 in which children have access to a high-quality learning environment and benefit from social interactions. Adults who accompany them learn ways to support learning, both at the program and at home. The following shows school enrollment from 2006 to 2010.

Table 3: Barriere Enrollment Rates (2006-2011)

Year	Barriere Kindergarten	Barriere Elementary Total	Barriere Secondary Total
September 2006	29	243	220
September 2007	35	267	212
September 2008	23	260	191
September 2009	25	256	191
September 2010	33	248	184
September 2011	21	227	177

Source: School District 73.

Thompson Rivers University (TRU), Kamloops, BC, provides post-secondary education to residents of Barriere. Programs at the Kamloops TRU campus include a range inclusive of 50 different undergraduate degree options, and some graduate programs. It will also maintain its certificates and diplomas for career and trades training, many of which "ladder" credits into degree programs. TRU also offers College Preparation, Adult Basic Education, ESL and vocational courses and programs. TRU delivers courses at an office in Barriere.

Thompson Rivers University – Barriere Regional Centre's purpose is to provide quality education and training by bringing as many of the TRU services, courses and programs to the community as the community is able to support. An Advisory Committee comprised of local residents with many diverse interests and ideas, meet yearly to assist the Coordinator. Other regional post-secondary institutions in the area are the University of Northern British Columbia in Williams Lake, and Okanagan College – Salmon Arm Campus, that offer a range of academic and technical courses. There is also the Nicola Valley Institute of Technology in Merritt which offers aboriginal students a range of courses that address aboriginal community needs, such as social work, economic marginalization and environmental issues.

EARLY CHILDHOOD DEVELOPMENT

Child development services are provided by the Yellowhead Community Services Society (YCS) which has offices in both Barriere and Clearwater. This organization was incorporated in 1989 in response to a recognized need for an overarching organization to develop and administer a number of social and health services for Barriere and the North Thompson Valley. This organization is the largest non-profit, registered charity in the North Thompson providing services to families and residents from McLure to Blue River.

Yellowhead Community Services (YCS) provides a number of services including infant development and early childhood development programs, parent-child Mother Goose programs, parenting groups, prenatal instruction and postpartum home visit programs.

YCS is also the umbrella organization hosting Success by 6, an early childhood development initiative dedicated to providing all children with a good start in life. It helps to ensure that children ages 0-6 develop the emotional, social, cognitive and physical skills they need as they enter school.

HEALTHCARE

Barriere currently has three full-time doctors who work together in a private clinic adjoining the provincial health care centre. The centre is operated by Interior Health as part of the Kamloops Local Hospital Area. Clinical services available include a cast clinic (ER only), a laboratory, an itinerant diabetes clinic, an itinerant nutrition clinic and emergency trauma care. The types of services delivered depend on patient needs and on whether comparable services are available nearby. Community Health Care centres do not have acute care beds but may offer:

- Child health passports,
- Diagnostic imaging,
- Electrocardiogram,
- Human Papilloma Virus (HPV) vaccine,
- Interior Health Mental Health and addiction services and
- One-to-one prenatal office visits.
- Basic laboratory and radiology (x-ray) services
- Urgent care
- Outpatient ambulatory care procedures such as day surgery
- Community services such as public health or physiotherapy
- Long term residential care services
- On-site doctors' offices

The closest hospitals in the region are the Royal Inland Hospital which is a tertiary level referral hospital that offers high-level specialty medical care located 66 kms to the south in Kamloops, BC, and the Dr. Helmcken Memorial Hospital 63 kms north in Clearwater, BC.

EMERGENCY SERVICES

Police, Fire, Search and Rescue & BC Ambulance Service

The RCMP station, located in Barriere, is responsible for policing Barriere, Chu Chua and the surrounding area and has four full-time police officers. Barriere has a Rural Crime Watch program that works with the RCMP to facilitate a local alert system. The Barriere Crime Stoppers are part of a province-wide, independent, non-profit organization to provide an opportunity for citizens to provide tips on a crime or a criminal anonymously. Local groups work with citizens, media and RCMP to develop and implement crime prevention initiatives.

Barriere has a Volunteer Fire Department with 22 trained members. Main equipment includes a 500 gallon, compressed air and foam capacity truck, a 1,000 gallon fire tender truck, a 1,700 fire tender truck and a one tonne bush truck with foam capacity. There is a "mutual agreement" with the Simpcw Volunteer First Department to assist each other when needed.

BC Ambulance service provides public ambulance services in BC under authority of the Emergency and Health Services Commission of the Ministry of Health.

The provincial government has set up the Ministry of Public Safety and Solicitor General (PSSG) of which Emergency Management BC (EMBC) is a branch, which assists local authorities and coordinates provincial ministries and agencies in an emergency capacity. Under the EMBC umbrella, certain offices have been included in one office which includes what we know as the Provincial Emergency Program (PEP), the Office of the Fire Commissioner (OFC) and BC Coroner Services. There is also the Public Safety Lifeline Volunteers which includes Emergency Social Services Program (ESS), Search and Rescue (SAR) and BC Road Rescue Service, to name a few. The District of Barriere is the "local authority" for Barriere. The Thompson Nicola Regional District, as the "local authority" for unincorporated communities and electoral

areas within the region, has established an “Emergency Preparedness Program”. Prior to the incorporation of Barriere, the TNRD plan included Barriere. After incorporation, the District entered a three-year agreement with the TNRD to have the TNRD continue to manage this program on behalf of Barriere. As part of the TNRD Program, emergency support groups have been formed in the Barriere area.

This support group is comprised of representatives from various organizations and government agencies that will play a role in reacting to an emergency.

ESS provides short-term assistance to British Columbians who are forced to leave their homes because of fire, floods, earthquakes or other emergencies. This assistance includes food, lodging, clothing, emotional support and family reunification. ESS (a local government asset) is meant to assist local authorities who are responsible for planning and operating emergency responses within their jurisdictional areas.

Founded in 1982, Barriere’s Search and Rescue (also the Highway Rescue unit are experienced in ground, embankment, flat water and auto-extrication rescues). All members receive training in basic SAR techniques, first aid, rope rescue, and tracking.

LOCAL ECONOMY

Barriere and the surrounding area have an economy that is dominated by agriculture (primarily cow/calf operations), forestry (planning, harvesting, processing and value-added manufacturing), a growing tourism sector and a mix of retirement and local services.

The primary industries of agriculture and other resource based industries employ 295 residents of Barriere and TNRD Electoral Area O (2006 Census). These industries are the ‘drivers’ of the local economy and make up the bulk of the economic base. The primary employer in the District is Gilbert Smith Forest Products, with 75% of the town's residents being linked to forestry.

Currently, Barriere is seeing an increase in the number of residents who are commuting to work in other areas. This is becoming prevalent due in part to the reasonable cost of real estate in Barriere, creating a “bedroom community” where residents reside in Barriere but rely on surrounding communities for employment and daily services.

INDUSTRY

Agriculture

There are approximately 600 agriculture operators in Barriere’s trading area; the major crop produced is alfalfa. The agriculture industry continues to thrive and feed the local economy of Barriere. There is a local initiative to grow local agricultural markets and encourage residents to consume locally produced foods.

Forestry

The primary employer in the District is Gilbert Smith Forest Products with 75% of the town's residents being linked to forestry. The forestry industry took a serious hit after the forest fires of 2003 which destroyed Tolko Industries’ Louis Creek Sawmill, a large local employer. Trucking plays an important role as it is involved in moving timber to mills and moving lumber and timber processing by-products to markets outside the region.

Tourism

Barriere is a tourism gateway for over 60 small to medium-sized lakes. The Barriere Lakes, North, South and East, are all located approximately 23 - 40 km east of Barriere. Tourism business services that benefit involve guided tours, accommodation and equipment provision. Accounting for the significance of tourism to

the local economy is difficult because Statistics Canada does not classify it as a separate industry (Tourism BC).

The resort and lodge sector in and around Barriere is a large contributor to Barriere's tourism industry in the summer months due to the previously mentioned large number of parks and recreational areas surrounding the community. Statistics from the Barriere Tourism Information Center show tourism is on the rise.

Service Sector

Barriere has a complete range of service-oriented businesses. Residents have access to a supermarket, banking services, post office, insurance, pharmacy, lawyer, accountant, churches, funeral home, several restaurants, motels and service stations.

Mining

Barriere is located just south of the newly discovered Harper Creek Copper deposit. The deposit is the 8th largest in the world (Yellowhead Mining, 2008). The mining industry is on the rise in the North Thompson and it is expected that Barriere will gain workers within the mining industry in the near future.

INFRASTRUCTURE

Water System

The District of Barriere currently draws its water supply from two deep and one shallow groundwater wells. Water characteristics and quality vary from well to well and the water is treated to Ministry standards before entering the District's distribution system. There are still a small number of homes serviced by water licences or private water wells on individual properties.

Existing Wastewater System

Barriere is not currently serviced by one large wastewater system.

Most properties currently have individual septic systems. The Interior Health Authority (IHA) is responsible for approving all systems designed to accommodate flow up to 22,700L/d. This comprises the majority of disposal fields within Barriere. The IHA also tracks septic system failures when they are reported on a case-by-case basis. For larger systems within Barriere (greater than 22,700 L/d), approval and monitoring under the Ministry of Environment's Municipal Sewage Regulation (MSR) is required. Since incorporation, Council has adopted a policy based on affordability that over time will see the vast majority of properties tied in to a municipally-owned and operated system. The District requires all new subdivision development that at final build-out will meet volumes requiring an MSR system, to provide the land for, construct and then turn over to the District a commissioned communal system. One such system exists on Birch Lane while two more are under construction on the north side of the Barriere River. There are presently two non-municipal MSR systems in Barriere which are:

- Barriere Secondary School, and
- Headway Investments (4510 Power Rd)

Solid Waste Management System

The District of Barriere currently has weekly curbside garbage and recycling pickup. Cardboard bins are strategically placed throughout the community in an attempt to further streamline the recycling process and for collection efficiency. The Thompson-Nicola Regional District (TNRD) manages the regional landfill located approximately 8km east of Barriere at 1500 Barriere Lakes Road.

The TNRD implemented a Regional Solid Waste Management Plan (SWMP) in 2008 which includes a region-wide pay-as-you-throw garbage collection program. It also plans to close the Barriere landfill site, replacing it with an Eco-Depot located immediately adjacent to the District boundary on Agate Bay Road,

which provides a drop-off site for a wider range of materials such as garbage, recycling, waste paint and used motor oil, wood and yard waste and metals. The Eco-Depot was approved for the Barriere area in September of 2010. The facilities are designed to recover valuable resources from the waste stream and reduce the amount of refuse sent to the landfill. Construction is scheduled to begin during the summer of 2011 and be fully operational by 2013.

Roads and Transportation

Barriere is located along the Yellowhead Highway #5 which offers a direct route to northeastern B.C, Jasper and Edmonton. At incorporation, the road network within the District's boundaries (excluding Highway 5) were dedicated to the District under an agreement that the Ministry of Transportation and Infrastructure would continue to pay for maintenance under the current contract until September 2013. The condition of Highway 5 running through the District of Barriere is relatively good due to recent highway improvements. Traffic counts and local residents confirm that in the summer season, there is some traffic congestion at busy intersections that will need to be addressed as the community continues to grow.

The following transportation systems are available in or close to the District of Barriere:

- Barriere Taxi;
- Health Connections Transit Service;
- Greyhound Bus Lines;
- There are two inland ferries that cross the Thompson River at 43 (McLure) and 93 (Little Fort) kilometres north of Kamloops. These both run daily and have a capacity of 2 vehicles and 12 passengers.

Railway

The Jasper-Kamloops-Vancouver link of the CNR mainline runs generally parallel to Highway #5 through the community of Barriere. The closest scheduled passenger services, offered by VIA rail, are in Kamloops.

Airport

The closest airport is located in Kamloops providing daily service to Vancouver, Calgary and Prince George.

CULTURE

The District of Barriere has an exceptionally high rate of volunteerism. It is very much a "can do" community priding itself on independence. There is a rich and diverse cultural base with a variety of clubs, educational groups, churches and other places of worship and volunteer organizations.

There are frequent musical, theatrical and arts events. A lively community of working artisans and craft makers contribute to exhibitions, fairs, and local markets. Barriere has a Farmers Market, and the famous North Thompson Fall Fair and Rodeo.

RECREATION

Outdoor recreational activities are popular in the region and these include hiking, biking, fishing, skiing and hunting. Extensive parkland spaces and facilities exist within Barriere, including a walking oval, green space and trails, ball diamonds, skating rink and band shell, all essential to providing residents of Barriere a higher quality of life. They also play a key role in the protection and enhancement of community carbon sinks that help meet our climate action objectives. Taweel, Momich Lake, Chu Chua Cottonwood, Bonaparte, Adams Lake, Dunn Peak and Emar Lakes Provincial Parks are all in relatively close proximity to the District of Barriere. These parks best represent elements and special features of this unique and distinct area of BC.

PART 3 – THE PLAN

3.1 LAND USE & BUILT FORM

The OCP provides a framework that ensures growth within the Plan area is conducted in a manner that best reflects the social needs of the community at large, acknowledges environmental considerations and echoes the economic needs of the District of Barriere community.

The local challenges of growth come from the servicing and the impact on the environment and the resource base. The need for alternative housing units, specifically smaller multi-family homes will need to be addressed as the general population ages. The change in demographic make-up will add pressure to Barriere's health care and transportation system, as citizens' needs change.

To ensure population and economic growth can be accommodated, land use within the District must be more integrated and strategic. The OCP will use strategic planning to enhance the quality of life in Barriere, while at the same time maintaining the community's unique characteristics.

Infill opportunities exist within the community, however these lands may require land-use changes, and/or development permit guidelines associated with Development Permit Areas (shown in Schedule B – Development Permit Areas) to either strengthen economic revitalization, form and character, protect natural hazards (floods and steep slopes), improve infrastructure servicing extensions or expansions and the possible re-alignment of some of the transportation network. Most recently, the LGA has allowed local governments to also use development permit areas to guide reduction strategies towards lowering GHG emissions.

There are three development permit areas designated in Barriere: 1) Downtown Core; 2) Yellowhead Corridor, and 3) Industrial. There are two parts of the Industrial Permit Area (1) located at the community's south end and (2) on the west side of the Yellowhead Highway No. 5 at the north end of the District.

Population and growth projections conducted by the TNRD and BC Stats indicate that the Barriere community will experience growth over the coming years. It is anticipated that with an annual growth of 1.4%, by 2020 there would be approximately 400 additional people residing in Barriere in 2020 and a total of 716 additional residents by 2030. This would require an additional 186 dwelling units by 2020 and another 147 units for a total of 333 new dwellings by 2030.

Table 4: Population and Household Growth Projections to 2020 and 2030

Growth Scenario	Population growth (people)		Household Growth (units)	
	To 2020	To 2030	To 2020	To 2030
No growth (0%)	1723	1723	800	800
Low growth (0.4%)	1829	1904	849	884
Moderate growth (1.4%)	2123	2439	986	1133
High growth (3%)	2684	3608	1075	1445

Table 5: Residential Development Projections to 2020 and 2030

Growth Scenario	Population growth (people)		Household Growth (units)	
	To 2020	To 2030	To 2020	To 2030
No growth (0%)	0	0	0	0
Low growth (0.4%)	106	181	49	84
Moderate growth (1.4%)	400	716	186	333
High growth (3%)	961	1885	275	645

GENERAL LAND USE & BUILT FORM OBJECTIVES & POLICIES

Growth Management

The OCP is a comprehensive land use document that establishes land use policies for the future development of the Barriere area. The goals and policies of the OCP have been developed through the plan process. The major goals of the OCP are:

3.1.1 To promote and encourage mixed-use development and higher densities within established or designated development nodes.

3.1.2 Focus growth near existing amenities.

a) Create nodes to assist in transportation capacity, commerce and recreation opportunities;
b) Pre-zone areas for mixed uses to allow for a complete neighbourhood; and
c) Development in excess of 4 ha (10 acres) must prepare a Neighbourhood Plan detailing transportation networks, servicing, land use, density, trail connectivity, parks, open space and environmentally sensitive areas and any other factors Council may consider pertinent within the plan area.

3.1.3 To improve and develop the downtown core to enhance and benefit the community.

a) Encourage retrofitting of existing buildings where feasible;
b) Encourage local art;
c) Provide spaces for gathering, sitting and celebration; and
d) Prepare a coordinated parking plan for the downtown core encouraging sharing of private and public spaces and considering off and on road parking opportunities.

3.1.4 To recognize existing and future commercial and industrial uses within the plan area and establish development permit guidelines to direct the future form and character of new commercial development;

a) Establish a minimum of three (3) development permit areas, Downtown Core, Yellowhead Corridor and Industrial, to designate and guide the development of the community in regard to density and form and character to ensure compatibility with the scale and character of development in the surrounding neighbourhood; and
b) Advance mixed land uses through zoning and comprehensive development areas.

3.1.5 To support the protection of agricultural resources and the promotion of opportunities for local food production, diversification and value added agricultural activities.

a) Urban development adjacent to the ALR will be buffered and fenced as per the ALC's "Landscaped Buffer Specifications". Where appropriate, consideration may also be given to establishing building setbacks or public right of way (i.e. fenced linear park) between farmland and urban development to mitigate urban/rural development impacts and improve community amenity and connectivity;
b) Promote the importance and viability of the agricultural and local food system within all growth opportunities;
c) Encourage youth and entrepreneurs to investigate agricultural-based employment; and
d) Encourage local food production and consumption.

3.1.6 To recognize and conserve the rich archaeological and cultural heritage resources contained within the plan area.

a) Work with Simpcw First Nation to identify, and designate as appropriate, areas of potentially high archaeological significance;
b) Support research, studies and proactive measures for identifying archaeological and cultural heritage resources; and
c) Develop land use policies that will assist in preserving the ecological integrity of Barriere and North Thompson Rivers and their foreshore areas within the plan area.

3.1.7 To achieve a building stock that is healthy, durable and energy efficient.

a) Create "flexi-zones" and incentives in the zoning bylaw to permit a diversity of housing types and densities;
b) Support a reduction in DCC's for subdivisions of small lots that are designed to result in lower greenhouse gas emissions and greater green space;
c) Promote and encourage net-zero emissions for all types of buildings;
d) Create a sustainability checklist;
e) Encourage the retrofitting of existing dwelling units for increase of indoor health and energy efficiency; and
f) Encourage a diversity of typologies, and tenures.

3.1.8 To recognize the demand for community infrastructure within existing and proposed development and encourage the development and expansion of the required infrastructure.

a) Require large subdivisions to construct a community wastewater system to District standards and dedicate it, including the land, to the District for long term operation and maintenance;
b) Require dedication of park space in the form of 5% of land or cash-in-lieu for all subdivisions as per *Local Government Act* provisions;
c) Encourage alternative design standards for new subdivisions (i.e. reduced road widths, French drains, buried utilities, multi-use paths, full-cut off lighting); and
d) Encourage the use of onsite renewable energy generation, water collection and reuse.

3.1.9 To encourage opportunities for improvements to the road network and the integration of alternative modes of transportation.

a) Promote opportunities for connectivity and the creation of a pedestrian friendly environment through the development of a non-motorized trail network within and between new developments, and existing neighbourhoods and communities.

GHG Management & Climate Change Management

In response to new legislative requirements, the TNRD adopted an amendment package for inclusion in each of the region's 10 existing OCPs. This package includes GHG reduction targets of 10 per cent by 2020 and 33 per cent by 2050 from 2007 levels, as well as policies and actions to support the GHG reduction targets. Although the TNRD's "Barriere OCP" no longer applies to the lands within the District boundaries, it does include fringe areas lying just outside the boundaries. In light of this the goals contained in this OCP document match those contained in the TNRD document as further detailed in the following objectives and related policies.

3.1.10 As signatory to the Climate Action Charter, the District of Barriere will take steps to address and support the goals of the Charter and encourage the reduction of greenhouse gas (GHG) emissions in the plan area (10 per cent by 2020 and 33 per cent by 2050 from 2007 levels).

a) Consider climate change and the impacts of land use decision making on climate change when reviewing new development applications and undertaking long-range planning initiatives;
b) Encourage compact community design, infill development and planning strategies that reinforce smart growth principles and best practices in sustainable development;
c) Encourage and support non-vehicular walkways, trails and alternative modes of transportation to help reduce automobile dependence;
d) Encourage home-based businesses that do not create a nuisance or detract from the residential character of a neighbourhood;
e) Encourage and support energy efficient new construction and the retrofit of existing buildings;
f) Encourage water conservation, including the installation of low-flow plumbing fixtures in new construction;
g) Encourage low-impact renewable energy generation including solar and geothermal technology;
h) Encourage and support initiatives to upgrade wood-burning appliances through wood stove exchange programs;
i) Support the preservation of agricultural lands and local food production;
j) Encourage local community gardens and farmers' markets within the Plan Area;
k) Encourage tree planting where appropriate and the retention of existing healthy trees and natural vegetation during new development;
l) Support recycling initiatives and the diversion of waste from area landfills;
m) Raise awareness about BC Climate Action and energy conservation by making relevant information material available to residents;
n) Investigate potential incentives to builders, developers and homeowners who incorporate alternative energy sources;
o) Investigate the feasibility of a tree planting incentive program for residents;
p) Request the Province's continued support in providing the District with the tools and resources necessary to monitor and measure GHG reduction levels;
q) Raise awareness about recycling and landfill diversion through educational initiatives such as newsletters, information guides, and newspaper inserts;
r) Support waste reduction policies and actions outlined in the Regional Solid Waste Management Plan, including a region-wide goal of 30% reduction in waste disposal by 2013 (from 2004 levels); and
s) Support the Regional District in working toward a comprehensive regional greenhouse gas reduction strategy, including action plans for:
    i. Encouraging and improving public transit;
    ii. Encouraging public transit/car-pooling for all Regional District personnel;
    iii. Improving the energy efficiency of existing Regional District buildings;
    iv. Using a minimum "LEED Gold" equivalent standard for all new Regional District buildings where practical, affordable and applicable;
    v. Purchasing fuel efficient "green" vehicles whenever possible;

vi. Reducing Regional District personnel travel through videoconferencing and other available methods ;
vii. Enhancing urban and rural forests in the Regional District and participating communities where possible;
viii. Seeking partnerships with participating Regional District municipalities on joint "green" initiatives and undertakings; and
ix. Encouraging development of energy efficient (green) refueling/re-charge options/networks within the Regional District and member municipalities.

Residential Development

Barriere is a growing, friendly and affordable community with residents who enjoy an urban yet rural lifestyle. Diversity of housing is essential to a healthy community. OCP's can direct the development of diverse housing types to accommodate the various housing needs of existing, as well as future residents, and to meet the changing needs of the various age groups of residents.

3.1.11 To reduce GHG emissions related to residential use and the construction industry.

a) Support residential development that provides for dedicated trail ROW and constructed trail along the Barriere River;
b) All subdivisions shall address required trail, park, and facility construction and dedication to ensure housing options for seniors are located within walking distance of the town centre;
c) Achieve a level of green building in new construction and retrofitting that allows Barriere to move towards a "net-zero ready"[3] housing stock;
d) All new subdivisions shall include the following onsite energy strategies:
i. Site planning that maximizes solar gain and shading;
ii. Suitable vegetation and foliage to shade the dwelling in the summer months and to allow solar gain in the winter months;
iii. Encourage neighbourhood-based energy production (geothermal, heat recovery from waste, micro-wind, and other alternative energy systems);
iv. Storm water collection for the use of local food production, landscaping and other non-potable water demands;
v. Encourage the development of a Barriere-unique green dwelling unit pilot project;
vi. Encourage clustering of buildings to minimize heat loss and disturbance to natural drainage, vegetation and wildlife habitat; and
vii. 800 metre proximity to the following existing or pre-zone uses:
- grocery store/convenience store
- community garden/greenhouse
- park or open-space
- transit stop

3.1.12 To make seniors housing a priority to accommodate the anticipated aging population needs.

a) Work with higher levels of governments and other partners to develop a seniors housing complex.

3.1.13 A level of diverse housing types and densities to accommodate the various housing needs of existing, as well as future residents and to meet the changing needs of the various age groups of residents.

a) Encourage mixed-use, and compact densities; and

[3] NetZero refers to a system of home design and construction where the home produces all the energy required for the needs and comfort of its occupants from renewable resources available at the building site.

b) Implementation of a mixed-use land use designation and zone that accommodates both local commercial and residential uses is supported.

3.1.14 To ensure the availability of a wide range of housing types including rentals to meet the diversity of needs of the District of Barriere.

a) Support a housing mix by creating density incentives for multi-family developments;
b) Create density incentives and partnership options on municipal land/crown land for apartment or other multi-family housing uses; and
c) Ensure all multi-family and affordable housing units proposed shall contain a diversified mix of sizes (varied floor space for family, bachelor, disabled persons, etc.).

Commercial Development

Barriere has two primary, linked commercial areas which should be considered as unique while keeping in mind how they interconnect and relate to the community as a whole in terms of social, economic, environmental and cultural sustainability.

3.1.15 To broaden the economic base through diversification and expansion of existing and emerging commercial sectors.

a) Strengthen linkages with Kamloops, Chu Chua, Sun Peaks, Clearwater and surrounding communities, where residents from other communities come to Barriere for specific amenities and services;
b) Advocate for the development of public transit between neighbouring communities throughout the North Thompson linking to Kamloops;
c) Encourage ways to engage residents and businesses in community development and operations and to provide year-round employment;
d) Build around existing tourism activities;
e) Encourage sustainable development of tourism based services, including food and beverage establishments, overnight accommodations, and land and water based tour operators;
f) Cooperate and partner with groups and agencies in the tourism, arts and recreation sectors to encourage and strengthen economic development and to support a Barriere identity that visitors can easily recognize;
g) Encourage the development of a collaborative community-based tourism plan, including sub-sectors such as eco-tourism, all-season tourism, agri-tourism, education tourism;
h) Encourage the increase in commercial space (rental); and
i) Assist in the identification of strategies and actions that will assist in developing year round tourism opportunities.

3.1.16 To investigate sources of funding for major infrastructure projects which can assist local businesses, such as:

a) Levies;
b) Strategic budget allocations;
c) Gas Tax Fund;
d) Green Municipal Fund;
e) Public transportation infrastructure funds;
f) Canada Strategic Infrastructure Fund; and
g) Infrastructure Canada program.

3.1.17 To establish two functioning and interconnected commercial cores.

a) Create three Development Permit Areas, with corresponding guidelines: 1) Downtown Core; 2) Yellowhead Corridor; and 3) Industrial
b) Support land use policy structure in terms of zoning and development permit areas, which create simple fast-tracked redevelopment of the commercial areas;
c) Pursue continual improvement in the realms of community beautification and encourage the participation in the Communities in Bloom program; and
d) Support incentives for new small scale, mixed use commercial development to occur in downtown core.

Industrial Development

Barriere also has two primary and distinct industrial areas in the District. The first is located in the southernmost portion of the municipality on the east side of the Yellowhead Highway and abuts the municipal boundary. The second industrial area is located north of the Yellowhead Corridor Development Permit Area on the west side of the Yellowhead Highway. The proactive and responsible development of these lands will ensure long term stability for the District through the provision of full time year round job opportunities and an increased tax base that will assist in the provision of additional amenities for the community at large.

3.1.18 To broaden the economic base through diversification and expansion of existing and emerging industrial sectors.
a) Encourage, partner and promote new industry to locate in Barriere. “Green” industry will be a focus.
b) Assist in creating local agri-tourism opportunities;
c) Identify new forest programs that provide opportunities for economic development;
d) Establish an economic strategy to recognize non-timber forest products;
e) Investigate the development and uptake locally of co-generation and biomass-based energy; and,
f) Examine the opportunity of being a research and development centre for wildfire renewal.

3.1.19 To utilize surrounding resources and materials for added-value use.

a) Assess feasibility of using biomass for bioenergy opportunities, including leasing crown land for this purpose; and
b) Investigate industrial locations to manage resource recovery from local and regional waste flows.

3.2 ENVIRONMENT

Conservation of local ecosystems is critical to the well-being and survival of our own and future generations. Without a healthy environment, the social well-being, economic health, and sustainability of our community is not possible. The protection of the natural environment is complex and a responsibility shared by the Federal, Provincial, Regional and local governments through a variety of strategies and regulations. Barriere is situated at the confluence of the Barriere and North Thompson Rivers and has numerous natural features that contribute to the rural charm and beauty of the community and to the quality of life for residents. Residents of Barriere also value the clean water and fresh air that the surrounding environment provides. The District of Barriere must be proactive in policy that protects the natural resources, rural identity and scenic beauty of the community and surrounding area.

GENERAL ENVIRONMENT OBJECTIVES & POLICIES:

Water

3.2.1 To protect & enhance the quality of Barriere's, rivers, streams and ground water sources in order to provide an integrity level that supports the ecological services of the North Thompson River and Barriere River and Watershed.

a) Support and establish a Groundwater & Surface Water Protection Plan;
b) Require the implementation of Barriere Riparian Area Regulations for all development occurring within a Riparian Area;
c) Require all new development to connect to the District Water system, except where physically or economically unfeasible, as determined by the District;
d) Prohibit bulk water sales;
e) Encourage onsite treatment of stormwater with use of best management practices such as oil collectors at drains;
f) Require all developments to use proper construction and development best management practices such as silt fences, erosion control, etc.;
g) Work to maintain or improve the quality of the natural environment including fish habitat and water quality;
h) Promote permeable landscaping materials;
i) Promote the treatment of stormwater run-off onsite;
j) Require all off-street parking lots to install oil-collector systems; and
k) Create an auxiliary power system for water treatment and distribution.

3.2.2 To provide leadership to promote water conservation and further educational programs.

a) Develop a Water Conservation Plan
b) Undertake a water metering program;
c) Integrate the conservation of natural resources with other community values;
d) Support and encourage water conservation educational programs and materials;
e) Promote the use of grey-water systems;
f) Promote the use of rain barrels for water conservation for residential use;
g) Encourage requirements and incentives for low water use fixtures (e.g. low flow shower heads and toilets);
h) Require all new developments to incorporate onsite rainwater storage and reuse capabilities;
i) Implement public educational programs encouraging responsible water use and conservation technologies;

j) Promote water demand education, management and conservation as a component of a sustainable community; and
k) District offices to lead the way in water conservation measures by featuring:
    i. Dual-flush toilets
    ii. Water/energy efficient appliances
    iii. Low water dependent plantings

Energy

3.2.3 To work with Regional stakeholders and senior levels of governments to create renewable sources of energy in Barriere.

a) Support research and development in emerging energy fields including wind and run-of-river;
b) Encourage the development of independent power projects (IPP);
c) Conduct an energy audit of existing local government buildings and facilities;
d) Conduct an alternative energy feasibility study for the area that includes overall energy map (sources, flows and consumers);
e) Ensure all municipal buildings include energy efficiency elements when retrofitting;
f) All new municipal buildings shall meet green building standards;
g) Include energy and GHG emission considerations in all local government decisions;
h) Encourage all new buildings to be net-zero ready;
i) Investigate the feasibility of co-generation with local industry;
j) Investigate the feasibility of using biomass for alternative energy sources;
k) Encourage all new buildings to utilize solar hot water heating systems; and
l) Investigate the opportunity of district-heating systems for neighbourhoods.

3.2.4 To adopt an integrative and strategic approach to achieving GHG reduction actions through the coordination of policies respecting housing transportation and Local Economic Development.

a) Encourage all new commercial and institutional buildings to achieve a level of environmental building standard (i.e. LEED, Built Green, Living Building, etc.);
b) Encourage the use of 'green technologies' such as LEED or energy efficiency in the design of all new buildings;
c) Owners and tenants are encouraged to equip their dwelling units with EnergyStar™ appliances; and
d) Lead the way by implementing measures to ensure all municipal owned buildings are more energy efficient.

Integrated Sustainability

3.2.5 To not trade off short term financial gain for long-term negative environmental impacts.

a) Work with local developers to encourage green building practices including reduced waste generation and the energy efficient use of resources during construction;
b) Support educational programs that will create public awareness regarding the District of Barriere's collective environmental responsibility; and
c) Energy and water saving components are incorporated into the construction of new residential development.

Environmental Health & Safety

3.2.6 To minimize risks to life and property from natural hazards and disasters, such as floods, erosion and slides.

a) Establish safe and appropriate development using the Development Permit process on steep hillsides and other sensitive/hazardous areas;
b) Where lands subject to flooding are required for development within the municipal boundaries, the construction and siting of buildings shall be flood-proofed to those standards specified by the provincial ministry;
c) Minimize development within sensitive or hazardous areas;
d) Require geotechnical engineering assessments for all development (land subdivision and building permit) found within a hillside area (>30%), as depicted in Schedule "B". In areas mapped at 20% or greater the proponent may be required to provide more detailed slope data as part of their development application; and
e) Maintain a Wildfire Plan.

3.2.7 To move towards a level of air quality that does not impact the environment or population in a negative manner.

a) Create an appropriate regulation and/or awareness regarding idling of automobiles;
b) To encourage the development and adoption of policies that contributes to the reduction and prevention of air pollution;
c) Encourage and support a wood-stove replacement program for residential areas; and
d) Establish education material with regards to suitable burning practices (weather, things not to burn, etc.) and/or alternatives to burning (i.e. composting, biomass energy production, etc.).

3.2.8 To support local and regional ecosystem restoration initiatives to mitigate the risk of interface fire hazard[4].

3.2.9 To encourage the adoption and implementation of FireSmart principles and wildfire mitigation measures by property owners, occupiers and developers.

3.2.10 To encourage alternative methods of reducing the fuel load in consideration of the impact on air quality.

a) Support and encourage ecosystem restoration initiatives on Crown and private land to mitigate the risk of interface fire hazard are supported;
b) The use of fire rated building materials is strongly encouraged; and
c) Applications to amend residential land use designations will be considered with respect to the following FireSmart principles, as appropriate to the nature of the application:
   i. Compatibility of the proposed use in relation to the density and proximity of existing or proposed adjacent uses.
   ii. The implementation of phasing or staging of development to minimize the interface fire hazard risk.
   iii. Integration and promotion of building materials that minimize the risk of fires starting or spreading.
   iv. Availability of the appropriate firefighting equipment, training and apparatus to service the proposed development.
   v. The identification and utilization of alternative methods of fuel load reduction when clearing to reduce the risk of interface fire hazard is encouraged.
   vi. The integration of joint wildland and structural firefighting training for Volunteer Fire Department personnel is supported.

[4] *Climate changes and the expansion of development within and around Barriere area has led to a potential threat to the community from interface fire hazard. Barriere and the surrounding area have experienced some of the worst effects of wildfire in the last decade and historic fire suppression efforts to protect the community of Barriere and surrounding area were not effective.*

Natural Habitat & Ecology

3.2.11 To identify, protect, enhance and create environmental resources for the long term benefit of wildlife, natural ecosystems and the enjoyment of the present and future population and visitors to the District of Barriere.

a) Protect valuable existing green space/open space and foliage through appropriate regulations and guidelines on both private and public lands;
b) Require new sub-divisions to incorporate wildlife corridor accessibility, application of alternative design standards;
c) At time of development application require planting or retention of native landscaping (trees, shrubs, & plants) in all new subdivisions, developments and redevelopments;
d) Identify wildlife and wilderness connectivity opportunities through natural corridors, and surrounding watersheds;
e) All new development are required to follow Provincial BearSmart guidelines;
f) Work towards becoming a BearSmart Community;
g) Inventory, protect and enhance environmentally sensitive areas (ESA's), including natural watercourses, riparian and steep or unstable slopes;
h) All development within riparian areas is to be completed as identified in Schedule "F" Riparian Area Regulations;
i) Inventory, protect and enhance environmentally sensitive areas (ESA's), including natural watercourses, riparian and steep or unstable slopes; and
j) Adhere to the Environmental Best Management Practices for Urban and Rural Land Development (Ministry of Water, Land and Air Protection) and Develop with Care: Environmental Guidelines for Urban and Rural Land Development in British Columbia where applicable.

Stewardship

3.2.12 To reduce Barriere's solid waste amounts.

a) Work with local developers to encourage green building practices including reduced waste generation and the energy efficient use of resources during construction; and
b) Promote and encourage diversion of organic material from the landfill through promotion of composting.

3.2.13 To act as stewards of the pristine area that is found in and around the Barriere community.

a) Support the creation and cooperative use of local stewardship guidelines;
b) Encourage environmental stewardship programs, public education, awareness and participation;
c) Identify, protect, enhance and create environmental resources for the long term benefit of wildlife, natural ecosystems for the enjoyment of the present and future community residents;
d) Promote retention of natural vegetation along natural boundary of the rivers;
e) Restrict the use of pesticide and other chemicals on lawns and on-grade surfaces; and
f) Liaise with local stewardship organizations for mapping local knowledge.

Wildlife & Habitat

3.2.14 To protect valuable existing green space/open space and foliage through appropriate regulations and guidelines on both private and public lands.

a) Support the inventory and protection of provincially and federally listed species at risk;
b) Protect and restore habitats that support native species of plants and animals; and
c) Address threats to biodiversity during development processes including invasive species.

3.3 SOCIAL SYSTEM

The high quality of life the District of Barriere and the surrounding area provides for its residents is one of the most valuable elements of living in the community for many residents. This high quality of life includes the close proximity to a major centre (Kamloops), the close proximity to numerous outdoor recreational pursuits, a rural lifestyle, high level of health care and supporting services found within the community, the feeling of community safety for residents of all ages, access to higher level education, access to recreational services and the affordable costs of living in the community. Barriere is a place where people feel connected to the people in their community, and this extends to the neighboring First Nation community of Chu Chua, with whom we have a supportive and collaborative relationship. Simpcw First Nation has a membership of nearly 700 people who are a culturally proud community, valuing healthy, holistic lifestyles based upon respect, responsibility and continuous participation in growth and education.

SOCIAL OBJECTIVES & POLICIES

First Nation

3.3.1 To strengthen the District of Barriere's relationship with Simpcw First Nation by building bridges of diversity and cultural understanding.

a) Embrace and facilitate effective partnerships between community organizations, businesses and all levels of governments; and
b) Improve and maintain clear lines of communication between the local government, Barriere residents and surrounding areas.

Public Safety and Emergency Preparedness Management

3.3.2 To ensure Barriere's safety needs are being met.

a) Ensure adequate fire, rescue, policing, and emergency response services as the community grows;
b) Require development to cover added fire protection needs (i.e. equipment, underwriters survey, pressure increase);
c) Support the volunteer fire department with needed training and equipment;
d) Support initiatives to educate the community on safety issues;
e) Continue to work alongside the TNRD to create an Emergency Preparedness Plan;
f) Continue to support education on best practices for fire prevention, including wildland/urban fire hazard prevention;
g) Continue to work with the RCMP on providing adequate safety as the population grows and changes;
h) Incorporate crime prevention considerations through environmental design in development approvals; and
i) Encourage all members of the community to be prepared and aware of emergency routines.

Health and Quality of Life

3.3.3 To work towards a continuous improvement in quality of life for Barriere residents.

a) Support multi-modal travel within and outside Barriere;
b) Support local food production and distribution opportunities;

c) Provide seniors with the means to live a life as full as possible by promoting access to safe and affordable housing, supporting physical and social mobility and facilitating social engagement in the community;
d) Ensure the provision of broad community based recreation opportunities for all residents of Barriere that improve the quality of life and provide a means of social interaction for all; and
e) Continue to support and work towards a healthy community by providing safe, affordable and high quality recreation and leisure opportunities to all residents of Barriere.

3.3.4 To support the provision of providing sound primary healthcare and social services to the community.

a) Promote a healthy corresponding built environment (housing, roads and pathways) in order to increase the opportunities for local residents and visitors to make healthy lifestyle choices;
b) Ensure the provision of accessible, appropriate health care services for all residents; and
c) Work in conjunction with other communities such as the District of Clearwater, and the Simpcw First Nation, different levels of government and community groups to ensure a broader focus in dealing with health and safety issues.

Engagement, Education and Learning

3.3.5 To continue to encourage a variety of educational opportunities in Barriere.

a) Partner with education institutions to establish satellite campuses, research and development centres, co-op placements, etc.;
b) Work towards a full continuum of education outlets and opportunities for continual learning; and
c) Continue to support early childhood development opportunities in Barriere.

3.3.6 To continue to allow opportunities for public engagement and participation.

a) Create opportunities for youth involvement and input;
b) Create a youth advisory panel, consisting of youth from the area to advise on decision-making processes;
c) Encourage a youth entrepreneurship group;
d) Encourage a mentoring program connecting youth and elders;
e) Establish a partnership structure with School District #73, Interior Health and other organizations to develop a comprehensive collaborative approach to community engagement;
f) Encourage and support youth participation and opportunities for developing youth leadership skills in municipal and community organizations, programs and events;
g) Host semi-annual Town Hall meetings to discuss community issues; and
h) Include different forms of community involvement to gather public input for most community-based decisions.

Volunteerism

3.3.7 To support and encourage the exceptionally high rate of volunteerism found in Barriere.

a) Host annual volunteer appreciation celebrations;
b) Award a volunteer of the year;
c) Provide incentives for volunteering;
d) Mentor volunteers; and,
e) Welcome new residents via volunteer networks.

3.3.8 To provide opportunities for citizens to contribute positively to the community through volunteering, the provision of leadership development and support, and the empowerment of community members to identify needs, set priorities and pursue a common vision.

a) Investigate community-based assets which could be governed by volunteer groups;
b) Support the creation and maintenance of an up-to-date list of all community services and volunteer opportunities; and,
c) Support a leadership program for both youth and adults in the community and surrounding area.

Local Food System

3.3.9 To provide the residents of Barriere with the opportunity, knowledge and resources to produce, acquire, eat, enjoy and celebrate affordable and nutritious local food.

a) Encourage the featuring of local products at District of Barriere events and encourage food producers to retail locally;
b) Continue to recognize and celebrate farming (fall fair prizes, business development, farming/local food entrepreneur, compete in regional and international food-product competitions);
c) Promote organic food production;
d) Support the Barriere Community Garden(s) including the development of collective food storage, production and cooking; and,
e) Incorporate food-safe kitchens in public institutional buildings.

3.3.10 To create a link between food security & economic development initiatives.

a) Support food-related community events;
b) Support agricultural processing facilities in Barriere area;
c) Support the enhancement, promotion and expansion of the Barriere Farmers Markets with a goal of increasing the number and variety of vendors and the idea of buying locally including establishing it as a year-round event;
d) Work with other public use property owners (e.g. schools, churches) to convert sections of public parks, schools, and unused spaces into community gardens or food production areas; and
e) Investigate the ability to create local soil and nutrients from local waste and natural material.

3.3.11 To respect traditional hunting, gathering, and fishing territories, practices, and protocols of the First Nation.

a) Promote opportunities for indigenous peoples to maintain connections to land, traditions, communities, and identities;
b) Support the development of an educational awareness and understanding program on local agriculture and food issues and opportunities; and
c) Strengthen partnerships and collaborations with local and regional food groups such as the North Thompson Valley Food Coalition.

3.4 CULTURAL SERVICES

Arts, culture and heritage play a significant role in creating a vibrant community for residents and visitors alike. These aspects of the community also play a role in expressing the identity and character that makes Barriere unique. Arts, culture and heritage add a layer of cultural richness and highlight the ideas, values, sentiments and traditions that residents of the Barriere community have in common.

Buildings, structures, and landscapes, along with other pieces of heritage identity provide understanding, appreciation, and sustainability within a community. Local arts, culture and heritage help build a distinctive community and create social cohesion. This is what visitors use to select their destination and where businesses find attractive opportunities.

The diverse cultural elements of a community, both tangible and intangible, are avenues through which many socio-economic and environmental dimensions of a community are embodied. Key cultural elements in the community can also be used as anchors and focus points for policy and planning efforts to ensure cultural resources are integrated as a component of a community's sustainability.

The plan area has a rich archaeological history extending back thousands of years through inhabitation and utilization of the land and its resources by the Simpcw. The plan area contains recorded archaeological sites and has the potential to contain many more. The Province protects these sites, whether known or unrecorded, through the *Heritage Conservation Act*. The protection applies to both private and Crown land. Current knowledge about the known archaeological sites is gained through the Provincial database of recorded archaeological sites.

CULTURAL OBJECTIVES & POLICIES

First Nation

3.4.1 To help preserve the cultural resources of the plan area.

a) Work with local First Nation community in coordinating a community communications strategy for archaeological-based and cultural storytelling processes; and
b) Strengthen the District's relationship with Simpcw first Nation, building bridges of diversity and cultural understanding;

Heritage

3.4.2 To ensure that all community celebrations revolve around the cultural significance of the area.

a) Inventory local stories and events;
b) Encourage and support existing local heritage groups such as the North Thompson Museum and Archives; and
c) Encourage the use of spaces for public participation, education and enjoyment of culture through the planning and design of buildings, open spaces and public areas, including the street environment.

Arts

3.4.3 To develop an overall Barriere community identity that includes arts.

a) Ensure that art is visible in buildings and on the streets of Barriere;
b) Promote Barriere's arts and cultural activities in its tourism and economic development initiatives;

c) Integrate arts and culture into community planning, recreation programming, and economic development;
d) Recognize that Art and Culture be encouraged and promoted as an integral part of life in Barriere;
e) Involve all age groups in the local art and culture of Barriere;
f) Work in cooperation with other agencies such as the Barriere and District Heritage Society and North Thompson Arts Council in the provision of arts, culture and heritage services;
g) Honour history by protecting the heritage assets of our community, including the preservation of unique heritage resources;
h) Create defined spaces in the community for performing, visual, literary, historic, and multimedia arts; and
i) Assist in the creation of a communication network that links artists and artisans, arts groups and organizations to one another and to the community at large.

Parks & Recreation

3.4.4 To ensure diverse accessible services and facilities for all residents; integrate recreation and open space into compatible uses and linkages to tourism-based recreation.

a) Create and Maintain a Parks Master Plan as a guide for the planning and budgeting for parks & trails in Barriere;
b) Support and implement the recommendations in the Barriere Active Transportation Plan;
c) Ensure recreation facilities and programs are accessible to people of all ages, ethnicity, incomes, and abilities;
d) Include the requirement for all new developments to dedicate and construct pathways and trails in Development Permit and zoning amendments; and
e) Provide adequate park space in the community and establish links between our public open spaces.

3.4.5 To achieve a level of community ownership of our parks and open space system through community gardens and stewardship programs.

a) Encourage neighbourhood gardening and landscaping;
b) Create a recreation amenity list to guide future capital investment;
c) Establish a maintenance schedule to ensure trails and network are safe and accessible to all; and
d) Appoint a neighbourhood contact to liaise with Barriere user groups and sport organizations on their needs and requirements.

3.4.6 To provide a diversity of recreation facilities and programs.

a) Locate funding sources for community amenities such as BMX Park, Memorial Gardens, and a children's water park;
b) Create a well-connected active transportation network that extends through Barriere;
c) Establish a trail network into the Community Park; and
d) Extend trails to connect with the surrounding area outside Barriere.

3.5 LOCAL ECONOMIC RESILIENCY

Creating and maintaining a resilient local economy is one of the foundations of a sustainable community. The concept of Local Economic Development (LED) is based on promoting local approaches that respond to local assets and their opportunities rather than the needs of one stakeholder. The goal is to add to a greater whole.

Traditionally Barriere has been a forestry driven economy. Statistics illustrate approximately 75% of the labor force in Barriere's trading area is directly or indirectly dependent on the forest industry. More than half of the businesses in Barriere and the surrounding area are directly dependent on the existence of an active forest industry. Also, agriculture is also a major economic activity; there are almost 600 agricultural operators in Barriere's trading area; the major crop produced is alfalfa. Tourism is becoming more prevalent as Barriere is seen by many to be a tourism gateway for the Lakes area.

LOCAL ECONOMIC RESILIENCY OBJECTIVES & POLICIES

3.5.1 To take a strategic approach to economic development based on the nature of local needs and opportunities and community values.

a) To recognize and celebrate farming, forestry and agriculture;
   i. Planning
   ii. Harvesting
   iii. Processing
   iv. Silviculture activities
b) Establish Barriere as a centre of excellence and research in the areas of resource management;
c) Ensure that resources will continue to be provided over the long term allowing for a good quality of life for Barriere residents;
d) Actively engage local people and their local knowledge;
e) Continue to support the North Thompson Fall Fair and Rodeo;
f) Support and encourage resource value-added opportunities;
g) Support business incubation and start-up; and
h) Identify community-based enterprises and maintain and encourage a strong social economy.

3.5.2 To encourage an integrated and diverse economy.

a) Pursue local manufacturing and processing of unique food, and wood products;
b) Increase telecommunications and attract home-based tech businesses;
c) Encourage research and development;
d) Encourage and promote continual learning and education; and
e) Encourage pilot projects and demonstrations.

3.5.3 To create a local economy around local food and agricultural assets.

a) Continue to support the success of the local forestry initiatives;
b) Support the community forest corporation;
c) Support value-added agricultural operations;
d) Support local food production;
e) Support the creation of a local food system from growing to production, processing, distribution and consumption and nutrient recycling and composting;
f) Support local food entrepreneurs when they compete in regional and international food-product competitions;
g) Encourage the development of commercial kitchens in all public buildings;

h) Support the expansion of the Barriere Farmers Market in size, local scope and to become a year-round event;
i) Support use of municipal property for community food production infrastructure such as:
   i. Greenhouse
   ii. Storage
   iii. Drying room
   iv. Encourage composting at the Eco-Deport
j) Review land use zones to ensure they support agri-tourism practices and opportunities.

3.5.4 To continue to be a leader in economic development, research and development parallels the enterprise creation and advancement.

a) Establish clear linkages between policy and investment/spending and evaluation of inputs, outputs and outcomes;
b) Increase the amount of quality year-round income earning and employment opportunities;
c) Enhance agriculture as an industry and economic component of Barriere; and
d) Expand mutually beneficial economic relationships with Simpcw First Nations in the areas of tourism and forestry to ensure economic resiliency.

Infrastructure & Utility

Encourage growth of Barriere with an integrated approach to infrastructure planning and development. Take advantage of the opportunities from Highway 5 and create Barriere as a transportation hub for the highway users.

3.5.5 To adopt an integrated approach to Barriere's waste management system.

a) Promote recycling and responsible solid waste management practices;
b) Promote and encourage responsible waste management practices the District of Barriere will provide on-going public education campaigns to increase public knowledge about how to reduce solid waste;
c) Recycling will be encouraged and coordinated with the Regional District recycling program; and
d) Residents and visitors are encouraged to follow the principles contained within the TNRD Solid Waste Management Plan to reduce the amount of solid waste produced in the Barriere by following the five R's: reduce, reuse, recycle, recover and residual management.

3.5.6 To work towards connecting all of Barriere to the water and sewer systems.

a) Promote responsible on-site water and septic system management for all existing systems;
b) Review water use and encourage water metering for both residential and commercial sectors; and
c) Property owners and occupiers are encouraged to ensure that maintenance contracts for on-site septic systems are followed in accordance with the appropriate Provincial regulations.

3.5.7 To develop an efficient transportation system in Barriere.

a) Integrate non-vehicular transportation features within new developments;
b) Ensure that future development patterns and land use decisions recognize and support highway safety and mobility objectives;
c) Ensure proper signage and lighting for vehicular and non-vehicular networks;
d) Land uses adjacent to Highway 5 should be compatible with highway noise and traffic speed; and
e) Ensure that alternative transportation options within the local road network are retained.

3.5.8 To support opportunities for the integration of infrastructure required for technological innovations to facilitate information sharing and access.

a) Promote cooperation and co-location between utility telecommunication companies when locating new corridors, services or towers.

PART 4 - IMPLEMENTATION

4.1 LAND USE DESIGNATIONS:

RESIDENTIAL (RES)

To provide opportunities for a wide range of housing forms at various densities, and under various forms of tenure, to accommodate all income, age groups and households types. Complementary uses shall be considered through a neighbourhood plan or Zoning amendment process.

COMMERCIAL (COM)

To encourage commercial nodes in order to provide business opportunities, core services, and employment opportunities, for residents and visitors of Barriere.

INDUSTRIAL (IND)

To provide a suitable inventory of land for industrial and supportive uses in order to create a supply chain for business development, employment opportunities, innovation and entrepreneurship.

PARK (P-1)

To provide a diversity of dedicated land areas throughout the community for the purposes of recreation and environmental conservation.

INSTITUTIONAL & RECREATION (P-2)

To provide for public or private community-based institutional uses, including schools, places of worship, gyms, arenas and other facilities for the purposes of learning, reflection, sports & recreation, and social activity.

AGRICULTURAL LAND RESERVE (ALR)

To recognize and support rural resource activities (farming, forestry, aggregate extraction, renewable energy production) within the plan area in order to preserve resource land in order to ensure present and future food production and sustainable management of resources.

RURAL RESOURCE (RR)

To recognize and support rural resource activities (farming, forestry, aggregate extraction, renewable energy production) within the plan area in order to preserve resource land (includes Agricultural Land Reserve lands) in order to ensure present and future food production and sustainable management of resources.

Residential subdivision in an area designated Rural Resource may be permitted provided that it:

- Involves land that is unsuitable for resource use;
- Will have minimal impact on existing or potential use of adjacent parcels;
- Has an adequate supply of domestic water and means of sewage disposal; and
- Has been approved not hazardous to the environment by the appropriate Provincial agency having authority.

Sand/Gravel
To identify and preserve sand/gravel resources for future development.

Industrial development including Sand/Gravel Resources subject to established development criteria wherever applicable will be encouraged to locate on lands appropriately designated on the Land Use map.

The locations of known Sand/Gravel deposits within the Plan Area are identified and shown on the Land Use Map. The District does not have direct jurisdiction over the extraction of Gravel Resources. Council encourages the extraction and on-site processing of Sand/Gravel Resources be located on lands designated for rural, agricultural and/or industrial use within the Plan Area provided suitable noise and dust controls are employed. The appropriate Provincial agency having authority should be encouraged to work cooperatively with the District to ensure that the location of Sand/Gravel Resource extraction sites within the Plan Area are compatible with other land use activities in the vicinity.

4.2 DEVELOPMENT PERMIT AREAS

Barriere's Development Permit Areas are shown on Schedule "B" and follow eligibility as per the following subsections of Section 919.1(1) of the *Local Government Act*:

(d) - revitalization of an area in which commercial use is permitted;
(f) - establishment of objectives for the form and character of commercial, industrial or multi-family residential development;
(h) - establishment of objectives to promote energy conservation;
(i) - establishment of objectives to promote water conservation;
(j) - establishment of objectives to promote the reduction of greenhouse gas emissions.

Owners/Authorized Agents are required to obtain a development permit prior to altering, developing, or subdividing lands subject to a development permit as specified in Section 920 of the *Local Government Act*.

Development Permit Area #1 - Downtown Core
Development Permit Area #2 - Yellowhead Corridor
Development Permit Area #3 - Industrial

Where land is subject to more than one development permit area designation, a single development permit is required. The application will be subject to the requirements of all applicable development permit areas, and any development permit issued will be in accordance of all such areas.

4.2.1 DEVELOPMENT PERMIT AREA (DPA) #1 – DOWNTOWN CORE (Schedule "B")

4.2.1.1 JUSTIFICATION

Barriere's downtown vision is to create a vibrant downtown core that is cohesive, well-defined, and has a uniquely designed streetscape that attracts residents and visitors into the area. The downtown core is accessed by turning east off the southern section of the Yellowhead Highway onto Barriere Town Road. Key institutions and facilities located in this area include the Post Office, RCMP, Interior Savings Credit Union, AG Foods, IDA Pharmacy, Barriere Building Centre, Barriere Library, Barriere BC Ambulance Station, Barriere Health Centre, Barriere Fire Hall and Fadear Park, Bandshell and Ball Diamonds.

The following challenges that need to be addressed have been identified in both the Active Transportation Plan and the Barriere Town Road Revitalization Plan, both completed in 2009:

- Sidewalks;
- Pedestrian linkages to other parts of community;
- Empty commercial lots and derelict building stock; and,
- Lack and overall design of parking.

Key thoughts from the public taken from the Active Transportation Plan, 2009 include:

- Consistent character and image;
- Incorporation of public art in key nodes;
- Ornamental street lights with flowers, banners or seasonal decorations;
- Gateway at the highway (meeting point of Development Permit 1 & 2);
- Traffic calming at north and south end of development permit area;
- Defined vehicle parking and RV parking; and
- Improved pedestrian facilities.

4.2.1.2 Objectives and Principles

The District's objectives are to ensure that the subject lands achieve:

a) Mixed use – residential and commercial mixed use form;
b) Development practices that conform to design guidelines; and,
c) A streetscape concept with good accessibility, walkability and trail connections.

The following core principles should be addressed:

a) Design standards, which portray an attractive, unified, pedestrian-friendly downtown commercial core with complementary residential development;
b) Pedestrian interconnectivity between the Yellowhead Corridor, community parks and facilities, and outlying residential neighbourhoods can be found; and,
c) A communal district wastewater system for existing and new developments within the Downtown Core.

4.2.1.3 USES EXEMPT FROM A PERMIT

a) District development
b) Dedicated Parkland
c) Single Family or Two Family residential development

4.2.1.4 FORM AND CHARACTER

a) Buildings and adjacent open space shall contribute to the image of a high quality, pedestrian-friendly main-street (façade facing street frontage, front entry, front lighting on signage and architectural features, natural landscaping, durable hardscaping);
b) Desirable maximum building height is 3 stories unless justified otherwise;
c) Design of developments or re-developments should consider the design of adjacent buildings and open-space;
d) Encourage the creation of residential/commercial developments with the residential on the 2nd storey, including setbacks for 2nd storey to accommodate porch and roof-top patios; OR main-level residential dwelling unit located behind primary building;
e) Signage must be consistent with building design and positioned not to obscure architectural details; and
f) The design elements of the rear and sides of buildings must be considered.

Parking

a) Limit vehicle off-street access/egress points onto properties and encourage shared access/egress ways;
b) Off-street parking is encouraged to be placed behind the primary building;
c) Shared municipal parking lot for temporary parking needs; and
d) Provide separation and screening between roads and parking lots.

Pedestrian Mobility & Safety

a) Winter snow accumulation that is characteristic of Barriere winters will be considered in design and material selection. All pedestrian and vehicle access points must be protected from snow shed and ice accumulation;
b) Variety, continuity and pedestrian interest should be expressed in the design of buildings, especially at the ground level. Massive structures and long expanses of straight walls must be avoided;
c) Use changes in building material to relate building frontage to pedestrian scale;
d) Use of medians to allow for mid-street pedestrian cross-ways, beautification, signage and lighting;
e) Building lighting shall be subdued and directed downward and away from adjacent properties. Front lighting is preferred over other forms of illumination;
f) Strong linkages and public ROW dedication to connect to community parks and river trails;
g) Placement of benches and covered areas for pick-up areas (i.e. bus, car-pool, taxi);

h) Trail signage for pedestrians and non-motorized users;
i) Encourage beautification of street front with hanging baskets, flower boxes, green drains, public art and decorative trees; and
j) Place bike lock-up areas near gathering spots or busy nodes.

4.2.1.5 MATERIALS

a) Locally-sourced building materials are encouraged (stone, brick, wood);
b) Building materials must be durable and withstand the local climate which is characteristic of high temperatures and dry heat in the summer and cool winters with snowfall;
c) Encourage the use of building materials that have a high fire resistance as recommended by the BC FireSmart Manual: metal, clay tile and asphalt shingles for roofs; stucco, metal, brick and concrete for exterior walls;
d) Materials that can help achieve onsite energy production or water collection are recommended (solar hot water systems, PV arrays, water cistern systems);
e) The use of high quality materials with a natural appearance is an important concept to creating character in the Downtown Core;
f) Most appropriate materials include local wood, rock and stone; however similar materials and colours can be presented at time of development permit application; and
g) Corporate logos are encouraged to be incorporated into natural appearance of storefronts.

4.2.1.6 INTERCONNECTIVITY & GHG REDUCTION

a) Encourage mixed-use commercial/residential development uses in the Downtown Core in order to encourage pedestrian activity and lowered automobile use;
b) Encourage mid-block pathways;
c) Encourage the use of onsite renewable energy production;
d) Encourage onsite water collection, and storm water management;
e) Require businesses to employ solid waste management initiatives (bottle returns, extended producer responsibility policy);
f) Use tree foliage and other vegetation to shade parking lots and use permeable surfaces where possible;
g) Require pedestrian access that has a universally accessible design; and
h) Connectivity and access between the Downtown, and the Yellowhead Corridor, Parks, river trails, and adjacent neighborhoods.

4.2.2 DEVELOPMENT PERMIT AREA (DPA) #2 – YELLOWHEAD CORRIDOR (Schedule "B")

4.2.2.1 JUSTIFICATION

The Yellowhead Corridor DPA stretches north along the Yellowhead Highway # 5 from Russell Street in the south to the bridge over the North Thompson River. The goal is to establish an aesthetically pleasing gateway area that provides commercial services and encourages people to stop and shop as well as be directed towards Barriere's downtown with the aim of highlighting the community's assets. The current setting includes:

- Locations for signage directing visitors to downtown, fair grounds and other amenities;
- Location of "first impressions" for visitors;
- Wide highway right-of-way; and,
- High visibility by residents and visitors.

Elements requiring attention are:

- Challenges crossing or turning on/off Highway 5; and,
- No sidewalks or opportunities for alternative transportation.

Being the location of the primary opportunity to capture the attention of travelers heading north and south on Highway 5 looking for services, this DPA will require a coordinated approach towards the design of the buildings, traffic routing, signage and assignment of accessory uses in the area.

4.2.2.2 OBJECTIVES

The District's objectives are to ensure that the subject lands achieve:

a) Attractive design standards which portray a cohesive easily accessible commercial service-centre;
b) Visible interconnectivity between the Downtown Core and the trails, parks and pathways;
c) Mixed uses – service commercial and light industrial;
d) A safe and welcoming entrance to Barriere; and,
e) A high standard of landscaping to enhance the highway corridor.

4.2.2.3 USES EXEMPT FROM A PERMIT

a) Multi-use pathways along Highway #5 ROW;
b) North & south Gateway entrance parks; and
c) Trail connections at North Thompson River Bridge & Barriere River Bridge.

4.2.2.4 FORM AND CHARACTER

a) Visual and physical cues are encouraged to delineate the Yellowhead Corridor Area (i.e. traffic circle, median, boulevard, signage);
b) Buildings are positioned closer to the highway ROW setback with the majority of parking to the side or rear of the building;
c) Signage shall conform to municipal sign bylaw requirements (similar height, material, illumination), signage must be consistent with building design and positioned not to obscure architectural details;
d) Highway lighting shall be full-cut off and cover multi-use pathways (bollards);
e) Shared access/egress points are encouraged to limit the amount of collision opportunities;
f) Buildings and the open space around them shall contribute to the image of a vibrant service commercial corridor that provides goods and services to local residents and visitors;
g) Design of developments or re-developments should consider the design of adjacent buildings; and
h) Winter snow accumulation will be considered in design and material selection. All pedestrian and vehicle access points must be protected from snow shed and ice accumulation.

4.2.2.5 MATERIALS

a) Building materials must be durable and withstand the local climate which is characteristic of high temperatures and dry heat in the summer and cool winters with abundant snowfall; and
b) Most appropriate materials include local wood, rock & stone; however similar materials and colours can be presented at time of development permit application. Corporate logos to be incorporated into natural appearance of storefronts.

4.2.2.6 INTERCONNECTIVITY & GHG REDUCTION

a) Encourage connectivity and access between the Downtown Core, trails, parks and adjacent neighborhoods;
b) Encourage a multi-use pathway along Highway #5 ROW;
c) Provide trail signage for pedestrians & non-motorized users; and
d) Design for universal accessibility and public safety.

4.2.3 DEVELOPMENT PERMIT AREA (DPA) #3 – INDUSTRIAL DEVELOPMENT PERMIT AREA (Schedule "B")

4.2.3.1 JUSTIFICATION

There are two areas that make up the Industrial Development Permit Area. The first is located in the southernmost portion of the municipality on the east side of the Yellowhead Highway and abuts the municipal boundary. The second industrial area is located north of the Yellowhead Corridor Development Permit Area on the west side of the Yellowhead Highway. These areas have strong economic development potential with their locations along the Yellowhead Highway. In particular, the northern parcel is very large and is north of the centrally located Yellowhead Corridor Development Permit Area. Due to both of these parcels' close proximity to the Yellowhead Highway; it is important to carefully consider the form and character of new industrial development as they pertain to adjacent land uses. This will ensure any industrial activities can be mitigated in terms of noise, air quality, and visual quality as much as possible.

4.2.3.2 OBJECTIVES

The District's objectives are to ensure that the subject lands:

a) Promote industrial development;
b) Achieve design standards which screen industrial land uses from adjacent land uses; and
c) Ensure safe and efficient pedestrian access throughout the Industrial Permit Area and connecting to other areas of Barriere.

4.2.3.3 USES EXEMPT FROM A PERMIT

a) Multi-use pathways along Highway #5 ROW
b) Trails and other non-motorized pathways connecting to other parts of the community

4.2.3.4 FORM AND CHARACTER

General

a) Create a street presence with entrances and architectural interest in building designs fronting public streets;
b) The form and treatment of new buildings should reflect the desired character and pattern of development in Barriere by incorporating appropriate architectural styles, features, materials, proportions and building articulation;
c) Outdoor storage and less attractive structures such as accessory buildings should be screened with fencing or landscaping; and
d) Loading facilities should be located away from public streets and into the rear or the interior of a site.

Vehicle Parking & Circulation,

e) Wherever possible, the majority of parking and all loading areas should be located between or to the rear of buildings, with access from lanes or internal circulation.

Pedestrian Access

f) Provide well-defined and safe pedestrian access from parking areas and the public sidewalk to industrial uses. Design access to ensure that pedestrian use is given precedence over vehicular use; and,
g) Industrial developments with large parking areas should provide a direct pedestrian pathway system through the parking area to facilitate convenient and safe pedestrian access between building entrances.

4.2.3.5 MATERIALS

a) Building materials must be durable and withstand the local climate which is characteristic of high temperatures and dry heat in the summer and cool winters with abundant snowfall; and
b) Most appropriate materials include local wood, rock and stone; however similar materials and colours can be presented at time of development permit application. Corporate logos to be incorporated into natural appearance of storefronts.

4.2.3.6 INTERCONNECTIVITY & GHG REDUCTION

a) Encourage the use of onsite renewable energy production;
b) Encourage onsite water collection, and storm water management;
c) Use tree foliage and other vegetation to shade parking lots and use permeable surfaces where possible; and
d) Require businesses to employ solid waste management initiatives (industrial waste management techniques).

4.3 AMENDMENTS AND OTHER INFORMATION REQUIREMENTS

OCP Amendments

The OCP sets out the broad objectives and policies of the District of Barriere. The plan does not provide all the tools to implement the specific directions contained within in it. Many of the policy statements contained within the plan are not the direct responsibility of the District. In these cases, the OCP represents the District of Barriere's position with respect to the preferred course of action for other levels of government, public authorities or individuals.

4.3.1 In the future, plan amendments may occur in response to a change in the needs of the community or the objectives for development or conservation. Amendments may be initiated by the District of Barriere or by an application by a property owner. All amendments to the plan require a bylaw amendment as prescribed by the *Local Government Act*.

4.3.2 Upon application to amend the OCP the applicant shall demonstrate that the proposed development site(s) will have adequate access and infrastructure services and that they are able to sufficiently mitigate any hazardous site conditions such as soil erosion, flooding and wildfire.

4.3.3 To ensure that the OCP remains effective, relevant and responsive to the needs of the community, the OCP should be periodically reviewed to determine if the level of development that has occurred in the plan area, or a change in the other conditions, necessitates that the plan be substantially amended or re-written.

Zoning Bylaw Amendments

4.3.4 Parcels may be rezoned in conformity with the land use designations contained in the **Land Use Designations** map**.** The proposed zoning must also conform to the objectives and policies contained in the OCP.

4.3.5 The subject parcel(s) shall be developable and meet the requirements of the zoning bylaw.

4.3.6 The owner shall demonstrate that the proposed development site will have adequate access and infrastructure services and will sufficiently mitigate any hazardous site conditions such as soil erosion, flooding and interface fire.

Development Approval Information

4.3.7 Pursuant to Section 920.1 of the *Local Government Act* the District may require the submission of development approval information to ensure that sufficient supporting documentation is provided, prior to approval, to assess the potential impact of a development or activity. Development approval information may be required and apply to:

- Applications for amendments to the zoning bylaw;
- Applications for a development permit; and
- Applications for a temporary commercial or industrial use permit.

The procedures for the preparation and review of development approval information are established within the Development Approval Procedures Bylaw.

4.3.8 Development approval information may be required for the following circumstances and areas:

a) To assess the impact of the proposed development or activity on minimum usable site area requirements and flood protection works;

b) To minimize conflict between agriculture and other land uses and meet the objectives and policies identified within section 3.2 Local Economic Resiliency of this plan; and

c) To consider the impact of the proposed activity or development on environmentally sensitive areas, endangered and threatened species, wildlife habitat and corridors or water resources in order to meet the objectives and policies identified within the following sections of this plan:

i. Environmentally Sensitive Areas;
ii. Wildlife Habitat and Corridors;
iii. Water Resources; and
iv. Protection of the Natural Environment

4.3.9 Rationale

a) Any proposed development, buildings, structures are required to conduct a site analysis and submit an engineering study showing how the proposed development will not impact the natural environment or be negatively impacted by hazardous lands, such as steep slope and hillside developments;
b) Maintain a riparian buffer (min. 30m) along rivers and streams in the Plan Area, requiring that vegetation or trees be retained or planted and that preservation zones be established in order to protect banks or riparian areas;
c) In order to maintain public access to natural features and to promote public access to natural features, public trails must be continued, created and secured on the lands where environmentally appropriate;
d) In areas where slopes are >30%, the District may require that tree preservation zones be established to control erosion and/or protect the banks;
e) Steep sloped areas are to undergo risk assessments and require geotechnical studies to guide any development works in close proximity (>30%); and
f) In order to ensure adequate protection from seasonal flooding, erosion, and/or soil instability the District may regulate all land clearing, land grading, irrigation works, landscaping, and may require hazard lands to remain free of development.

MAP SCHEDULES

SCHEDULE B - **Barriere Development Permit Areas**

SCHEDULE C - **Barriere Land Use Designations**

SCHEDULE D - **Barriere Transportation and Trail Network**

SCHEDULE E - **Barriere Sensitive Ecosystem Areas**

PART 6 - APPENDICES

APPENDIX A - BARRIERE RIPARIAN AREA REGULATIONS

1.0 MANAGEMENT AND METHODS

The Riparian Area Regulation (RAR) assessment methods are to be followed with additional consideration of cumulative impacts of development along the entire length of the stream or wetland.

Trails can be located inside or outside the protective buffer zone; sections within or through sensitive habitats need to be constructed with high standards and are acceptable where:

(a) The ground is stable or will not be detrimentally impacted by the constructed trail;
(b) The sensitive habitat will not be impacted by the presence of the trail (some bird nest sites and sensitive ecosystems may be adversely affected);
(c) The habitat features are identified by interpretative signs including statements about their sensitivity to uncontrolled access; and
(d) Access is limited to the designated trail, through fencing, planting and designated people areas.

With effective planning and design, land use managers can utilize some sensitive habitats as features in greenways, linear walkways, and park trail networks and as green space amenities.

1.1 Where Properties are Adjacent to Barriere River and/or North Thompson River:

(a) No building shall be constructed, nor mobile home located within 30 horizontal metres of the natural boundary of the river. There is an option to decrease the setback with the implementation of a management plan with protocols prepared by a Qualified Environmental Professional (QEP).

(b) Areas used for habitation, business, or storage of goods damageable by floodwaters shall be established within any building at an elevation such that the underside of the floor system thereof is no lower than 3 metres above the natural boundary of the river.

1.2 Changes In and About a Stream:

Culverts, bridges, bank protection works, pipeline crossings and other changes in and about a stream (as defined in the Water Act) may negatively impact on the legal rights of downstream water licensees, water channel stability, flood levels and fish resource values. These changes in and about a stream are therefore regulated under Section 9 of the *Water Act* and Part 7 of the Water Act Regulations to minimize these negative impacts.

1.3 Stormwater Management:

During the past 15 years, a significant body of research has been completed regarding the impacts of urbanization on streams, lakes, rivers and wetlands. The findings clearly demonstrate that the most important impacts of urbanization on streams in order of importance are:

- Changes in hydrology;
- Changes in riparian corridor;
- Changes in fish habitat within the stream; and
- Water quality

Stormwater is the component of runoff that is generated by human activities. Stormwater is created when land development alters the natural hydrological cycle or water balance. To mitigate the cumulative impacts of stormwater resulting from changes to the natural water balance, the Province of BC has developed a guidebook to assist local governments, engineers and planners in clearly understanding the broader issues.

2.0 REPORTS REQUIRED

An Assessment Report is required for the District of Barriere before development is approved to proceed. This must be completed by a Qualified Environmental Professional (QEP) at the developer's expense. The Assessment Report must provide the following components:

- Evidence of the QEP's qualifications
- Ensure that proper assessment methods will be followed

2.1 Proposal for Management of Sediment

Information regarding the following components: streams, fish presence, fish habitat, animal presence, riparian vegetation and other ecosystem conditions that support fish life processes, removal of hazard trees, windthrow, drip zone and rooting strength, encroachment, sediment and erosion control measures, floodplain concerns, and on-site stormwater management.

- Information regarding potential impacts of the proposed development, mitigation options and design alternatives;
- Evidence that the development will not result in Harmful Alteration, Disruption, or Destruction (HADD) of riparian areas;
- Indicate that the slope stability will not be jeopardized if the area has a slope of 30% or more; and
- Identifies measures that will be required to maintain the integrity of the riparian area.

A proposal for the management of sediment during construction is required and needs to show how the stream, wetland, river, or any associated drainages will be protected from sediment, erosion, areas of exposed soil and runoff impacts that may result from construction or land clearing activities.

2.2 Drainage Plan

A drainage plan must be completed that includes recommendations for implementation with the proposed development that address the following factors: water quality, water quantity, erosion control, impact on fish and wildlife habitat, and physical riparian functions. The drainage plan should aim to minimize to the fullest extent the impact the development may have on the riparian area.

2.3 Viewscape Plan

A viewscape is all of the land and water seen from a point or along a series of points (e.g., a road or trail); it is also a point being viewed (e.g., a lookout, building, or sign). Viewscape management includes describing, planning, and designing the visual aspects of all components of the area, then working to achieve specific related objectives. Existing trees and native vegetation within the riparian assessment area are to be retained as much as possible; therefore, a Landscape Architect prior to any clearing or land alteration will complete a viewscape plan.

2.4 Re-Vegetation Plan

A QEP, in conjunction with a landscape architect, is required to provide a re-vegetation plan if the proposed area to be developed was previously cleared of native vegetation, or is cleared during the process of development. Conditions and requirements respecting implementation of the vegetation management may be specified in a development permit. The chosen vegetation should be native to the District of Barriere, and be selected for erosion control and/or fish habitat and animal habitat values as needed. Vegetation species used in replanting, restoration and enhancement shall be selected to suit the soil, light, and groundwater conditions of the site.

3.0 EXEMPTIONS

1. Emergency procedures to prevent, control, or reduce immediate threats to life or property, including:
(a) Emergency actions for flood and erosion protection, and clearing of obstructions from watercourses;
(b) Emergency works to protect, repair, or replace public utilities;
(c) Repairs to bridges or safety fences;
(d) Removal of trees when there is an imminent danger of the tree. All actions used to resolve emergency situations must be reported to the District of Barriere Public Works Department (250-672-9708), and,
(e) If appropriate, the federal and provincial authorities immediately. Any emergency works are to be undertaken in accordance with the Provincial *Water* and *Wildlife Acts* and the *Federal Fisheries Act.*

2. Removal of individual invasive species identified by a QEP, by hand or in a manner that does not unduly disturb surrounding native vegetation. The District of Barriere has an Inventory Package that QEPs can access which includes a list of invasive species.

3. The planting of native species trees, shrubs, or groundcovers for the purpose of enhancing the habitat values and/or soil stability within the development permit area provided the planting is carried out in accordance with the guidelines provided in the following documents: Stream Stewardship, 1993; the Environmental Objectives, Best Management Practices and Requirements for Land Developments March 2001, published by BC Ministry of Environment, Lands and Parks, or any subsequent editions.

4. Works approved by the District of Barriere, Fisheries)and Oceans Canada (DFO) and/or MOE with respect to installation of public utilities, sewer and water lines, stream enhancement, and fish and wildlife habitat restoration.

5. Renovations to existing buildings and structures in or in close proximity to riparian areas provided the footprint of the building is not expanded and none of the list of activities under the definition of Development occur.

3.1 Types of development that the RAR does not apply to

- Existing permanent structures and roads
- Parks and parkland

4.0 Monitoring and Enforcement

Monitoring of the proposed development site should be a collaborative effort between the following five participants: local government, QEP employed by the developer, landowners, non-government organizations (NGO) such as Stream Keepers, and the general public. The potential role of the general public would be to inform the QEP or the District of Barriere of violations.

Enforcement of the development activities, such as land clearing and excavation, shall be done through a QEP as well as the local government. As part of their due diligence, QEP's are expected to document any compliance problems with respect to riparian areas and water quality so that the problems can be addressed promptly, with copies of all reports forwarded to the municipality. This documentation can include verbal advice and warnings of non-compliance to the land development proponent. Following up on compliance problems will ensure they are addressed within a reasonable time period and, if they are not addressed, ensure these facts are also reported to the municipality. The District of Barriere may withhold occupancy permits or subdivision approvals if there is any report of non-compliance.

The importance of clearly identifying sensitive environmental resources as well as management and protection mechanisms for sensitive habitats and ecosystems in a plan prior to the design layout stage cannot be overstated.

5.0 Additional Tasks for Qualified Environmental Professional's

The QEP has the option of acquiring an unofficial Inventory Package (stream atlas, invasive species list, biological inventory) from the District of Barriere to use as a reference and guide to the start of their project. All QEP's will be employed and compensated by the developer. The payment for the QEP is an agreement negotiated strictly between the developer and the QEP and does not involve the District of Barriere.

A QEP will determine appropriate setback distances for buildings, structures and uses, in relation to riparian areas. Setbacks specified in the Zoning Bylaw for buildings, structures and uses, may be varied in accordance with the recommendations of a QEP to minimize encroachment into the riparian assessment area. Applicants will be required to confirm, through survey by a certified BC Land Surveyor, the top of the stream bank in relation to the property lines and existing and proposed development. There will be a minimum setback of five metres on all streams in the DPA regardless of whether they are fish bearing or not, as they are corridors for animals. The QEP will use their own discretion to determine further setbacks or default to the "riparian assessment area" distances, as stated on page two, in the Riparian Areas Regulation, July 27, 2004.

A QEP will determine appropriate timing, usage, and methods of construction that minimize the impacts on the riparian assessment area. Permanent or temporary fencing measures may be required to be installed at the applicant's expense along the boundaries of the riparian area prior to any development activities in order to ensure that no encroachment occurs into the riparian assessment area at the time of construction. A QEP will determine whether their presence is required during any riparian land alteration at the development site to ensure that Harmful Alteration, Disruption or Destruction (HADD) does not occur.

As part of their enforcement, the QEP will only be responsible for areas they have assessed. A QEP will determine whether their presence is required during any riparian land alteration at the development site to ensure that Harmful Alteration, Disruption or Destruction (HADD) does not occur. More than one QEP may be involved with the development depending on their strengths or expertise. A QEP shall indicate in writing that all riparian area regulations have been met before the District of Barriere will issue occupancy permits.

6.0 ACRONYMS

DFO – Department of Fisheries and Oceans
HADD – Harmful Alteration, Disruption, or Destruction
MOE – Ministry of Environment
MOE – Ministry of Environment
NGO – Non-Government Organizations
OCP – Official Community Plan
QEP – Qualified Environmental Professional
RAR – Riparian Area Regulation
SPEA – Streamside Protection and Enhancement Areas
SPR – Streamside Protection Regulation

7.0 DEFINITIONS for the purposes of this Riparian Areas Regulation

"Animals" Means a mammal, reptile, amphibian or bird.

"Assessment Report"
A report prepared in accordance with the assessment methods to assess the potential impact of a proposed development in a riparian assessment area and which is certified for the purposes of this regulation by a qualified environmental professional.

"Cumulative Impacts"
Those impacts that result from the incremental impact of our actions added to other past, present and reasonably foreseeable actions in the future.

"Development"
Any of the following associated with or resulting from the local government regulation or approval of residential, commercial or industrial activities or ancillary activities to the extent that they are subject to local government powers under Part 26 of the Local Government Act:
(a) removal, alteration, disruption or destruction of vegetation;
(b) construction or erection of buildings and structures;
(c) creation of non-structural impervious or semi-impervious surfaces;
(e) flood protection works;
(f) construction of roads, trails, dock, wharves and bridges;
(g) provision and maintenance of sewer and water services;
(h) development of drainage systems;
(i) development of utility corridors;
(j) subdivision as defined in section 872 of the Local Government Act;

"Development Proposal"
Any development that is proposed in a riparian assessment area that is within or partly within the boundaries of an existing development permit area.

"Fish"
All life stages of:
(a) salmonids
(b) game fish, and
(c) regionally significant fish

"High Water Mark"
For inland lakes, wetlands, those parts of the water body bed and banks that are frequently flooded by water so as to leave a mark on the land and where the natural vegetation changes from predominately aquatic vegetation to terrestrial vegetation (excepting water tolerant species).

"Invertebrates"
Any species without a spinal column.

"Natural Boundary"
Means the visible high water mark of a lake, watercourse, or other body of water caused by the usual action of the water in the ordinary years.

"Natural Features, Functions and Conditions"
Includes but are not limited to the following:
(a) large organic debris that falls into the stream of streamside area, including logs, snags and root wads;
(b) areas for channel migration, including active floodplains;
(c) side channels, intermittent streams, seasonally wetted contiguous areas and floodplains;
(d) the multi-canopied forest and ground cover adjacent to streams that
    i. moderates water temperatures,
    ii. provides a source of food, nutrients and organic matter to streams,
    iii. established root matrices that stabilize soils and stream banks, thereby minimizing erosion, and
    iv. buffers streams from sedimentation and pollution in surface runoff;
(e) a natural source of stream bed substrates; and
(f) permeable surfaces that permit infiltration to moderate water volume, timing and velocity and maintain sustained water flows in streams, especially during low flow periods.

"Permanent Structure"
Any building or structure that was lawfully constructed, placed or erected on a secure and long lasting foundation on land in accordance with any local government bylaw or approval condition in effect at the time of construction, placement or erection.

"Qualified Environmental Professional"
An applied scientist or technologist, acting alone or together with another qualified environmental professional, if:
(a) the individual is registered and in good standing in British Columbia with an appropriate professional organization constituted under an Act, acting under that association's code of ethics and subject to disciplinary action by that association,
(b) the individual's area of expertise is recognized in the assessment methods as one that is acceptable for the purpose of providing all or part of an assessment report in respect of that development proposal, and
(c) the individual is acting within that individual's area of expertise.

"Ravine"
A narrow, steep sided valley that is commonly eroded by running water and has a slope grade greater than 3:1.

"Riparian Area"
Areas adjacent to, streams, lakes, rivers and wetlands. These areas support a unique mixture of vegetation and habitat. Riparian areas are involved in the following actions:
- Filter contaminants from surface runoff and prevent erosion
- Sedimentation control
- Shade surface waters and maintain cool water temperatures
- Flood protection
- Provide fish and animal habitat and corridors

- An important food source for fish, invertebrates and animals.

"Stream"
Includes any of the following that provides fish habitat or an animal corridor:
(a) a watercourse, whether it usually contains water or not;
(b) a pond, lake, river, creek or brook;
(c) a spring or wetland that is connected by surface flow to something referred to in the above point (a) or (b).

"Streamside Protection and Enhancement Area (SPEA)"
An area that is:
(a) adjacent to a stream that links aquatic to terrestrial ecosystems and includes both existing and potential riparian vegetation and existing and potential adjacent upland vegetation that exerts an influence on the stream, and
(b) the size of which is determined according to this regulation on the basis of an assessment report provided by a qualified environmental professional in respect of a development proposal.

"Water Quality"
A term used to describe the biological, chemical and physical characteristics of water and its general composition. These attributes affect water's ability to sustain life and its suitability for human consumption.

"Wetland"
The land that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal conditions does support, vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, fens, estuaries and similar areas that are not part of the active floodplain of a stream.

APPENDIX B - GLOSSARY



A

Accessory Dwelling Unit: An accessory dwelling unit or a secondary suite is an urban planning term for an additional separate dwelling unit on a property or within a multi-family building that would normally accommodate only one dwelling unit. A secondary suite is considered "secondary" or "accessory" to the primary residence on the parcel.

Active Transportation: Also known as Non-motorized Transportation, this includes walking, bicycling, and small-wheeled transport such as strollers, skates, skateboards, and push scooters.

Adaptability: Whether it's the design of space in a building or an outdoor space such as a park, when thinking longer term, is it important to 'build in' the ability to allow changes to whatever we build or design so that we can accommodate the needs of different users in the long term.

Adaptation (re: Climate Change)**:** The ability of a system (e.g. ecosystem, social systems) to adapt to climate change or other environmental disturbances. This may mean moderating potential damages, taking advantage of opportunities, or coping with the consequences.

Affordable Housing: Housing affordability is a function of housing cost and household income. Affordable housing is defined as housing which has a market price or rent that does not exceed 30% of income households which have income that is 80% or less than the median household income for the community. Affordable housing can be provided by the private, non-profit, cooperative, and public sectors separately or through partnership models. Affordable housing includes a variety of tenure models including ownership, rental, co-housing, cooperative and rental.

Agricultural Land Reserve (ALR): Means lands designated pursuant to the *Agricultural Land Commission Act* to be preserved for agricultural use or uses compatible with agricultural purposes. The Agricultural Land Commission (ALC) decides on requests for exclusion, inclusion, subdivision and non-farm use of land in the ALR.

Agriculture: Means all farm uses permitted in terms of the *Agriculture Land Commission Act* and BC Regulation 171/2002 as an area than can be used, for example, for the growing, rearing, producing, harvesting and processing of agricultural products, including livestock, and the storage and repair of implements and machinery used for farming purposes, but does not include intensive agriculture.

Aging in Place: "Aging in place" is growing older without having to move from a building or, more often, a neighbourhood or city.

Alternative Design Standards (ADS): ADS are customized standards that improve the quality of design and efficiency in land use. Both the public and private sectors benefit from this smarter approach to development. They explore land development standards that are less expensive, less wasteful, and more environmentally and culturally sensitive.

Amenity: Means an item of benefit to the community that is determined through the development approvals process, and may include parkland, infrastructure, special housing, parking areas, streetscape improvements, community facilities and cash in lieu.

Amenity Migration: the movement of people from cities to rural areas for non-economic reasons.

Animal Husbandry: Means the agricultural practice of breeding and raising livestock. It has been practiced for thousands of years, since the first domestication of animals.

Aquatic Ecosystem: Means an ecosystem that exists underwater. Aquatic ecosystems can exist in a range of sizes from a drop of water or a puddle, to rivers and lakes and the entire ocean.

Arborist: Means a professional in the practice of arboriculture, the management and maintenance of trees. Work may also include care of shrubs, vines and other perennial woody plants. An arborist is distinct from a forester, or from a logger. Those professions may have much in common, but the scope of work is different. Arborists frequently focus on health and safety of individual trees, or wooded landscapes, rather than managing forests or harvesting wood.

Archaeological Site: Land containing material remains of archaeological value.

Asset Management: Asset management is the systematic process of maintaining, upgrading, and operating physical assets in a cost-effective manner.

Attainable Housing: Means the gap in houses and services for people who do not fall into provincially or federally defined affordable housing and do not make enough to purchase a market rate home.

B

Bare Land Strata Plan: A strata plan on which the boundaries of the strata lots are defined on a horizontal plane by reference to survey markers and not by reference to the floors, walls or ceilings of a building, or any other strata plan defined by regulation to be a bare land strata plan.

Baseline: Data on a current process that provides the metrics against which to compare improvements.

Biodegradable: Means any organic material that can be broken down by microorganisms into simpler, more stable compounds. Most organic waste such as foods, paper, etc. is biodegradable. Breakdown products can often be reused by other organisms as food and energy sources.

Bioswale: A technology that uses plants and soil and/or compost to retain and cleanse runoff from a site, roadway, or other source (e.g. vegetated ditch or depression)



Brownfield: Means lands that are abandoned, idled, or under used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contaminations. In municipal planning, brownfield land, or simply a brownfield, is land previously used for industrial purposes, or certain commercial uses, and that may be contaminated by low concentrations of hazardous waste or pollution and has the potential to be reused once it is cleaned up.

Buffer: Means an area typically within a lot, adjacent to and parallel with a property line, consisting of either existing vegetation or created by use of planted trees, shrubs, berms and fencing, and designed to obscure views from adjacent lots or public roads by at least 50% of the see through visibility.

Built Green BC: Built Green™ is a building industry based standard to promote construction of buildings that is healthier for the occupants and healthier for the environment. Sustainable or "green" building practices can reduce the tremendous impact that building has on both people and nature.



Better energy efficiency means comfort and long term savings for the homeowner.

- Healthier indoor air means comfort, better health and peace of mind for the family.
- Durable, reduced-maintenance materials mean a longer life for the home and long term savings.
- Preserving natural resources means leaving more for future generations to enjoy.

Sustainable building practices go beyond energy and water conservation, resource efficient building materials and superior indoor environmental quality.

Some of the key benefits are:

- Lower electric and water utility costs
- Environmentally effective use of building materials
- Enhanced health and productivity
- Long-term economic returns
- Reduced environmental impact

Built Green™ addresses energy through the use of EnerGuide ratings, while using a points scoring system for other environmental features, such as water, waste, materials, IAQ and developer business practices. The strengths of Built Green™ are its low cost, simplicity and use of a recognized energy standard.

Building Code of BC: Provincial legislation containing standards to which buildings must comply with health and safety requirements.

C

Carbon Neutral: Means emitting no carbon dioxide into the atmosphere. A plant is said to be carbon neutral if the carbon dioxide (CO_2) that it absorbs while alive is the same as the (CO_2) it emits when burned as a fuel. For people and organizations, becoming carbon neutral is usually achieved by implementing renewable energy projects such as planting trees, which absorb CO_2) that offset the amount of carbon dioxide emissions.



Charrette: An intense time limited workshop held early in the design phase of a project in which the design team, contractors, end users, community stakeholders, and technical experts are brought together to develop goals, strategies, and ideas for maximizing the performance of a project.

Chicane: An `S` bend in a roadway that reduces speeds by forcing drivers to drive through in a single file.

Climate Change: Changes in long-term trends in the average climate, such as changes in average temperatures. According to the United Nations Framework Convention on Climate Change (UNFCCC), climate change is a change in climate that is attributable directly or indirectly to human activity that alters atmospheric composition.

Climate Change Mitigation & Adaption: Means a change in climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability over comparable time periods. Climate change can be caused by an increase in the atmospheric concentration of greenhouse gases, which inhibits the transmission of some of the sun's energy from the earth's surface to outer space. The increased concentrations of greenhouse gases result in part from human activity including deforestation, the burning of fossil fuels such as gasoline, oil, coal, and natural gas and the release of CFC's from refrigerators, air conditioners, etc.

Cluster Development: Development that concentrates buildings and infrastructure in specific areas on a site to allow remaining land to be used for recreation, common open space, or the preservation of historical or environmentally sensitive features.

CMHC: Canada Mortgage & Housing Corporation

Cogeneration: A process in which an industrial facility uses its waste energy to produce heat or electricity. Cogeneration is a thermodynamically efficient use of fuel. In separate production of electricity some energy must be rejected as waste heat, but in cogeneration this thermal energy is put to good use.

Complete Street: A multi-modal street that is designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and bus riders of all ages and abilities are able to safely move along and across a complete street.

Construction and Demolition Waste: Waste building materials, tree stumps, and rubble resulting from construction, remodeling, repair, and demolition of homes, commercial buildings and other structures and pavements.

Core Need: Households in core housing need are those individuals who currently reside in housing that is either in need of major repair, does not have enough bedrooms for the size and makeup of the household, or costs 30 percent or more of their total income, and who are unable to rent an alternative housing unit that meets these standards without paying 30 percent or more of their income.

Cost and Benefit Analysis: An economic method for assessing the benefits and costs of achieving alternative health-based standards at given levels of health protection.

Crime Prevention Through Environmental Design (CPTED): Means a proactive crime prevention strategy utilized by planners, architects, police services, security professionals and everyday users of space.

CPTED surmises that proper design and effective use of the built environment can lead to a reduction in crime and improve the quality of life.

Crown Land: Land owned by a ministry of a provincial or federal government.

D



Densification (see also Infill): As far as land use planning in BC is concerned, this term means to add new residential units to an existing neighbourhood. This may or may not include population increase as people per household declines. This can include a house, an apartment unit, a condominium or any other form of housing.

Density: Means a measure of the total number of dwelling units or total floor area on a parcel of land. Expressed as units per metres and/or floor area ratio (FAR).

Density Bonus: Means an increase in the allowable number of dwelling units or floor area on a parcel of land in exchange for an amenity provided by the developer for the community. Typically implemented through density bonusing provisions in the zoning bylaw.

Development: Means (a) removal, alteration, etc. of vegetation; (b) disturbance of soils; (c) construction of buildings and structures; (d) creation of non-structural impervious or semi-impervious surfaces; (e) flood protection works; (f) construction of roads, trails, docks, wharves, and bridges; (g) provision and maintenance of sewer and water services; (h) development of drainage systems; (i) development of utility corridors; (j) subdivision as defined in section 872 of the *Local Government Act*.

Development Permit Areas (DPA): Means an area in which development and/or land alteration must follow specific guidelines and regulations as stated in a Development Permit.

Development Cost Charges (DCC's): Means monies that municipalities and regional districts collect from land developers to offset that portion of the costs related to these services that are incurred as a direct result of this new development. The demand created does not always relate to works that are located adjacent to the property being developed. For example, new development may require a local government to increase the size of its water storage reservoir. Developers pay DCC's instead of the existing taxpayers who are not creating the demand and are not benefiting from the new infrastructure.

District Energy System: District energy is an approach to supplying thermal energy in the form of steam, hot water and cold water through a distribution system of pipe from a central plant to individual users. Users then extract the energy from the distribution system for their individual heating, cooling and process requirements.

E

Easements: An easement is the right to do something or the right to prevent something over the real property of another. At common law, an easement came to be treated as a property right in itself and is still

treated as a kind of property by most jurisdictions, e.g. an access easement may provide access to from Parcel A to Parcel B.

Eco-based Management: Means a discipline in the management of natural resources such as land, water, soil, plants and animals, with a particular focus on how management affects the quality of life for both present and future generations. The discipline has given rise to the notion of sustainable development, a principle which forms the basis for land management and environmental governance throughout the world.

Ecosystem: Means the basic functional unit in ecology, the interacting system of a biological community and its non-living environmental surrounds. These are inseparable and act upon each other.

Environmental Resource: Means an area specifically designated to manage development and preserve the ecological integrity within an environmentally sensitive area such as the headwaters of a river, creek, a watershed or a designated wetland.

Environmental Scan: Means a site survey to identify potential environmentally sensitive areas (as defined in this document) and environmental features of interest will be performed by an environmental practitioner who is acceptable to the District. Data from other reports/tests required by this or other agencies may assist in this process (for example: hydrological, geological, soil analysis, etc.). A map will be provided identifying environmentally sensitive areas and environmental features, such as, but not limited to: rare plant communities, significant wildlife habitat, water bodies, existing wildlife trails and old growth trees/patches.

Environmentally Sensitive Areas (ESA's): Means those areas identified by a community and contained with Development Permit Area ESA's contain significant natural environmental features and their associated lands that require a level of protection to ensure their preservation. Natural environmental features may include land or land and water that contain fish or wildlife habitat, watercourses, estuaries, riparian areas, woodland vegetation, rock outcrops and lands with steep slopes.



EnerGuide: An EnerGuide rating shows a standard measure of your home's energy performance. It shows you (and future buyers) exactly how energy efficient your home is. The rating is calculated based on standard operation assumptions so that you can compare the energy performance of one house against another. The home's energy efficiency level is rated on a scale of 0 to 100. A rating of 0 represents a home with major air leakage, no insulation and extremely high energy consumption.

Environmental Impact Statement: A study undertaken by a registered professional biologist to evaluate the impacts of a proposed development on the natural environment including the following subject areas:

a. Physical Environment

Including soil erosion, unstable slopes, streams, flooding, ground water, air quality, and noise, contamination of land or water, and aesthetics;

b. Biological Resources

Including: birds, mammals, food chain effects, vegetation, biological diversity, loss or reduction of habitat, rare or endangered species, and rare or representative ecosystems.

Equilibrium Housing: Means the Canada Mortgage and Housing Corporation's (CMHC) net zero energy healthy housing initiative that has been officially branded Equilibrium Housing. It reflects the objective of balancing Canada's housing requirements with the need to preserve and protect the natural environment.

F

Flexi-zone: Means that permitted uses and other regulations may be modified depending upon if other conditions of the zone can be met. E.g. all forms of residential housing may be allowed in a zone however neighbourhood suitability, parking, open space, affordability, proximity to transit connections, etc. would all need to be met to be able to attain the higher density multiple-family use that is permitted in that zone.

Floor Area Ratio (FAR): Means the ratio of the gross floor area of a building to the gross area of the lot on which it is situated. Example: an FAR of 2.0 would indicate that the total floor area of a building is two times the gross area of the plot on which it is constructed, as would be found in a multiple-story building.

Food Security: Access by all people at all times to enough food for an active, healthy life. Food security includes at a minimum: ready availability of nutritionally adequate and safe foods; and, an assured ability to acquire acceptable foods in socially acceptable ways.

G

Geo-Exchange: Solar heat stored in the upper layers of the earth. This heat can be extracted and delivered to a building through a ground source heat pump.

Green Building: Means the practice of increasing the efficiency of buildings and their use of energy, water and materials, and reducing building impacts on human health and the environment, through better siting, design, construction, operation, maintenance and removal - the complete building life cycle.

Green Infrastructure: The ecological processes, both natural and engineered, that act as the natural infrastructure. This includes, swales, ditches, creeks, wetlands, parks, open space, vegetation, green roofs, and gardens, working lands, aquifers and watersheds that supply drinking water.

Greenfield: Previously undeveloped parcels that are not surrounded by existing development, or are surrounded by partially developed/low-density areas.

Greenhouse Gas (GHG)

Components of the atmosphere that contribute to the "greenhouse effect." Some greenhouse gases occur naturally, while others come from activities such as the burning of fossil fuel and coal. Greenhouse gases include water vapor, carbon dioxide, methane, nitrous oxide, and ozone.

Green Wall: Means any portion of a wall enclosing a building floor area that allows or facilitates plants to thrive in a manner that the plants over or otherwise become the principal focus of the wall, and define the wall's visual character.



Ground-Oriented Multi-Family Units: Dwelling units that are accessible by ground, including with one flight of stairs, with outdoor living space. Examples include townhouses, rowhouses and duplexes. First or

second floor units of low-rise multi-family dwellings may also be considered.

Growth Management: A general term used regarding regulation of land use and development that seeks to focus, guide or contain urban development.

Greywater: Waste water from the kitchen, laundry and bathroom (but not the toilet). It usually contains soap, detergents and fats.

H

Habitat: Means the place where population (human, animal, plant or microorganism) lives and its surroundings, both living and non-living.

Heritage: Means the set of all things, places and ideas inherited from the past which are of special significance to the collective life of a community, including both natural and human-built elements.

Heritage Site: Land, whether designated or not, including land covered by water that has a heritage value to British Columbia, a community or an aboriginal people.

High Occupancy Vehicle (HOV): A passenger vehicle carrying more than a specified minimum number of passengers, such as an automobile carrying more than one or more than two people. HOVs include carpools and vanpools, as well as buses.

Housing Agreement: An agreement between a property owner and the District pursuant to Section 905 of the *Local Government Act*.

I

Infill (see also Densification): As far as land use planning in BC is concerned, this term means to add new residential units to an existing neighbourhood. This may or may not include population increase as people per household declines. This can include a house, an apartment unit, a condominium or any other form of housing.

Infrastructure Services: The physical service elements without which a municipality cannot safely and efficiently function: roads, sidewalks, sanitary and storm sewer systems, water systems, etc.

(IDS) Innovative Design Standards: IDS includes engineered French drain technology, rain water detention ponds, narrow roads, permeable surfaces, retention of the natural ecosystems.



Industrial Development: Means any land development activity in the community, including but not limited to, non-offensive types of industry, processing and manufacturing activities, but not including development activity intended solely for residential, retail and or office use. Industrial development also includes any addition, remodeling, relocation or construction requiring an amendment to an approved Industrial Comprehensive Development Zone.

Innovative Development Standards (IDS): Means development standards that allow for more flexible requirements for road widths, building specifications, zoning uses and densities, and rainwater management that support Smart Growth objectives.

Development standards are the regulations, requirements and bylaws by which developments must abide. Development standards are often antiquated, over-prescriptive and cost prohibitive.

Institutional: Means an area specifically designated to encourage and contain new public and private Institutional development within the District. Typical of such development might be health care services complementary to those already in existence such as extended care and assisted living facilities. Institutional also refers to Public Utility lands.

Integrated Community Sustainability: Means a long term plan, developed in consultation with community member's that provides direction for the community to realize sustainability objectives it has for the environmental, cultural, social and economic dimensions of its identity.

Inventory (re: Climate Change): A tool developed to better understand and predict the impact of GHG emissions on climate change. A climate change inventory may be used as a tool to develop atmospheric models, develop mitigation strategies, establish compliance records with allowable emission rates, and track the effectiveness of policies related to GHG emissions.

J, K

L

Landscape Coverage: Means land that is undeveloped or developed that can support plant materials; or has decorative landscape treatment; or that may be used by customers for recreation, circulation, or may be viewed by them. Paved parking lot areas used for auto circulation or parking does not qualify as landscape coverage.

Landscaping: Means landscaping that provides sufficient quantity and quality of plant materials to screen parking, building, or hardscape areas of a project and provides colour and viewing interest.

LEED™: The Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings.

LEED Neighbourhood Design (LEED-ND): Means Leadership in Energy and Environmental Design for Neighbourhood Development, which is a rating system that integrates the principles of SmartGrowth, urbanism and green building into the National standard for neighbourhood design.



Level of Service: A standardized measure of infrastructure operating conditions, often defined with reference to a benchmark. The most common example is used by transportation engineers to indicate that traffic is moving at ideal, average, or poor efficiency and measured on a grade scale of "A" through "F".

Life Cycle: Refers to all stages of a building's development, from extraction of materials to construction, use, and disposal.

Life Cycle Analysis (LCA): The assessment of a building's full environmental costs, from raw material to final disposal, in terms of consumption of resources, energy and waste.

Livability: Livability refers to the environmental and social quality of an area as perceived by residents, employees, customers and visitors. This includes safety and health (traffic safety, personal security, and public health), local environmental conditions (cleanliness, noise, dust, air quality, and water quality), the quality of social interactions (neighborliness, fairness, respect, community identity and pride), opportunities for recreation and entertainment, aesthetics, and existence of unique cultural and environmental resources (e.g., historic structures, mature trees, traditional architectural styles). Livable communities directly benefits people who live in, work in or visit an area, increases property values and business activity, and it can improve public health and safety. Livability is largely affected by conditions in the public realm, places where people naturally interact with each other and their community, including streets, parks, transportation terminals and other public facilities, and so is affected by public policy and planning decisions.

Livable Wage: Means a wage that ensures employees are able to afford food, shelter and clothing in their local area.

Local Government Act: A law enacted by the BC Legislature formerly called the Municipal Act. The purposes of this Act are: (a) to provide a legal framework and foundation for the establishment and continuation of local governments to represent the interests and respond to the needs of their communities, (b) to provide local governments with the powers, duties and functions necessary for fulfilling their purposes, and (c) to provide local governments with the flexibility to respond to the different needs and changing circumstances of their communities.

Long Term Thinking: Sustainability requires us to think long term. 'Long term' has been defined many ways; some think about it as the next generations, some people actually prescribe time lines such as 50 years ahead or even 100 years. For the most part, plans or strategies are developed for 10-20 year time frames. Thinking long term permits us to think about what the future might look like and start planning for it early. If the last 100 years were any indication of how things can change, imagine the next 100!

Low-Impact Development: A comprehensive land planning and engineering design approach with a goal of maintaining and enhancing the pre-development hydrologic regime of urban and developing watersheds. This design approach incorporates strategic planning with micro-management techniques to achieve superior environmental protection, while allowing for development or infrastructure rehabilitation to occur.

Low Income Households: Low income households include those earning up to the maximum of $38,000/yr.; the new ceiling for eligibility for the provincial Rental Assistance Program.

M

Major Repairs: Major repairs refer to the repair of defective plumbing or electrical wiring, structural repairs to walls, floors or ceilings, etc.

Median Household Income: As reported by the Census, it is a form of average representing the midpoint of all household incomes in an area.

Minor Repairs: Minor repairs refer to the repair of missing or loose floor tiles, bricks or shingles, defective steps, railing or siding, etc.

Mitigation (re. Climate Change): An intervention to reduce the extent of global warming through reducing the sources or enhance the sinks of greenhouse gases.



Mixed Use: Provision of a mix of complementary uses, such as residential, community and leisure uses, on a site or within a particular area. *(Right)*

Multi-modal Transportation: Most goods and people movements involve more than one mode of transportation. Main modes include: walking, cycling, transit (e.g. bus, railcar, taxi, ferry, etc.), vehicles (single occupant and high occupant), and trucks, aircraft, boat and railcars for goods movement.

Multi-Family Residential: Includes duplexes, triplexes, townhouses, garden apartments and apartment blocks with a maximum density of 10-50 units per hectare, depending on the provision of affordable and special needs housing.

N

Native Plants: Means a plant that lives or grows naturally in a particular region without direct or indirect human intervention. These plants are adapted to the local climatic and soil conditions and therefore should be less dependent on inputs such as fertilizer and pesticides than many introduced species are.

Natural Boundary: Means the visible high water mark of any lake, river, stream or other body of water where the presence and action of the water are so common and usual and so long continued in all ordinary years as to mark upon the soil of the bed of the lake, river, stream, or other body of water a character distinct from that of the banks, in vegetation, as well as in the nature of the soil itself and includes the active floodplain. Where difficult to determine, the District reserves the right to require a professional to determine its exact location.



Naturescaping: Is a term that refers to a method of landscaping that allows people and nature to coexist. By incorporating certain plants, especially native ones, into one's yard, one can attract beneficial insects, birds, and other creatures, and help keep our rivers and streams healthy.

Needs Assessment: A needs assessment is a tool used to determine how well your community is currently meeting the

needs of your community and what other types of resources and services it can provide in the future. Results of a needs assessment study can be used to, determine whether community members satisfied with the standards of living (employment, housing, community infrastructure, environmental, social, health, recreational etc.); as an inventory on natural, human, physical, financial resources; to understand how the community is changing (e.g., socioeconomic status, demographics, etc.).

Neighbourhood: An imprecisely defined area within which people live, work, learn, and/or play. Its edges may be well-defined or more loosely felt by residents. Although it is often defined by a radius equal to an easy walk, its size may vary, from an easily walkable district to a larger region. In some cases, neighborhoods may overlap, especially where they are well-connected.

Neighbourhood Commercial: A commercial centre located within a neighbourhood offering goods and services for residents of the immediate area.

Net-Zero Emissions: Net-zero emissions refers to an organization that has minimized its carbon footprint to zero; also referred to as being carbon neutral. The emissions are direct or indirect. Net zero emissions is achieved by balancing a measured amount of carbon released with an equivalent amount of sequestered off-set, or buying enough carbon credits to make up the difference. It is used in the context of carbon dioxide releasing processes, associated with transportation, energy production and industrial processes.

O

Open Space: Means land that is undeveloped or developed that can support plant materials; or has decorative landscape treatment; or that may be used by customers for recreation, circulation or may be viewed by them. Walkways, plant beds, lawns and terraces within an open space area may be included as part of such open space area. Paved parking lot areas used for auto circulation or parking does not qualify as open space.

Open Space Preservation: The protection of natural areas both within and around communities that provide important community space, habitat for plants and animals, recreational opportunities, farm and ranch land (working lands), places of natural beauty and critical environmental areas (e.g. wetlands).

Organic Intensive Farming and/or Agriculture: Means a form of agriculture that relies on crop rotation, green manure, compost, biological pest control, and mechanical cultivation to maintain soil productivity and control pests, excluding or strictly limiting the use of synthetic fertilizers and synthetic pesticides, plant growth regulators, livestock feed additives, and genetically modified organisms. Since 1990 the market for organic products has grown at a rapid pace, averaging 20-25 percent per year to reach $33 billion in 2005. This demand has driven a similar increase in organically- managed farmland. Organic agricultural methods are internationally regulated and legally enforced by many nations, based in large part on the standards set by the International Federation of Organic Agriculture Movements (IFOAM), an international umbrella organization for organic organizations established in 1972. IFOAM defines the overarching goal of organic farming as follows: "Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved."

Orientation (Solar): Orientation of a structure for controlled solar gain is essential to the success of passive and active solar design elements. Sun charts and software assist in orienting a building for maximum solar benefit. Designing for solar considerations can substantially reduce both heating and cooling.

P

Parcel: Means the minimum amount that a single user may occupy. In many cases, more than one parcel will be combined for development of a single building or cluster of buildings to be used by a single user. (client concern, also linked to FAR, which I added an example and density.)

Parkland: Means an area of land preserved in its natural state or modified dedicated for public use.

Passive Solar: Strategies for using the sun's energy to heat (or cool) a space, mass, or liquid. A window, oriented for solar gain and coupled with massing for thermal storage (e.g., a Trombe wall) is an example of a passive solar technique.



Performance Bonding: Means a security given to ensure performance of an obligation arising under a permit, contract or similar obligation, and includes the terms under which the security may be realized.

Permeable Paving: Means a term used to describe paving methods for roads, parking lots and walkways that allow the movement of water and air through the paving material. Although some porous paving materials appear nearly indistinguishable from non-porous materials, their environmental effects are qualitatively different. Their effects are important because pavements are two-thirds of the potentially impervious surface cover in urban areas. Porous pavements have been called "the holy grail of environmental site design" and "potentially the most important development in urban watersheds since the invention of the automobile."

Pesticides: Means both chemical and biological substances designed to kill, repel, control or manage unwanted plants, animals, insects or microorganisms that damage, or interfere with the growth of crops, timber trees and other desired vegetation. Many chemical pesticides are persistent and bioaccumulative.

Phased Development Agreement: Means an agreement that gives a developer certainty that after development commences, the municipality cannot downzone the lands for up to 10 years. The agreement must be established by bylaw. Terms and conditions agreed to by the municipality and the developer can include, but is not limited to: the inclusion of specific features in the development, the provision of amenities, the phasing and timing of the development and of other matters covered by the agreement, and the registration of covenants under section 219 of the *Land Title Act*.

Procurement: Means the acquisition of goods and/or services at the best possible total cost of ownership, in the right quantity and quality, at the right time, in the right place for the direct benefit or use of governments, corporations or individuals, generally via a contract.

Public: Means what belongs to the people; relating to, or affecting, a nation, province, state or community; opposed to private; as, the public treasury, a road or lake. Public is also defined as the people of a nation

not affiliated with the government of that nation. Public also refers to the general body of mankind, or of a nation, province, state or community.

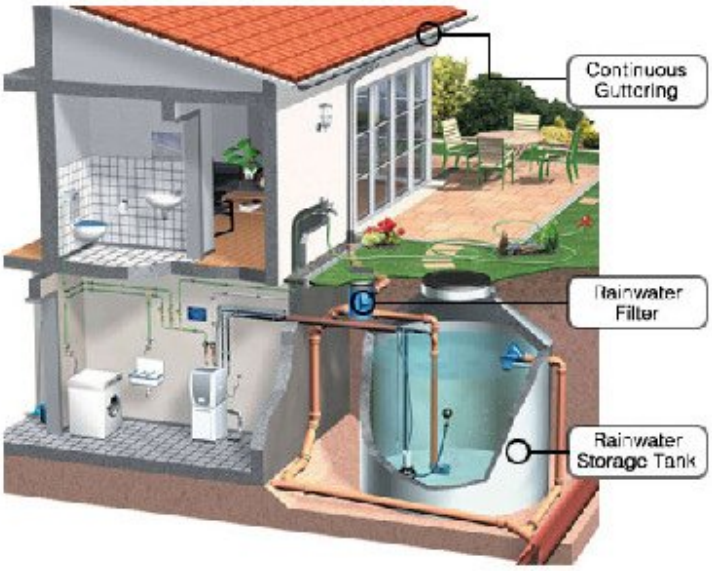
Public Space: Means any of a variety of spaces that are accessible and usable by the general public, including but not limited to: plazas, parkland, courtyards, and forecourts, sitting areas, widened sidewalks, stormwater/rainwater rain gardens and art or water features.

Q

Qualified Environmental Professional: Means "an applied scientist or technologist as defined in section 1(1) of the Riparian Areas Regulation, enabled by the Fish Protection Act, and amendments thereto."

R

Rainwater Harvest: On-site rainwater harvest and storage systems used to offset potable water needs for a building and/or landscape.



Recycled Content: The content in a material or product derived from recycled materials versus virgin materials.

Regional Growth Strategy: Growth management is a process involving collective action between government, residents and businesses to develop solutions to problems associated with rapid population growth, and ensure the long-term livability of the region. The strategy represents an agreement, developed and approved by the member municipalities and the regional district in partnership, on social, economic, and environmental goals and priority actions.

Renewable Resource: A natural resource (such as wood, water, wind, solar energy, etc.) that can be replenished or replaced by natural processes.

Right of way: The right to pass over property owned by another, usually based upon an easement. (2) A path or thoroughfare over which passage is made. (3) A strip of land over which facilities such as highways, railroads or power lines are built.

Riparian Assessment Area: Means as defined by the Riparian Areas Regulation (a) for a stream, the 30 m strip from high water mark on both sides of the stream; (b) for a ravine less than 60 m wide, a strip on both sides of the stream measured from the high water mark to a point that is 30 m beyond the top of the ravine bank; and (c) for a ravine 60 m wide or greater, a strip on both sides of the stream measured from the high water mark to a point that is 10 m beyond the top of the ravine bank.

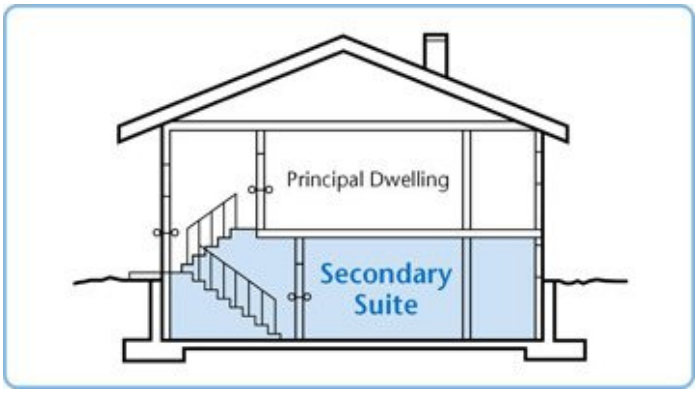
Riparian Areas: Means a streamside protection and enhancement area (SPEA's). Riparian areas are the terrestrial areas adjacent to a water body that are influenced by the soil moisture contributed by the water body.

S

Safety Planning: Means an approach whose objective is to ensure that safety becomes an explicit consideration in all areas of land use and transportation planning. Safety planning aims to reduce the risk, exposure, and consequences associated with an accident, and to achieve compatibility between a road's use, form and intended function.

Secondary Suite: Secondary Suite is an urban planning term for an additional separate dwelling unit on a property that would normally accommodate only one dwelling unit. A secondary suite is considered "secondary" or "accessory" to the primary residence on the parcel.

Shared Parking: A type of parking management in which parking spaces are shared by more than one user, which allows parking facilities to be used more efficiently. Shared Parking takes advantage of the fact that most parking spaces are only used part time by a particular motorist or group, and many parking facilities have a significant portion of unused spaces, with utilization patterns that follow predictable daily, weekly and annual cycles.



Smart Growth: Means a strategy for designing and building liveable and sustainable communities and cities: communities are 'smart' when they work for people, give them the widest range of opportunities and ensure their health in social, economic and environmental terms.

Social Marketing: The use of marketing principles and techniques to influence an audience to voluntarily accept, reject, modify or abandon a behaviour for the benefit of individuals, groups or society as a whole.

Solid Waste Infrastructure: The set of systems and facilities that are used to manage solid waste (garbage and recyclable materials); this includes storage, collection, transport, recycling, and disposal systems and facilities.

Steep Slope: Means lands in their natural state that have a slope angle of 30% or greater for a minimum horizontal distance of 10 metres.

Streetscape: Means the interrelationship of development, landscape and open space in a street. Also meaning an urban roadway design and conditions as they impact street users and nearby residents. Streetscapes are an important component of the public realm (public spaces where people often interact), which help define a community's transport conditions, activities, aesthetic quality and identity. Streetscaping (programs to improve streetscape conditions) can include changes to the road cross section, traffic management, sidewalk conditions, landscaping, rainwater management, street furniture (utility poles, benches, garbage cans, etc.), and building fronts and materials specifications. It also involves improving signage.

Stormwater Infrastructure: Stormwater infrastructure is the network of piping, systems and facilities that manage runoff from areas such as paved surfaces and roofs.

Stormwater Management: Building and landscape strategies to control and limit stormwater pollution and runoff. Usually an integrated package of strategies, elements can include vegetated roofs, compost-amended soils, pervious paving, tree planting, drainage swales, and more.

Subsidized Housing: This type of housing encompasses all types of housing in which the provincial government provides some type of subsidy or rental assistance, including public, non-profit and co-operative housing, as well as rent supplements for people living in private market housing. It also includes emergency housing and short-term shelters.



Supportive Housing:

- *Moderate Supportive Housing:* Dwelling units that are dedicated for persons with disabilities, independent senior living, or victims of abuse.
- *High Supportive Housing:* Dwelling units that require on-site support services for senior assisted living, shelters, or persons with mental illness or addictions.

Sustainability: Means that environmental and social systems continue to function long into the future. Economic systems must be healthy to help achieve the sustainability of environmental and social systems. Practices that would ensure the continued viability of a product or practice well into the future.

Sustainable Development: Means development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Principles of sustainable development are applied to the goal of creating a 'sustainable community' that has healthy natural areas, uses land efficiently, has vibrant, safe and accessible neighbourhoods, is designed for efficient resource use, transportation and servicing, and is equitable, affordable and fiscally responsible.

Sustainable Infrastructure: Is the term referring to a broader, sustainable approach to water, wastewater, stormwater, solid waste, and energy systems with a focus on climate-friendly strategies.

Sustainable Landscape: A landscape that uses environmental and financial resources efficiently. Characteristics of a sustainable landscape may include water conservation and infiltration, invasive plant prevention, and habitat enhancement.

T



Traditional Neighborhood Development: Development that is based on human-scale design with concern for walkability, and exhibits several of the following characteristics: alleys, streets laid out in a grid system, buildings oriented to the street, front porches on houses, pedestrian-orientation, compatible and mixed land uses, village squares and greens.

Traffic Calming: Traffic calming involves changes in street alignments, installation of barriers, and other physical measures to reduce traffic speeds and/or cut-through volumes to improve street safety and livability.

Tree Cover: Means the area of a residential and recreational development that is covered by the combined canopy of all resident trees. Total canopy area is measured or estimated for all trees at maturity.

U

Universal Design: Access to environments and products that are designed to the greatest extent possible, to be accessed and used by everyone regardless of their age, ability, or circumstance.

Upstream Approach: Means a comprehensive sustainability approach to planning that must integrate innovative solutions to address local and global challenges and employ an upstream and systems-based perspective at all levels (i.e. focus on root causes, not symptoms). An upstream approach to planning avoids problems before they occur, as opposed to a 'downstream' approach where resources are used to deal with the results of the problems. A system is made up of many different parts that work together and share a basic set of principles. Identifying and avoiding problems upstream requires an integrated systems approach, which involves understanding the connections and relationships among different parts of the entire system rather than only looking at individual parts.

Urban: Means an area with an increased density of human created structures in comparison to the areas surrounding it. This term is at one end of the spectrum of suburban and rural areas. An urban area is more frequently called a city or town. Urban areas are created and further developed by the process of urbanization. Measuring the extent of an urbanized area helps in analyzing population density and urban sprawl, and in determining urban and rural populations.



Urban agriculture: The practice of growing of plants and raising of animals for food and other uses within and around cities and towns, and related activities such as the production and delivery of inputs and the processing and marketing of products.

Urban Forest: The collection of all the trees and shrubs that grow within a city, town or a suburb looked together as one forest. In a wider sense it may include any kind of woody plant vegetation growing in and around human settlements. The benefits of urban forests are many, including beautification, reduction of the urban heat island effect, reduction of stormwater runoff, reduction of air pollution, reduction of energy costs through increased shade over buildings, enhancement of property values, improved wildlife habitat, and mitigation of overall urban environmental impact.

V

View Corridor: A three dimensional area extending out from a viewpoint. The width of the view corridor depends on the focus of the view.

Viewscape: Means a physiographic area composed of land, water, biotic, and cultural elements which may be viewed and mapped from one or more viewpoints and which has inherent scenic qualities and/or aesthetic values.

W

Walkability / Walkable: Walkability reflects overall walking conditions and usually takes into account the quality of pedestrian facilities, roadway conditions, land use patterns, community support, security and comfort for walking. The quality of pathways, building access ways and related facilities, the existence of sidewalks and crosswalks, roadway conditions (road widths, traffic volumes and speeds), accessibility (the relative location of common destinations) and the quality of connections between them all affect walkability.



Wastewater: The spent or used water from a home, community, farm, or industry that contains dissolved or suspended matter.

Wastewater System: Means a system of waste collection, treatment and disposal serving two or more dwelling units that has been approved and permitted by the agency having jurisdiction.

Water & Wastewater Infrastructure: The network of pipes, systems and facilities that provide fresh water supply and wastewater (sewage) management for communities.



Watercourse: Includes any of the following that provides fish habitat: (a) a watercourse, whether it usually contains water or not; (b) a pond, lake, river, creek, brook; (c) a ditch, spring or wetland that is connected by surface flow to something referred to in paragraph (a) or (b).

Waterfront: Land which is contiguous to a body of water.

Watershed: Area of land that contributes runoff to a particular, common body of water.

Water Supply Infrastructure: Water supply infrastructure could include everything between the water source, and the buildings or site where the water is delivered. System components include water supply conveyance, water treatment plants, and water distribution networks.

Wildfire Interface: The wildland-urban interface where risk of harm to people and property can be significant.

X

Xeriscaping: An environmentally friendly form of landscaping that uses a variety of indigenous and drought tolerant plants, shrubs, and ground cover.



Y
Z

Zoning Bylaw: Means an implementation tool for the Official Community Plan, the zoning bylaw regulates land use, density and development for specific areas or parcels of land in the community.