RECORD OF AMENDMENTS TO OFFICIAL COMMUNITY PLAN BYLAW NO. 1115, 2011 ELECTORAL AREAS E and H

ELECTORAL AREAS E and H					
Amending Bylaw No.	<u> </u>		Summary of Amendment	Date of Adoption	
	Text ✓	Map ✓			
1264	✓		Riparian Area Regulations	2014 05 27	
1280		✓	Redesignate from Agricultural to Institutional	2015 04 28	
1334		✓	Redesignate from Limited Use to Residential Limited Use	2015 12 16	
1533	√	✓	Recognizes EA E and H Split; amends other Subdivision and Density and Resort Residential Sections	2019 09 18	
1599	✓	✓	Erosion Setback Line Updates for the Chilliwack River Valley	2021 01 28	
1628	√		to revise the Official Community Plan Amendment Bylaw No. 1599, 2020 – clerical errors	2021 05 27	
1460	✓	✓	Redesignate from Limited Use to Suburban Residential	2022 09 22	
1668			Omnibus Amendment re Regional Consolidated Zoning Bylaw 1638, 2021	2022 10 27	

FRASER VALLEY REGIONAL DISTRICT

Bylaw No. 1115, 2011

A Bylaw to Adopt an Official Community Plan for Electoral Areas E and H

1. CITATION

This bylaw may be officially cited for all purposes as "Fraser Valley Regional District Official Community Plan for Electoral Areas E and H Bylaw No. 1115, 2011".

2. AREA OF APPLICATION

This bylaw shall apply to the areas shown on the map attached hereto as "Schedule 1115-A Official Community Plan Boundary" which forms an integral part of this Bylaw.

3. SCHEDULES

- a) "Fraser Valley Regional District Official Community Plan for Electoral Areas E and H
 Bylaw No. 1115, 2011" is comprised of the following:
 - i. Schedule 1115-A Official Community Plan Boundary
 - ii. Schedule 1115-B Official Community Plan which includes text, maps, tables, figures, and the following schedules:
 - Schedule 1 Boundary of the Plan Area
 - Schedule 2 Land Use Designations
 - Schedule 3 Development Permit Area 1-E
 - Schedule 4 Development Permit Area 2-E & 3-E
 - Schedule 5 Development Permit Area 4-E
 - Schedule 6 Development Permit Area 5-E
 - Schedule 7 Development Permit Area 6-E
 - Schedule 8 Development Permit Area 7-E
 - Schedule 9 Parks
 - Schedule 10A Cultus Lake South Neighbourhood Plan Boundary
 - Schedule 10B Cultus Lake South Neighbourhood Plan Land Use Concept Map
 - Schedule 10C Cultus Lake South Neighbourhood Plan Trail Concept Map
- b) The Schedules listed in Paragraph 3(a) are an integral part of this bylaw.

- c) The Schedules listed in Paragraph 3(a) constitute the Official Community Plan for Electoral Areas E and H of the Fraser Valley Regional District, the location and area of which is outlined on Schedule 1115-A Official Community Plan Boundary.
- d) If any schedule, section, subsection, sentence, clause or phrase of this Bylaw is for any reason held to be invalid by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Bylaw.

4. REPEAL

"Official Settlement Plan for Electoral Area E, Regional District of Fraser-Cheam Bylaw No. 400, 1982" and any and all amendments thereto, are hereby repealed.

5. **READINGS & ADOPTION**

READ A FIRST TIME THIS	22 nd Day of November, 2011
READ A SECOND TIME THIS	28th Day of August, 2012
A PUBLIC HEARING WAS HELD ON THE	12 th Day of September, 2012
SECOND READING WAS RESCINDED THIS	26th Day of March, 2013
READ A SECOND TIME THIS	26 th Day of March, 2013
A PUBLIC HEARING WAS HELD ON THE	12th Day of June, 2013
READ A THIRD TIME THIS	13th Day of August, 2013
ADOPTED THIS	13 th Day of August, 2013
Chair/Vice-Chair C	orporate Officer/Deputy

6. **CERTIFICATION**

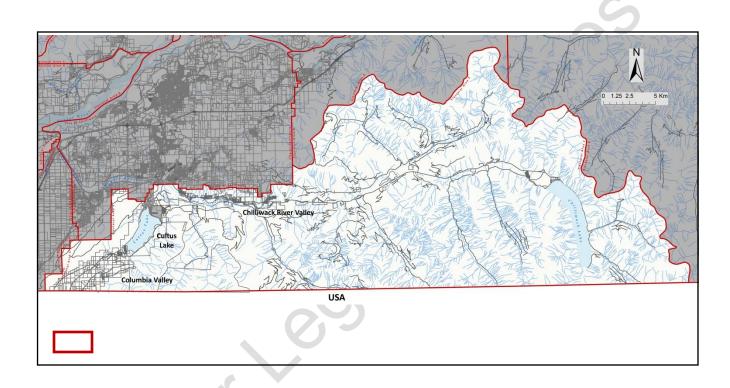
Corporate Officer/Deputy

I hereby certify the foregoing to be a true and correct copy of "Fraser Valley Regional District Official Community Plan for Electoral Areas E and H Bylaw No. 1115, 2011" as adopted by the Board of Directors of the Fraser Valley Regional District on the 13th day of August, 2013.

Dated at Chilliwack, BC on the 14th day of August, 2013.	

FRASER VALLEY REGIONAL DISTRICT OFFICIAL COMMUNITY PLAN FOR ELECTORAL AREAS E AND H BYLAW No. 1115, 2011

Schedule 1115-A Official Community Plan Boundary



This is Official Community Plan Schedule 1115-A, attached to and an integral part of "Fraser Valley Regional District Official Community Plan for Electoral Areas E and H Bylaw No. 1115, 2011".

Chair/Vice Chair	Corporate Officer/Deputy

FRASER VALLEY REGIONAL DISTRICT OFFICIAL COMMUNITY PLAN FOR ELECTORAL AREAS E AND H BYLAW No. 1115, 2011

Schedule 1115-B Official Community Plan

This is Official Community Plan Schedule 1115-B, attached to and an integral part of "Fraser Valley Regional District Official Community Plan Electoral Areas E and H Bylaw No.1115, 2011".

Chair/Vice Chair Corporate Officer/Deputy



FRASER VALLEY REGIONAL DISTRICT OFFICIAL COMMUNITY PLAN FOR ELECTORAL AREAS E and H BYLAW No. 1115, 2011

Schedule 1115-B Official Community Plan

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1.0 Plan Purpose & Structure

Community planning in Electoral Areas E and H started in 1983 when the Regional District of Fraser-Cheam adopted "Official Settlement Plan for Electoral Area "E", Regional District of Fraser-Cheam Bylaw No. 400, 1982". Bylaw No. 400 was updated in 1994 to incorporate hazard information for the Chilliwack River Valley. Overall, the Official Settlement Plan has served the community well for many years. This Plan is a comprehensive update to Bylaw No. 400.

This plan was amended in 2019 to recognize the division of the former Electoral Area E of the Fraser Valley Regional District into Electoral Areas E and H in accordance with Order in Council No.501, approved and ordered on September 5, 2014 and Letters Patent effective December 17, 2014 issued by the Province of British Columbia. [Byl # 1533, 2019]

1.1 Purpose of the Official Community Plan

Official community plans (OCPs) are defined by the <u>Local Government Act</u> as broad statements of objectives and policies which guide planning and land use management decisions. The <u>Local Government Act</u> sets out required content for OCPs, including:

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

Official Community Plans may also include policies respecting a variety of other matters including social needs; the regional context the plan area is located within; the maintenance and enhancement of farming; and, the preservation, protection, restoration and enhancement of the natural environment.

1.2 Effect of the Plan

In accordance with the <u>Local Government Act</u>, the Regional Board is required to comply with the policies of this Official Community Plan as follows:

a. A zoning bylaw enacted prior to the effective date of this Plan is not altered by this Plan.
 Where such a bylaw is amended, the amending bylaw must be consistent with the provisions of the Official Community Plan.

- b. The adoption of this Plan does not commit the Regional Board or any other governmental body to undertake any project outlined herein, nor does it authorize the Regional Board or any other governmental body to proceed with a project except in accordance with the procedures and restrictions laid down by any Act.
- c. All bylaws enacted and works undertaken by the Regional Board shall be consistent with the Official Community Plan.
- d. Consolidated Zoning Bylaw: The Board intends on consolidating and updating all nine zoning bylaws within the Regional District for the limited purposes of creating one new, more user-friendly, region-wide consolidated Zoning Bylaw applicable to all electoral areas. It is a policy of the Regional District that this Plan facilitates that zoning bylaw consolidation including by not requiring that all regulations applicable to each property and each zone implement fully the policies and land use designation of this Plan. While an objective of the consolidation is to avoid significantly altering the regulations applicable to any particular parcel of land or zone, there will inevitably be different regulations in certain instances as the current zoning bylaws were adopted between 1976 and 1992, and many similar zones can and should be consolidated. Where similar zones have different regulations, it is generally intended the most permissive would apply, and permitted land uses would not be taken away with the consolidation, which may result in land uses becoming available after the consolidation. Therefore, OCP Policies in this Plan, including land use designations and zone categories, permitted uses, densities, and subdivision regulations for the creation of new parcels, are, where necessary to achieve consistency, expanded to include the existing regulations under the various zoning bylaws and the new consolidated zoning bylaw. For certainty, these accommodations are limited to the Consolidated Zoning Bylaw Project and the situation where the existing zoning of a property or new consolidated zoning bylaw permits a use, density, or other development regulation different than otherwise identified in this Plan; by virtue of this provision, this Plan incorporates and permits those zoning regulations for that property such that there is no inconsistency with this Plan. Also, lands that have no zoning, may continue as such in the new zoning bylaw. However, all subsequent amendments to the new zoning bylaw must be consistent with this Plan without recourse to this policy. [Bylaw No. 1668, 2022]

1.3 Plan Area Location and Boundaries

In 2014, Electoral Area E was divided by Order in Council No. 501 and an amendment to the FVRD Letters Patent into Electoral Areas E and H. Electoral Area E consists of the Chilliwack River Valley. It borders the City of Chilliwack and Electoral Area H to the west, Electoral Area D to the north, Electoral Area B to the east and the U.S. border to the south. Electoral Area H consists of Cultus Lake and Columbia Valley. It borders Electoral Area E to the west, the City of Chilliwack to the north, the City of Abbotsford to the west, and the U.S. border to the south.

The plan boundary coincides with the political boundaries of Electoral Areas E and H and also the watershed divide separating lands draining to the Chilliwack River (thence to the Fraser

River) from lands draining more directly to the Fraser. The boundaries of the plan area are shown on *Schedule 1 - Boundary of Plan Area*. [Byl # 1533, 2019]

1.4 Planning Process

The preparation of this Official Community Plan involved consultation with the Electoral Area E and H residents, provincial and federal agencies, local interest groups and others. The planning process included:

- public open houses in the communities of Chilliwack River Valley and Columbia Valley/ Cultus Lake:
- newsletters and surveys mailed to households in the Plan boundary;
- early and on-going consultation with various agencies;
- extensive dialogue with two Advisory Planning Commission (APC) groups from the Chilliwack River Valley and Columbia Valley/Cultus Lake areas, comprised of local residents and property owners;
- many meetings with stakeholders, government agencies and others; and,
- open houses and public hearings prior to the adoption of the Official Community Plan.

Consultation was guided by "Electoral Areas "E" Official Community Plan Update: Consultation Strategy and Advisory Planning Commission", adopted at the May 2010 Regional Board Meeting.

1.5 Plan Structure and Interpretation

In this Official Community Plan, policies are numbered and clearly identified. They follow the phrase, "it is the policy of the Regional Board that". Policies are often preceded by a discussion which is intended only to provide the reader with context. Discussions are summaries only and are not comprehensive. They do not constitute Plan policies and must not be interpreted as complete statements of the intention of the Regional Board with respect to the policies that follow them. Ultimately, Plan policies stand on their own.

Particular attention should be given to the wording of the Regional Board policies contained in the Plan:

"**shall**" describes an imperative course of action which is within the scope of the Regional Board's powers to provide, enact, regulate or enforce;

"**should**" describes a desirable course of action to be taken by the Regional Board or other body or person;

"may" describes a permitted course of action which is available to the Regional Board or other bodies or persons; and,

"will" describes a result to be expected on the basis of present information.

This Plan contains both *Schedules* and *Maps*. Schedules contain official designations of the Regional Board including land designations, current and potential parks and development

permit areas. Boundaries between different land use designations are general and are not necessarily intended to conform to property lines. Schedules will be updated and amended as required. Maps display information that is useful in understanding Plan policies. Maps are unlikely to be updated; data shown on maps will become outdated.

It is the policy of the Regional Board that:

- 1.5.1 In this Plan, only statements clearly identified as policies of the Regional Board should be understood as Plan policies. Plan policies stand on their own as expressions of the Regional Board. Discussions, or non-policy statements, within the Plan are brief summaries provided for context only. They do not constitute plan policies and must not be interpreted as complete statements of the intention of the Regional Board with respect to the policies that follow them.
- 1.5.2 Boundaries between different land use designations are general and are not necessarily intended to conform to property lines.

1.6 Review and Amendment

From time to time, this Official Community Plan may be amended to allow for a development, a project of major significance, or a series of development proposals which warrant revision of the policies within the Plan. The Plan may be amended through two procedures:

- Applications for rezoning to permit developments that are inconsistent with the OCP shall be accompanied by applications for Plan amendments. The Board may reject the applications or initiate Plan review and amendment procedures in accordance with the provisions of the <u>Local Government Act</u> and pertinent FVRD bylaws. The Board may elect to defer zoning amendment applications that are inconsistent with this Plan until a process to review and update the Plan is complete.
- The Board may periodically initiate review and amendment of the Plan where warranted by development trends, new information regarding natural hazards, or at the request of local, provincial or federal governments.

It is important that the Plan policies and objectives reflect the community interest. To remain current, the Plan should be reviewed approximately every ten years. All Plan reviews should be substantially justified by new circumstances and provide ample opportunity for public input.

It is the policy of the Regional Board that:

- 1.6.1 The Official Community Plan should be reviewed at intervals of ten years and this review should be followed by appropriate amendments to guide development and land use for the next ten years.
- 1.6.2 The Official Community Plan may be reviewed and amended where deemed necessary by the Board only after consultation and public hearing and in accordance with the provisions of the <u>Local Government Act</u>.

- 1.6.3 All rezoning applications which are inconsistent with the Official Community Plan shall be accompanied by applications for amendment to the Plan.
- 1.6.4 The Regional Board may defer Plan amendment applications. The Board may give particular consideration to deferring applications for major amendments to the Plan especially amendments to facilitate developments or land uses which are particularly complex, require services not provided for in the Plan, or involve uses not contemplated within the Plan area until a broader Plan amendment and consultation process can be undertaken. Additionally, the Board may wish to consider such Plan amendment applications separate from any related zoning amendment applications.

1.7 Consultation & Cooperation

Implementation of the Official Community Plan depends upon community support and the cooperation of senior governments. Accordingly, the policies of this Plan reinforce the Regional Board's commitment to open discussion, local involvement and cooperation in community development.

Electoral Areas E and H are subject to aboriginal rights and title claims. Several First Nations may be affected by land use planning in Electoral Areas E and H, especially in the Chilliwack River Valley which is actively used for spiritual and traditional activities, and has documented and undocumented First Nation archaeological sites. Accordingly, the Regional District will consider the potential effects of land use plans and development approvals on the interests of First Nations and identify appropriate means of consultation. Consultation regarding land use matters may also be seen as an avenue for increased co-operation, understanding, and dialogue between First Nations and the Regional District and a basis for good-neighbour relations and servicing agreements.

Electoral Areas E and H share borders with the City of Chilliwack, City of Abbotsford, and Cultus Lake Park Board. It includes provincial parks and ecological reserves which receive many hundreds of thousands of users annually. There is a clear need for coordinated land use and shared servicing strategies for the Cultus Lake area and potentially for the Chilliwack River Valley. It is hoped that this plan may be a conduit for the development of a common vision, coordinated land use planning actions, the articulation of shared concerns, and long-term infrastructure investment agreements for these areas. It is the policy of the Regional Board that:

- 1.7.1 Consultation during the development, amendment or repeal of this Official Community Plan will meet or exceed the requirements of Section 879 of the <u>Local Government Act</u>. Consultation should be commensurate with the scope of the change contemplated.
- 1.7.2 Property owners and residents are invited to meet privately or in groups with Regional District staff and Board members to discuss individual or local concerns.

- 1.7.3 The Regional District will, where requested, assist in coordinating discussions between property owners and residents, school districts, provincial and federal agencies on matters of land use, roads and services.
- 1.7.4 It is the intention of the Regional Board that this Plan serve as a conduit for multi-jurisdictional infrastructure planning for the Cultus Lake area as a whole, particularly for sanitary sewer services. Such planning would include definition of common concerns, the adoption of a common vision, coordinated planning actions and formal infrastructure agreements.
- 1.7.5 The City of Chilliwack, the Cultus Lake Park Board and the City of Abbotsford should be consulted about amendments to this Plan that may affect their interests, particularly when land designations along the municipal boundary are under consideration; transportation/traffic implications are evident; major services are proposed; or, opportunities for shared services and coordinated planning are apparent. The scope and form of consultation shall be determined by the Regional Board and informed by discussion with the municipality.
- 1.7.6 First Nations including Soowahlie First Nation, Cheam First Nation, Popkum Band, Peters Band, Sumas First Nation, Stó:lō Nation, Stó:lō Tribal Society and the Ts'elxweyeqw Tribe shall be consulted respecting amendments to this Plan that may affect their interests in accordance with the requirements of the Local Government Act and the policies of the FVRD Board of Directors. The scope and form of consultation shall be determined by the Regional Board and informed by discussion with First Nations. Opportunities for shared services and coordinated land use planning should be explored.
- 1.7.7 Soowahlie First Nation, Cheam First Nation, Popkum Band, Peters Band, Sumas First Nation, Stó:lō Nation, Stó:lō Tribal Society and the Ts'elxweyeqw Tribe are encouraged to consult with the Regional District on matters that may affect the land and residents of Electoral Areas E and H.
- 1.7.8 Upon completion of the land use plan being developed by the Ts'elxweyeqw Tribe for their traditional territories and the land use code being developed by the Soowahlie First Nation for IR 14, a joint exercise involving the Ts'elxweyeqw Tribe, Soowahlie First Nation and FVRD should be undertaken to review these plans for consistency and identify opportunities for coordination, cooperation and shared services.

1.8 Implementation

The policies of the Plan may be implemented in a number of ways. Policies respecting matters within the jurisdiction of the Regional District can be implemented through the provision of services; servicing practices and standards; and, the subdivision and development control process, including zoning bylaws, subdivision standards, and the issuance of permits.

The Plan also contains advocacy policies which relate to matters that are the jurisdiction of provincial agencies or other authorities. These policies may be advanced through liaison with the responsible authority, including referral responses.

It is the policy of the Regional Board that:

- 1.8.1 The policies of this Plan will be implemented by the Regional Board in a variety of ways, including subdivision and development control, servicing decisions and policy approaches. Plan policies which relate to matters that are the jurisdiction of provincial agencies or other authorities will be advanced through liaison, advocacy and referral responses.
- 1.8.2 This Plan may be taken by the Subdivision Approving Officer as a statement of the public interest.
- 1.8.3 The policies of this Plan, including minimum parcel sizes, shall be considered and addressed in subdivision approval processes. Where this Plan establishes a designation and/or parcel size policy that differs from zoning, the conditions identified in the Plan should be addressed to the extent possible.

2.0 Community Profile

The history of development in Electoral Areas E and H can be broadly described in three phases: a period around the turn of the 20th century of isolated homesteads; then developing into natural resource extraction which gathered momentum early in the 20th century and subsided in the 1950's; and finally, in the 1960's onward, a period of accelerated growth in recreation, residential settlement and agricultural development notable, among other reasons, for the emergence of Cultus Lake South as a significant resort area.

Electoral Areas E and H are divided into two distinct valleys, the Chilliwack River Valley and Columbia Valley/Cultus Lake area. Each valley has its own unique identity and history. Over the last several years, each community has published their recollections and local history in books detailing original settlements and homesteading to more recent times. These sources should be consulted for histories of the local area:

- Howard Cramer. The Valley Beyond: A History of Columbia Valley & Lindell Beach. 2005.
- Chilliwack River Valley Historical Society. <u>In the Arms of the Mountains: A History of the Chilliwack River Valley.</u> 2006.

It is possible to offer only a very brief overview of Electoral Area E and H's history. Yet, the present planning challenges and problems are in every sense a legacy of this past. It is through an understanding of the history of development that current values and issues can be understood and solutions can be discovered.

2.1 Columbia Valley

Homesteading in Columbia Valley began in the year 1888 and continued during the early years of the 20th century. Settlers moved to the area via the United States and began the typical settlement process of clearing land and establishing small subsistence farms. The 1910's and 1920's can be characterized as a time of large scale commercial logging, which overtook much of the lower mainland of British Columbia. Columbia Valley was logged during the early decades of the century by the Campbell River Logging Company.

The logging economy involved a substantial railroad system which was built to link Columbia and Chilliwack River Valleys to the coast at Bellingham where logs were boomed and shipped to the mills at White Rock. The railroad established a link between Columbia Valley and Maple Falls area in Northern Washington which lasted most of the first half of the century.

The economic focus of the Valley began to shift from logging to farming when the first franchise for whole milk transport was secured. Land was cleared to support increased herds and milk production. A distinctive shift from subsistence farming to large scale agriculture was taking place. With the forest removed, mixed farming became the predominant land use of Valley land in the 1930's and 1940's. The land base of Columbia Valley, however, never provided a strong base for an agricultural economy. The Valley retained strong ties to Northern Washington during this period, for the road connections to the Chilliwack area were poor.

In 1968-69, several dairy farms in the Valley stopped production, when the requirement to install bulk tanks was introduced into the dairy industry. During the same period, however,

recreation-oriented development expanded around Cultus Lake. In 1956 hydro was brought into the Valley. In 1957 the road around Cultus Lake was paved and the resort uses of the lake were greatly expanded. By the end of the decade a transition had been completed from the Valley being a small, insular community to being part of the larger Chilliwack/Sardis community.

In 1975, the Department of National Defense acquired property in Columbia Valley with a view to establishing military ranges and training areas for CFB Chilliwack. Valley residents vehemently opposed the plans for military installations in Columbia Valley. However, negotiations between Ministry of Forests and the military authorities led to plans for the building of the ranges in the Slesse Creek area of the Chilliwack River Valley. Active acquisition of land in Columbia Valley for military purposes has stopped, and although the Valley continues to be used for DND field training exercises, there are no plans for range development. Strong local opposition still exists to any expansion of military activities or land holdings in the Valley.

During the 1980's, ten intensive swine farms were established in the Valley, representing as much as 4% of the swine farms in the Lower Mainland. In 1993, there were four operating intensive swine farms in the valley producing 10,000 hogs per year. Recently, intensive swine farms have declined in the Valley.

In recent years, agriculture in Columbia Valley has generally increased in intensity with farmers investing more money into their crops and farm infrastructure. There has been an increase in production of higher value soil-based crops such as grapes, hops, and berries. There are many diverse types of livestock in Columbia Valley, including intensively produced livestock and grazed livestock. This expansion is a welcomed positive trend in farm viability and diversity in Columbia Valley.

2.2 Cultus Lake

With the accelerating demand for recreational land in the lower mainland, special attention must be given to the resort function of Cultus Lake. The primary attraction of the area, aside from natural physical characteristics, is its proximity to the population centres – 10 km south of Chilliwack and approximately 90 km from Vancouver. Since the 1920's, the recreation and resort development has grown gradually but consistently, first in the form of Cultus Lake Park in the 1920's and 1930's, then in the development of the Lindell Beach resort and Cultus Lake Provincial Park in the 1940's and 1950's, and finally in the evolution of Cultus Lake South as a significant resort community. The two resort developments at the north and south ends of the lake are separated by the Provincial Park and a vast recreation area.

Cultus Lake Park Board (CLPB) lands consists of 251 hectares of land acquired by the District of Chilliwack during the years 1924 to 1957. Crown grant specifies that the land is to be used "forever for park use and no other purpose", ensuring the existence of a park on the lands in perpetuity. City of Chilliwack holds tenure over CLPB lands and lands can only be leased. Leases range from up to 21 years for residential uses and 5 years for businesses. For these reasons CLPB have a unique set of challenges, and matters of governance are an ongoing discussion for the community in 2010.

Perhaps the earliest interest in Cultus Lake as a resort area was associated with the establishment of church camps and retreats. Records of the United Church Camp at Cultus Lake stretch back to the 1920's. The other church camp in the Cultus Lake resort area, the Columbia Bible Camp, was established in the late 1950's. The camp has developed into a large year-round camp and conference facility open to a large range of user groups. These two church camps continue to exist today.

Cultus Lake South, at the south end of Cultus Lake, developed in a small valley around Frosst Creek approximately 90 m below the floor of Columbia Valley. Up until the 1940's the area was farmed, but the soil and moisture limitations presented a serious drawback to farming, especially in the shadow of the Fraser Valley 10 km to the north. Subdivision activity at Lindell Beach began in 1945 with a 62 cottage lot development. In 1954 the area expanded to approximately 182 lots. Recreational development accelerated between 1950 and 1980. First, the Teepee Campground and Aquadel Golf Course, then the Cultus Lake Holiday Park and the Thousand Trails developments, were added to the Lindell Beach resort. Presently, this area is experiencing intensive development and re-development of recreation sites. The Cottages on the former Teepee campground is the most recent development in this area. The continued growth of resort developments, and the high number of lake users is creating more challenges this plan needs to address: access to the lake, lake health, and recreation carrying capacity of the lake, and the creation of an integrated resort community at Cultus Lake South.

Cultus Lake Provincial Park was established in 1948 and expanded to 656 hectares in 1958. In 2000, the 1,905 hectare International Ridge Recreation Area was added to Cultus Lake Provincial Park. In 2012, foreshore was added to the park bringing its total area to 2,729 hectares.

Cultus Lake Provincial Park is evenly divided between the northwest and southeast sides of Cultus Lake. The northwest portion of Cultus Lake Provincial Park has a long history of use and development. Until the early 2000s, the Department of National Defense held a park use permit in this area for use as a training facility. The former training site has since been developed into a day use area with beach access, and is accessible by way of a (gated) service road from Parmenter Road. Recently the park facility operator has developed two group campsites in this area that accommodate groups totaling approximately 30 persons. There are a number of visitor-oriented facilities in the southeast portion of the Park including: Clear Creek (84 sites); Delta Grove (54 sites); Honeymoon Bay (2 group sites); Entrance Bay (52 sites); and, Maple Bay (106 sites). The campgrounds are serviced with water and toilets, and facilities exist for trailers and recreation vehicles, picnicking, beach and boat recreation, hiking, and group camping.

The United Church Camp in the Cultus Lake South area is situated in Cultus Lake Provincial Park. A park use permit was issued to the United Church of Canada in August, 1949, for the purpose of an "organizational campsite" in the vicinity of Maple Bay. The United Church continues to hold a park use permit over this area of the park. The 1980, Cultus Lake Park Master Plan called for the expansion of the Maple Bay campground into this area upon the permit expiry to accommodate growing demand for lake-oriented activities and camping. The park use permit is scheduled to expire in April 2014. In December 2009, BC Parks agreed to consider a renewal of the United Church Camp park use permit for a further period of five years.

Once the permit expires BC Parks will be proceeding with the expansion of the Maple Bay campground as per the Master Plan.

The policies of this Plan, and specifically the Cultus Lake South Neighbourhood Plan, will guide the continued evolution of Cultus Lake South toward a high-quality integrated resort community.

2.3 Chilliwack River Valley

Chilliwack River Valley owes much of its development history to the establishment of the logging industry in lower mainland British Columbia. Logging in the Valley began early in the century. By the 1920's railroad logging operation had cleared the easily-accessible timber in the Valley bottom.

The logging industry experienced a considerable setback for the industry in 1938 when a rail accident resulted in a massive fire which destroyed 30,355 hectares of productive forest in the Valley. One outcome of the fire was the abandonment of the railroad and a concerted change to truck logging in the 1930's. Much of the Chilliwack River watershed is today in some stage of re-growth and the significance of logging-related industry has declined in recent years due to market fluctuations, housing subdivisions, provincial parks and private property.¹

Mining also played a role in the Valley's development. In 1899, the Red Mountain Mine was established at the American border, south from the Slesse Creek area.

The decline of commercial logging on the Valley floor has been followed by the growth of recreation. The fisheries resource played an important role in this recreational growth. Historically, the Chilliwack/Vedder system supported the most-used steelhead fishery in the Province. Angling continues to be important to the local economy, and the fisheries resource is significant from both a regional and provincial perspective.

Settlement during the first half of the 20th century was sparse. Homesteading was usually carried out in connection with other activities such as mining and logging although the actual settlement was largely confined between Vedder Crossing and Tamihi Creek. Following the fire and the decline of logging and mining the emphasis shifted to public sector development in the 1940's and 1950's.

With the establishment of Canadian Forces Base Chilliwack in 1942, and the need for a land base for military operations, tracts of land were set aside for military uses in the surrounding area. In the beginning, almost the entire Chilliwack River Valley was reserved for military operations but eventually this area was reduced so that today military reserves are confined to three areas, Liumchen Creek (197 hectares), Larsen's Bench (81 hectares), and south of Mt. Thurston north of the Chilliwack River.

In the early 1960's, a renewed emphasis on private development occurred with subdivision activity in the Bell Acres and Slesse Park areas. Slesse Park was a subdivision for recreational cottage lots during the mid-1960's. The first home on the subdivided lots in Bell Acres was built in 1968. Few homes were added during the late 1960's and early 1970's.

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¹ Chilliwack River Valley Historical Society. In the Arms of the Mountains: A History of the Chilliwack River Valley. 2006.

In 1976, the Baker Trail/McFaul Road area, single family lots were developed along with two mobile home parks: Baker Trail Village, a 157-lot strata title park, and Chilliwack River Estates, a 77-site rental park.

At the east end of the Valley, approximately 25 km removed from the area of contiguous settlement, the provincial government independently created an 88-lot unserviced recreational subdivision at Post Creek in 1969.

Today, apart from some potential for infill on the few lots in the Bell Acres area, and the odd vacant lot in other largely settled areas, the Valley is essentially fully developed. Similar to Cultus Lake, pressure for recreational activities and space is increasing. However, the type of recreation is distinctly different. Recreation focuses on the wilderness atmosphere and opportunities. This creates challenges for the community and in some instances tensions between the residents, resource industries, institutions, and the recreation user. The Plan strives to address some of these issues.

2.4 Population and Building Statistics

Understanding the dynamics and character of population growth is important for identifying the amount and type of land use needs of a community. This section will look at population, mobility, household and family characteristics, and economic properties.

Unless otherwise noted, data used in this section are derived from the 1996, 2001, 2006 and 2011 Statistics Canada Census.²

Table 2.0							
	Population Characteristics, Electoral Areas E and H						
	1996	2001	2006	2011	% Growth 2006 - 2011	% Growth 2001 - 2006	% Growth 1996 – 2011
Areas E and H Population	3,290	3,400	3,481	3,358	-3.5%	2.4%	2.1%
Areas E and H Population Density	4.4	4.5	4.6	4.5			
FVRD Population	222,397	237,550	257,031	277,593	8%	8.2%	24.8%

² Census Canada excludes the Soowahlie Indian Reserve from Electoral Areas E and H data. Census Canada includes the Cultus Lake Park Board in Electoral Areas E and H data.

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Resident Population

In 2011, Census Canada reported a population of 3,358 for Areas E and H, a decrease of 3.5% since 2006. If accurate, this would be a departure from consistent but modest population growth over the decade from 1996 to 2006. Despite this downturn, Areas E and H experienced an overall population increase of 2.1% in the period 1996-2011.

The apparent decrease in population between 2006 and 2011 may reflect a trend toward more seasonal residency in Electoral Areas E and H. For example, homeowner grant data indicates that fewer Area E and H property owners are claiming the homeowner grant for their principle residence. Presumably, resort areas such as Cultus Lake South are driving this trend rather than significant changes in the occupancy of established residential hamlets such as those in the Chilliwack River Valley.

At 751 square kilometres, Areas E and H are the fifth largest Electoral Areas in the FVRD. It comprises 6.1% of the land area of the Region and has 1.4% of the total population. Population density grew slightly from 4.4 in 1996 to 4.5 in 2011. Table 2.0 shows the population growth pattern between 1996 and 2011.

Seasonal High Population

While the resident population of Electoral Areas E and H - as reflected in Census Canada data - has changed relatively little since 1996, the total population during peak summer season is expected to be considerably higher as seasonal residences are occupied and campsites and resorts are full. An understanding of seasonal high population is critical for anticipating future servicing needs.

As Table 2.2 below shows, the increase in number of dwelling units has significantly outpaced population growth in Areas E and H. Between 2006 and 2011, the number of dwelling units increased by 16% or 289 units while the resident population slightly decreased over this period suggesting that seasonal dwellings are being constructed. The Homeowner Grant data below is further evidence that the seasonal high population may be much greater than the normal resident population. A rough estimate of the potential seasonal high population of Areas E and H can be derived by multiplying the average number of persons per private household by the number of dwelling units in Areas E and H. This method indicates that the current seasonal high population in Areas E and H may be in the order of 4600 to 5000 persons.³ Under the policies of this Plan, the seasonal high population could potentially grow over the life of the Plan to 5,900 to 7,200 persons. Most of that growth will be in Cultus Lake South with only modest infill development elsewhere in the Plan area.

Age Composition

Table 2.1 examines the distribution of population by age group. Age group characteristics indicate that the population of Electoral Areas E and H is aging; the percentage of residents above the age of 55 is growing significantly while younger age groups are declining in number.

³ Total private dwellings (2,084) in Areas E and H times the regional average number of persons per household (2.7) is 5001. If the average number of persons per household of Areas E and H is used (2.2), the total peak seasonal population would be 4,585. This estimate doesn't include people in campsites or commercial resorts.

This suggests that the new residents are retirees looking to enjoy the many amenities offered in Electoral Areas E and H. Further, the population decreases for the younger age groups are reflective of the movement of aging children through the age categories with the older children leaving the family home to live and work in other communities.

Table 2.1					
Age Group Characteristics, Electoral Areas E and H					
Total Population by Age Group	2001	2006	2011	% Change 2001-2011	
Total Population	3400	3480	3360	-1.2%	
< 15	545	515	380	-30.3%	
15 - 24	350	345	350	0%	
25 - 54	1,445	1,405	1230	-14.9	
55 - 74	840	975	1110	32.1%	
75+	210	250	275	31.0%	

Housing Characteristics

Areas E and H have four distinct types of housing – rural, farm, suburban and resort residences. The overall number of housing units increased 13% between 2001 and 2011 from 1,420 to 2,084. In 2006, over 85% of all homes in Electoral Areas E and H were occupied by the owners. Table 2.2 shows total dwellings and the proportion of owned to rented dwellings in 2001 and 2006.

The average property value in 2009 for the Chilliwack River Valley was \$283,601.08 compared to \$232,293.97 in 2006, an increase in property value of 22.1%. However, in the Chilliwack River Valley 2011 data indicates an average property value of \$274,155.89, a decrease from 2009 of 3.3%. This can be tied to the overall real estate market and is consistent with real estate trends in the Fraser Valley. The average property value in 2009 for Columbia Valley and Cultus Lake South was \$333,732.52 compared to \$268,064.15 in 2006, an increase of 24.5%. Property values have also risen in Columbia Valley and Cultus Lake South; between 2009 and 2011 average values increased by almost 10%.⁴ This can be partly attributed to the high demand for recreational property and construction of high quality resort residences in Cultus Lake South.

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⁴ BC Assessment Data from 2006, 2009 & 2011. Data reflects properties with an address. The Soowahlie Indian Reserve and Cultus Lake Park Board Area are excluded from BC Assessment data.

Table 2.2						
Home Ownership, Electoral Areas E and H						
2001 2006 2011 % Growth 2001-2011						
Total Private Dwellings	1,840	1,795	2,084	13.3%		
# Owned Dwellings	1,165	1,220		Co		
# Rented Dwellings	255	215		0.9		

Single unattached private dwellings are the dominant residential form within Electoral Areas E and H comprising about 85% of the total number of occupied private dwellings in 2011. Of the remaining stock, about 14% were movable dwellings, including mobile homes. The housing stock is relatively old; in 2006, 73% of the private dwellings were constructed before 1986.

Home Owner Grants

In 2011, home owner grants were claimed for 74% of homes in the Chilliwack River Valley. In contrast, in 2011 homeowner grants were claimed for only 39% of homes in Columbia Valley, Cultus Lake and Lindell Beach. As the Cultus Lake area is a recreation-based community and more seasonal in nature, it can be assumed that the homes that did not claim their home owner grant are secondary homes for the owners and therefore are not eligible to claim a home owner grant. ⁵

⁵ Home Owner Grant data obtained from the Real Property Taxation Branch.

3.0 Community Plan Vision and Objectives

3.1 Community Vision

Electoral Areas E and H are communities made up of distinct communities, but bound by a strong connection to the natural environment, a commitment to stewardship and a desire to protect the natural beauty of the rural landscape and the quality of the environment. It is a place of rural lifestyles, well-managed outdoor recreational opportunities; high quality resort development; resource uses and a healthy, diverse agricultural sector.

3.2 Plan Objectives

The following seven objectives have guided the policies of this Plan:

- Preserve the natural beauty and scenic values of the environment and rural landscape while protecting wildlife, aquatic habitat and water resources, particularly Cultus Lake and Chilliwack River;
- 2. Engage residents as stewards of the environment and natural beauty and foster them in this role:
- 3. Encourage sustainable development and building practices to create low impact development;
- 4. Promote agricultural viability and strengthen agriculture by providing flexibility in land uses and fostering sustainable practices;
- Support well-managed recreation, resort and resource activities to provide for local and regional needs in a sustainable manner;
- 6. Avoid development in hazardous locations; and,
- 7. Foster the resiliency of rural and resort communities through efficient servicing; diverse economic opportunities; strong internal and external connectivity; and, working with nature.

3.3 Regional Growth Strategy

The policies of this plan must address not only local circumstances, but also the regional context. The Fraser Valley Regional District's "Choices for Our Future: Regional Growth Strategy", adopted in 2004, outlines broad framework for managing regional growth. Eight management goals are identified that will help manage growth in the FVRD, including:

- Increase Transportation Choice and Efficiency.
- Support and Enhance the Agricultural Sector.
- Manage Urban Land Responsibly.
- Develop a Network of Sustainable Communities.
- Protect the Natural Environment and Promote Environmental Stewardship.

- Protect and Manage Rural and Recreational Lands.
- Manage Water, Energy Resources and Waste Responsibly.

Official Community Plans are a primary means of implementing the Regional Growth Strategy (RGS). OCPs apply the broad goals of the RGS to local communities and provide specific policies to help achieve regional goals. Indeed, Section 865 of the <u>Local Government Act</u> requires that all bylaws adopted by the Regional District are consistent with the RGS.

Regional Context

The Region is expected to grow by approximately 60% by 2041 from 2011 levels. The current population of the Region is approximately 292,000, an increase of approximately 54,000 people since 2001.⁶ Electoral Areas make up about 5.5% of the regional population; 11,775 people live in FVRD's Electoral Areas.

Electoral Areas E and H are the most populated electoral area in the Regional District. The 2012 population is estimated at 4,090. It is possible that the population of Electoral Areas E and H could increase to 4,600 people by 2041. However, the resort / recreation nature of the electoral areas makes population estimation difficult. In any event, development pressures on the Plan area are expected to continue.

Electoral Areas E and H serve an important role in the Region. It satisfies significant demand from across the region for recreation opportunities, resort development and natural resources. It also provides intact habitat to support regionally-significant populations of fish and wildlife.

Consistency with the Regional Growth Strategy

This OCP is fundamentally consistent with the goals of Fraser Valley Regional District's "Choices for Our Future: Regional Growth Strategy (2004). Table 3.1 below outlines how this plan supports the RGS goals.

Table 3.1					
Concordance with FVRD's Regional Growth Strategy					
RGS Goal	OCP Direction				
Goal 1: Increase Transportation Choice and Efficiency	 Encourages the creation of trails within the south Cultus area to encourage walking and cycling as an alternative to motor vehicle travel 				
	 Encourage alternative forms of transportation linking community amenities with larger urban areas, where feasible 				
Goal 2: Support and Enhance the Agricultural Sector	 Promotes agricultural viability and strengthens farming by providing flexible uses that will strengthen the agricultural sector and supporting an agriculture area plan for Columbia Valley 				

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⁶ Fraser Valley Regional District, Strategic Planning and Initiatives Department. FVRD Regional Growth Strategy Review: Work Plan. 2011.

Table 3.1						
Concordance with FVRD's Regional Growth Strategy						
RGS Goal	OCP Direction					
Goal 4: Develop a Network of Sustainable Communities	 Encourages sustainable development and building practices to create low impact development 					
	 Supports local commercial uses and flexible land uses consistent with rural and agricultural environments 					
Goal 5: Protect the Natural Environment and Promote Environmental Stewardship	 Identifies the objective of achieving a sanitary sewer system for all the communities of Cultus Lake to ensure sewage disposal does not impact lake health 					
	 Recognizes the importance of the natural environment, preserves wildlife and fish habitats and water resources 					
	 Fosters a sense of stewardship towards local environments among residents, industry and visitors 					
Goal 6: Protect & Manage Rural & Recreational Lands	 Supports maintaining and enhancing rural character and local aesthetics 					
	 Addresses the challenges to geotechnical and other hazards 					
Goal 7: Achieve Sustainable Economic Development	Supports agri-tourism initiatives					
Goal 8: Manage Water, Energy Resources & Waste Responsibly	Addresses servicing and other issues					

4.0 General Land Use Policies

4.1 Permitted Uses & Parcel Sizes

Permitted land uses are identified within the Use Policies section of each designation in Section 6 of this Plan. A summary index of the permitted land uses is provided in Table 4-1 for convenience. Specific conditions of use may apply, as prescribed in designations or other parts of this Plan or in zoning bylaws and in other regulations. Use Policies outlined in each designation are particularly relevant to the Regional Board's consideration of proposals to establish, or temporarily permit, new uses not currently permitted by zoning. Designations also establish minimum parcel size policies for subdivision (which are summarized for convenience in Table 4-2).

Permitted uses and minimum parcel sizes are based on a number of considerations including the suitability of the land, service levels, hazards, access, community planning objectives, regional growth goals, environmental carrying capacity and thresholds, and others. Moreover, they facilitate effective planning by providing a basis for avoiding land use conflicts and predicting density levels, servicing needs and environmental impacts.

Table 4.1											
Summary of Designations & Permitted Land Uses*											
Permitted Land Uses	Agricultural	Conservation	Forest	Institutional	Limited Use	Local Commercial	Mobile Home Park	Residential Limited Use	Resort	Rural	Suburban Residential
Residential											
Single family residential use					✓			✓		✓	✓
Resort Residential use									✓		
Mobile home park							✓				
Accessory residential use				✓		✓	✓				
Associated rural residential use	✓				✓					✓	✓
Associated residential limited use								✓			
Accessory farm employee dwelling	✓										
Commercial & Resort											
Associated resort use									\checkmark		
Commercial campground use									✓		
Local commercial use						✓					

Table 4.1											
Summary of Designations & Permitted Land Uses*											
Permitted Land Uses	Agricultural	Conservation	Forest	Institutional	Limited Use	Local Commercial	Mobile Home Park	Residential Limited Use	Resort	Rural	Suburban Residential
Local commercial mixed use						✓			✓		
Low density commercial recreation Golf course				✓	✓						
Multi-family resort residential use									✓		
Holiday park									✓		
Recreation use		✓	✓	✓	\checkmark		\checkmark		\checkmark		✓
Natural campground use	✓		✓				<i></i>				
Agriculture	Agriculture										
Farm use	✓	✓			\checkmark					✓	
Resource & Industrial	1	Τ					Т	1		П	
Forestry			✓								
Public & Institutional	1										
Assembly use				✓					✓		
Park & park reserve	✓	✓	\checkmark	V	✓			✓	✓	✓	✓
Conservation use	✓	✓	✓	✓	✓			✓	✓	✓	✓
Local institutional			✓	✓	✓	\checkmark				✓	✓
Major institutional			√	√					_		

^{*} This table presents a summary of land uses supported in each Plan designation. It is provided for convenience only. Users must consult the policies in Section 5.0 and in other sections of this Plan to confirm the uses supported in each Plan designation and any conditions of use.

TABLE 4.2							
Summary of Designations & Parcel Sizes for Subdivision*							
Designation	Minimum Parcel Size						
AGRICULTURAL	8 ha within floodplains; 4 ha outside floodplains						
CONSERVATION AREA							
FOREST	35 ha						
INSTITUTIONAL							
LIMITED USE	8 ha						
LOCAL COMMERCIAL	0.5 ha with approved community water system; 2.0 ha with on-site water and sewage disposal services						

TABLE 4.2							
Summary of Designations & Parcel Sizes for Subdivision*							
MOBILE HOME PARK	2 ha						
RESIDENTIAL LIMITED USE	2 ha						
RESORT	See the policies of the RESORT designation and the Cultus Lake South Neighbourhood Plan						
RURAL	2 ha						
SUBURBAN RESIDENTIAL	2.0 ha; 0.2 ha with approved community water system; 0.2 ha where an approved community water and approved sanitary system is provided						

^{*} This table is a summary. It is provided for convenience only. Users must consult the applicable designation to confirm minimum parcel size policies and other Plan policies regarding subdivision. Minimum parcel sizes in the AGRICULTURAL designation may not be achievable without approval from the Agricultural Land Commission.

4.2 Housing Needs & Residential Uses

The <u>Local Government Act</u> requires that an official community plan include statements and map designations respecting the approximate location, amount, type and density of residential development required to meet anticipated housing needs over a period of at least five years. The sections below utilize past census and development approval data to estimate future housing needs.

As discussed in Section 3.3 of this Plan, the Regional Growth Strategy (RGS) for the Fraser Valley Regional District forecasts a 60% increase in population by 2041 from 2011 levels. RGS policies direct future development to existing urban areas and other locations within municipal boundaries to achieve complete and compact communities. At the same time, it aims to preserve rural lands, which are expected to remain stable with modest, incremental growth over the next twenty years.⁷

The RGS vision of modest growth in rural areas is consistent with historical growth rates in Electoral Areas E and H. Statistics Canada data indicates that between 1996 and 2011 the average annual population increase in Electoral Areas E and H (excluding Indian Reserves) was approximately eight persons per year.⁸ The total number of households and private dwellings occupied by usual residents in the Plan area remained consistently around 1425 between 2001 and 2011. However, the number of total dwellings increased during this period by about 24 dwellings per year - this figure is skewed significantly by the construction of resort cottages (seasonal or second residences) in recent years.

⁷ Fraser Valley Regional District. *Choices for our Future: Regional Growth Strategy.* 2004. p. 30.

⁸ These figures were derived from Statistics Canada data from various census years

Review of FVRD development approval data indicates that about 67 new dwellings (excluding seasonal dwellings) were added to the total dwelling pool, between 1996 and 2010.⁹ This amounts to an average of four residential dwellings each year. Most of this demand was accommodated on existing parcels rather than through subdivision.

Development approval data and Statistics Canada census information are not strictly consistent. However, they show a history of modest annual demand for new residential units each year.

Recreational and resort properties were excluded from this analysis to provide a more accurate picture of actual housing demand as opposed to demand for resort units. However, the demand for recreation and resort properties is significantly greater and is expected to continue for the foreseeable future. Demand for resort units is expected to be met through new development and redevelopment in the Cultus Lake South area. See Section 7 of this Plan for greater discussion of resort development.

Considering: 1) the RGS policies of preserving rural areas and providing for growth within existing municipal development areas; and, 2) the historic rate of growth in Electoral Areas E and H; it is anticipated that housing needs over the next five to ten years will be modest and in keeping with historic levels. Accordingly, this Plan will meet anticipated housing needs primarily through infill development of new dwellings outside of the ALR on existing vacant parcels and subdivision under existing zoned or planned densities.

True subdivision and development potential must be determined on a site-specific basis, particularly in light of geological and other constraints prevalent in portions of Electoral Area "E". Nevertheless, it is reasonable to conclude that infill development will satisfy the majority of primary housing needs over the expected life of this Plan. The Plan presents limited opportunities for new residential development as the majority of lands located in suburban residential areas are developed.

The Plan provides opportunities in Cultus Lake South for resort residential development. At least initially, these developments will primarily serve as recreational properties and second homes for purchasers. However, over time it is anticipated that resort residential units will increasingly function as primary residences or that year-round occupancy of the units will increase.

In Columbia Valley, the majority of new residential construction will be in the form of infill development on vacant lands. Subdivision development is constrained by the Agricultural Land Reserve. However, infill development through the construction of residences on vacant lands is anticipated. Major new residential developments are not expected in this area.

In the Chilliwack River Valley, it will be infill development that will provide opportunities for new housing. Limited opportunities for new residential subdivision exist, though new clustering policies in this plan should serve to maximize efficiency.

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⁹ These figures were derived from FVRD building permit files for Electoral Areas E and H. Efforts were made to exclude from these numbers instances where an old dwelling was demolished and replaced with a new one resulting in no net change to the total dwelling count.

New residential developments in Electoral Areas E and H should strive to minimize environmental impacts and energy consumption. Recent data suggests that 19% of greenhouse gases come from residential buildings in the Regional District. Efficient new construction and retro-fitting of existing buildings could reduce energy consumption by up to 30% and reduce GHG emissions by a similar amount. Standards such as R-2000 House (highly energy efficient homes), Built Green and LEED for Homes all provide models for high performance housing. The adoption of these standards by residential developers is encouraged.

Throughout the consultation process, community members and Advisory Planning Commission members have expressed the need for alternative housing options in the form of secondary suites, garden flats and carriage housing. These alternative housing forms are viewed as an opportunity to help children of residents and allow the aging population to remain in their community. Secondary housing also provides a "mortgage helper" to address affordability issues.

It is the policy of the Regional Board that:

- 4.2.1 It is anticipated that housing needs in Electoral Areas E and H will primarily be addressed through infill development in existing hamlets.
- 4.2.2 Under certain conditions, the Regional Board may establish zoning in areas designated AGRICULTURAL, LIMITED USE, RURAL, and SUBURBAN RESIDENTIAL to permit second dwellings. However, in AGRICULTURAL areas farm use is a priority and residential uses are limited under the regulations and policies of the Agricultural Land Commission.
- 4.2.3 The Regional District should review zoning provisions regarding Accessory Family Residential Use and, in particular, consider changes to allow the caregiver to reside in the accessory residence.
- 4.2.4 Residential development will be directed away from agricultural lands, lands susceptible to hazards, lands with severe limitations for ground-based disposal of sewage, and lands with building or road foundation limitations unless adequate measures are taken to mitigate associated issues.
- 4.2.5 Opportunities for alternative housing forms will be explored which may include garden suites, carriage houses, secondary suites and second residences.
- 4.2.6 The Regional Board should explore opportunities for alternative housing forms with the preparation of a discussion paper to address:
 - a. land use and zoning regulations;
 - b. servicing requirements and feasibility;
 - c. location of secondary housing; and,

- d. siting considerations.
- 4.2.7 Where new dwellings are proposed, residents are encouraged to construct energy efficient, low-impact buildings which should include storm water management, water conservation, drought-resistant landscaping and minimal impervious surfaces.
- 4.2.8 When renovating an existing dwelling homeowners are encouraged to retrofit existing homes to become more energy efficient and to reduce their carbon footprint.
- 4.2.9 The Regional District will produce a guide to assist residents with retrofitting and constructing energy efficient and low-carbon homes in the FVRD.

4.3 Industrial Uses

Section 877 of the <u>Local Government Act</u> requires that official community plans identify the approximate location, amount and type of present and proposed industrial land uses.

There are a small number of parcels zoned for industrial uses in the Plan area. The Plan does not proactively identify additional lands for future industrial development, as the services necessary to support industrial development are generally not available in the Plan area and there is little demand for industrial land in Electoral Areas E and H. Accordingly, applications for the designation of new industrial lands will be considered on a case-by-case basis.

In Electoral Areas E and H, industrial uses often relate to resource sector activities such as aggregate or forestry which occur on or near Crown land but can impact neighbouring residential, agricultural and institutional uses. These resource industries provide local employment and economic investment. Balancing the impacts and benefits of industrial development will be a consideration of the Regional Board in commenting on senior government referrals and in decisions on land use activities including Temporary Use Permits (Section 15 of this Plan).

It is the policy of the Regional Board that:

4.3.1 The Regional Board will consider proposals to rezone or establish community plan designations for industrial uses as proposals emerge.

4.4 Community Care Facilities

Section 20 of the <u>Community Care And Assisted Living Act</u> states that a local government bylaw does not apply to licensed Community Care Facilities if the bylaw would:

- limit the number of persons in care who may be accepted or accommodated at the community care facility;
- limit the types of care that may be provided to persons in care at the community care facility; or

- apply to the community care facility only because:
 - it is not being used as a single family dwelling house, or
 - it operates as a community care facility, a charitable enterprise or a commercial venture.

4.5 Lawfully Non-Conforming Use & Siting

Legally established existing land uses which are not permitted uses in the zone within which they are located, are considered to be nonconforming under Section 911 of the <u>Local Government Act</u>. Most lawfully non-conforming uses are associated with development constructed before zoning bylaws were established. In many cases, the existing zone to establish conformity is not an acceptable option, although continuance of the use under certain restrictions may be acceptable. The siting and dimensions of buildings may also be lawfully non-conforming under the Local Government Act.

It is the policy of the Regional Board that:

- 4.5.1 Where the continuance of a lawfully non-conforming land use would not be hazardous or conflict with surrounding land uses and where the applicant indicates a desire to negotiate a covenant with the Regional Board limiting future uses, buildings and structures to those legally established at present the Board may rezone the property to reflect the actual use.
- 4.5.2 The Regional Board may consider the issuance of a development variance permit to varying siting regulations to address so as to render the siting or dimensions of a building or structure conforming.

4.6 Transportation and Utility Corridors

In recognition that additional capacity in transportation and utility corridors and facilities will be required to serve future growth areas of the Lower Mainland - and that the construction of new transportation and utility corridors has major impacts on the land base, growth potential and economic well-being of the Region - in May, 2001, the Regional Board adopted the *Transportation and Utility Corridors of Regional Significance* Policy. The policies of this plan supplement the *Transportation and Utility Corridors of Regional Significance* for Electoral Areas E and H.

It is the policy of the Regional Board that:

4.6.1 Transportation and utility proposals of regional significance that satisfy the aforementioned criteria should be designated to make use of existing transportation and utility right-of-ways wherever possible.

4.6.2 Visual impacts associated with major utility corridors and infrastructure should be assessed and mitigated.

4.7 Use of Crown Lands

Regulating the use of Federal land is beyond the jurisdiction of local governments. As well, the use and development of Provincial Crown lands by the Provincial Government, or an agent of the Provincial Government, is immune to local government regulations and policies. As a result, the designations and policies of this Plan may not apply, or may not be binding on, lands or resources owned and administered by federal and provincial governments. Generally, tenants or third party users of Provincial Crown land are subject to local bylaws and regulations, though exemptions exist.

While local government regulations may not be binding on federal and provincial governments, the provisions of the Plan should be taken into account by those bodies as an expression of Regional Board objectives and a basis for co-operation between different levels of government. Should a government ministry, agency or other organization propose a development or permit uses which are contrary to the policies of this Plan, then the Responsible Authorities are encouraged to make application for Plan amendment as outlined in this Plan. Not only would the application allow the Board to express its interest in the proposed development and provide for public input at a local level, but this procedure will enable the Regional Board to adjust policies for adjacent land over which it has jurisdiction and thereby secure integrated and compatible development throughout the Plan area.

It is the policy of the Regional Board that:

- 4.7.1 Provincial and Federal governments are encouraged to use Crown land in a manner that conforms to Regional District bylaws, policies, and regulations.
- 4.7.2 Where a government ministry, agency or other organization proposes a land use which is contrary to the policies of this Plan, the Responsible Authorities are encouraged to make application for Plan amendment as outlined in this Plan.
- 4.7.3 The Department of National Defense has large land holdings in the Plan area. The Regional District encourages the Department of National Defense to consult with residents prior to re-allocation or change in ownership or status of these large parcel holdings.
- 4.7.4 Transient and temporary uses of Crown land should be designed to minimize and mitigate impacts to the local community, particularly where the use generates visual impacts, noise, waste, or traffic disturbances.

5.0 Designations

Official Community Plan designations provide a policy framework for guiding land use decisions and servicing that is in keeping with Plan objectives and legislative requirements. Designation policies are implemented primarily through permits, zoning and other regulatory bylaws.

Electoral Areas E and H are divided into the land use designations summarized below. Policies established in each of the designations shall apply to land within that designation as shown on *Schedule 2- Land Use Designations*. Boundaries between different land use designations are general and are not necessarily intended to conform to property lines.

Agricultural Land Reserve or best suited

to agricultural activities

Conservation Existing or potential parks, stream channels, recreation

reserves or important fish and wildlife habitat

Forest Land within the working forest

Institutional Land used, or reserved for public and assembly uses

Land with significant geotechnical or flooding hazards,

access limitations and/or limitations to on-site servicing

Local Commercial Existing commercial lands

Mobile Home Park Existing mobile home parks

Residential Limited Use Existing residential lands with significant geotechnical or

flooding hazard and/or access limitations

Resort Lands generally free of geotechnical and flooding

hazards located in close proximity to Cultus Lake and

oriented toward resort activities

Rural Larger parcels of land with limited development

opportunities due to site constraints, best suited to low

density residential development

Suburban Residential Lands relatively free of hazards and potentially suitable

for suburban development

Within these designations, the policies of the Regional Board policy are contained under the four following sub-headings:

- General policies outline the local and regional development policies in a particular designation
- **Designation policies** state the type of land placed in a particular designation and the conditions for extending existing areas or creating new areas in the designation
- Use policies list the uses that may be permitted on land within a designation and in some cases, state the standards under which a given permitted land use must be developed
- **Subdivision policies** specify the minimum lot size permitted within a designation and other conditions of subdivision

5.1 AGRICULTURAL (AG)

Description

Farmland in Electoral Areas E and H reflects the overall trend in the Fraser Valley of high quality soil, increasing demand for access to water for irrigation, and intensification of agricultural uses. Growth of agriculture in Electoral Areas E and H is expected to continue so as to meet increased demand for high quality foods in global, provincial, local and niche markets.

This Plan seeks to preserve and protect farm land for long term agricultural use while supporting the flexibility needed for stable and sustainable farms. Designating farm lands as AGRICULTURAL will ensure that farm uses and uses associated with and complementary to agriculture are permitted and are consistent with provincial legislation and policy. The use and subdivision policies in this Plan ensure that AGRICULTURAL areas do not become fragmented and that agricultural potential is not diminished. Larger parcel sizes and uses compatible with farming are to be maintained wherever possible.

The Plan must be consistent with the <u>Local Government Act</u>, the Provincial Agricultural Land Commission's policies and regulations, and the policies of the Ministry of Agriculture. Generally, land within the AGRICULTURAL designation is also within the Agricultural Land Reserve, but not in all cases. The <u>Agricultural Land Commission Act</u>, regulations and Orders of the Commission take precedence on matters of land use and subdivision in the ALR. The Regional Board assists in the administration of the Agriculture Land Reserve land by commenting on applications for subdivision, non-farm use, inclusion of land in the ALR, and exclusion of land from the ALR. The policies established in this Plan will provide guidance for future Regional Board comments on these applications.

It is the policy of the Regional Board that:

General Policies

- 5.1.1 Farm lands in the Columbia Valley and bench lands above Chilliwack River Valley shall be preserved and stabilized by discouraging: the subdivision of farms; the introduction of incompatible recreational uses and other incompatible developments; and, the development of rural residential subdivisions in the Agricultural Land Reserve.
- 5.1.2 The preservation and enhancement of existing agricultural operations in the AGRICULTURAL designation will be a priority over newly proposed non-farm uses.
- 5.1.3 The Regional Board will work with the Ministry of Agriculture and the Agricultural Land Commission to provide for a broader range of agricultural opportunities and uses which:
 - a. are supplementary and ancillary to farm use;
 - b. support value-added activities that improve farm viability;
 - c. are consistent with the environmental policies of this Plan; and
 - d. will not jeopardize the long-term productivity of farmland.

- 5.1.4 Agricultural activities in the Plan area should be conducted in an environmentally sensitive and sustainable manner that adhere to guidelines as provided by the Ministry of Agriculture's Environmental Farm Plan Program and other best practices.
- 5.1.5 Agricultural activities on the bench lands above the Chilliwack River Valley that may negatively impact property and residents in the Valley below should be undertaken in an environmentally sensitive manner so as not to impact the local microclimatological characteristics and the environmental sensitivity of the Chilliwack River.

Designation Policies

- 5.1.6 The intention of this Plan is to designate as AGRICULTURAL those areas best suited to farm production including all lands within the Agricultural Land Reserve.
- 5.1.7 Where land presently within the Agricultural Land Reserve is, pursuant to the Agricultural Land Commission Act, excluded from the Agricultural Land Reserve; or, found to be exempted under Section 23(1) of the Agricultural Land Commission Act; the provisions of the Official Community Plan shall be binding and the lands shall remain in AGRICULTURAL designation until the land is re-designated by bylaw amendment.
- 5.1.8 AGRICULTURAL areas may be extended or created through Plan amendment where additional areas suited to farm production are identified through an application process or pursuant to the <u>Agricultural Land Commission Act</u> and the <u>Agricultural Land Reserve Use</u>, <u>Subdivision and Procedure Regulation</u>.
- 5.1.9 The boundary between the Agricultural Land Reserve and Provincial Forest Reserve in Columbia Valley should be contiguous. Any lands to be removed from the *Provincial Forest* which are adjacent to the Agricultural Land Reserve shall be designated AGRICULTURAL in the Official Community Plan and an application shall be made to include them in the Agricultural Land Reserve. No privately owned land adjacent to the Provincial Forest boundary should be excluded from the Agricultural Land Reserve and those Crown lands adjacent to agricultural lands but excluded from the Agricultural Land Reserve should be included in the Provincial Forest.

Use Policies

- 5.1.10 AGRICULTURAL areas shall be used for only:
 - a. Farm use;
 - b. Conservation use;
 - c. Park and park reserve;
 - d. Single family residential use;
 - e. Natural campground use, in accordance with the <u>Agricultural Land Reserve Use</u>, Subdivision and Procedure Regulation;

- f. Associated rural residential use; and
- g. Accessory farm employee dwelling.
- 5.1.11 AGRICULTURAL areas in the Agricultural Land Reserve are subject to the provisions of the <u>Agricultural Land Commission Act</u> and the regulations and the orders of the Agricultural Land Commission.
- 5.1.12 The Regional Board may support re-zoning applications for non-farm uses approved by the Agricultural Land Commission provided the property remains designated as AGRICULTURAL.
- 5.1.13 Agri-tourism uses may be supported provided that parking and other servicing needs can be met on-site and the use meets the requirements of the <u>Agricultural Land Reserve Use</u>, <u>Subdivision and Procedures Regulation</u>.
- 5.1.14 Notwithstanding Section 5.1.10, where a land use is proposed but not permitted within the AGRICULTURAL designation, the applicable zoning bylaw or the regulations of the Agricultural Land Commission, the Regional Board may issue a Temporary Use Permit provided the following are all met:
 - a. the Agricultural Land Commission approves the non-farm use;
 - b. the use is temporary and compatible with surrounding uses;
 - c. the use will not interfere with long term agricultural capabilities on the parcel and surrounding area;
 - d. no extension of services or public infrastructure is required;
 - e. the use is a small-scale in nature; and
 - f. a public meeting is held.
- 5.1.15 The Regional Board may prefer to consider a Temporary Use Permit to permit a natural campground use prior to site-specific rezoning.
- 5.1.16 The Regional Board may consider site-specific zoning amendments to permit seasonal farm labour accommodation on agricultural parcels where all of the following conditions apply:
 - a. the land is within the Agricultural Land Reserve;
 - b. the parcel is classified as 'farm' under the British Columbia Assessment Act; and,
 - c. the seasonal farm labour accommodation use is incidental to and necessary for a farm operation on the same farm unit.

- 5.1.17 Notwithstanding 5.1.10, where more than one ACCESSORY FARM EMPLOYEE DWELLING is proposed, the Regional Board may support additional dwellings for year-round farm help on land within the Agricultural Land Reserve provide that:
 - a. the Regional Board has determined that an additional residence is necessary for farm use or, if the Board prefers to refer the matter to the Agricultural Land Commission, the Agricultural Land Commission has considered a non-farm use application and determined that the residence is necessary for farm use;
 - a covenant is offered by the property owner to limit the use of the dwelling to farm help; and,
 - c. the residence is located in such a way as to minimize the impact on the current and future agricultural capability of the farm.
- 5.1.18 The removal of soil or placing of fill on land in AGRICULTURAL areas shall be undertaken in accordance with the <u>Agricultural Land Reserve Use</u>, <u>Subdivision and Procedure Regulation</u> and the bylaws of the Fraser Valley Regional District.

Subdivision Policies

- 5.1.19 Land in AGRICULTURAL areas within the Agricultural Land Reserve shall be subdivided only in accordance with the provisions of the <u>Agricultural Land Commission Act</u>, regulations thereto, and orders of the Commission.
- 5.1.20 New parcels created by subdivision within the AGRICULTURAL areas shall be configured to maximize agricultural sustainability and minimize potential conflicts between farm and non-farm uses.
 - 5.1.21 The Regional Board will support applications for subdivision in the AGRICULTURAL areas, including subdivision of parcels split by a road in the Columbia Valley where:
 - a. lot lines would follow roads and topographic barriers; or,
 - b. the proposed subdivision will not result in conflicts with agriculture or diminish agricultural potential;

provided that the new configuration of parcels does not impede the use of agricultural machinery.

- 5.1.22 Land in AGRICULTURAL areas shall be subdivided only in accordance with the standards of the Responsible Authorities, except that the parcel size shall be:
 - a. not less than eight (8) hectares for lands in a floodplain; or,
 - b. not less than four (4) hectares for lands outside of a floodplain.

It is noted that the minimum parcel sizes above may not be achievable in the Agricultural Land Reserve without approval by the Agricultural Land Commission.

- 5.1.23 Notwithstanding 5.1.22, bench lands above the Chilliwack River Valley located in the ALR shall have a minimum parcel size of eight (8) hectares of land or greater.
- 5.1.24 Notwithstanding that the Provincial Agricultural Land Commission may have indicated approval or no objection to this Plan, the Commission is obliged to consider individual applications on their own merit under the mandate of the <u>Agricultural Land Commission Act</u> and is not obliged to approve applications that comply or, alternatively, refuse applications that do not comply with the minimum lot size or densities of this plan.

5.2 CONSERVATION AREA (C)

Description

The CONSERVATION AREA designation allows for the identification, protection and management of park lands, proposed parks, and environmentally sensitive areas. It also includes portions of stream channels under Crown ownership; in these areas, maintaining access for sediment management and environmental stewardship is particularly important.

It is the policy of the Regional Board that:

General Policies

- 5.2.1 The CONSERVATION AREA designation is established to:
 - a. identify designated and proposed local, regional or Provincial parks or protected areas;
 - b. provide walking and cycling access to park and recreation areas, excluding ecological reserves, for the enjoyment of the natural environment;
 - c. conserve environmental assets including unique natural features, distinctive landscapes and areas of high recreational value; and,
 - d. recognize environmental values and management requirements of Crown riparian and littoral areas.

- 5.2.2 This Plan designates lands with some or all of the following characteristics as CONSERVATION AREA:
 - a. areas owned or under long-term lease by a Responsible Authority for public recreation use or regional or local significance including regional parks, recreation reserves and areas with recreational potential, and land of significant recreational potential which is suitable to reserve for future public and park use;
 - b. areas that may have geological or flood hazards;
 - c. areas of important wildlife or environmental value, including habitat;
 - d. land with significant recreation potential which may be suitable for future park use; and,
 - e. riparian and littoral areas under Crown ownership.
- 5.2.3 CONSERVATION AREAS may be extended or created through Plan amendment provided that additional lands that meet the required designations policies above are identified.

- 5.2.4 CONSERVATION AREAS shall be used only for:
 - a. Conservation use;
 - b. Park and park reserve;
 - c. Recreation use, in accordance with the conservation objectives and management policies of the Responsible Authority; and,
 - d. Farm use provided that the lands are located within the Agricultural Land Reserve.
- 5.2.5 Notwithstanding Section 5.2.4, CONSERVATION AREAS may also be used for:
 - a. channel maintenance for the purpose of community flood protection, including sand and gravel removal and necessary ancillary activities subject to any necessary approvals from the Regional District and the Responsible Authorities; and,
 - hazard land management uses, including works, facilities and activities to provide protection from and to manage flooding, snow avalanche, rock fall, landslides, and other natural hazards.

Subdivision Policies

5.2.6 Land in the CONSERVATION AREA shall only be subdivided under circumstances where subdivision is required in the interests of responsible park or environmental management.

5.3 FOREST (F)

Description

The FOREST designation recognizes that extensive areas of Crown land within the Plan area are part of the Province's 'working forest'. These lands are actively managed by the Ministry of Forests, Lands & Natural Resource Operations and forest licensees. A range of forestry uses and activities are expected to continue in the area. Forestry activities including logging, reforestation and stand tending are regulated by the Provincial agencies, primarily under the Forest Act and Forest and Range Practices Act.

FOREST lands include areas with steep slopes and streams located above settlement areas. Forestry activities in these areas may initiate or exacerbate hazards on Crown land which can impact private lands and infrastructure below. Special consideration should be given where forest uses may have an impact on settlement and habitat areas. In these situations, the Regional Board will recommend to the Provincial agencies having jurisdiction that habitat assessments, geotechnical and hydrological studies and mitigation works be undertaken in association with any plans for forest use or management.

In addition to a working forest, Crown lands in the Plan area provide access to the backcountry for recreational activities. At times, elements of the working forest are at odds with expectations of recreation users. Policies in the FOREST designation recognize these different uses, but they are addressed primarily in other sections of the plan including Section 6 - Local Area Policies and Section 9 - Recreational and Cultural Resources.

It is the policy of the Regional Board that:

General Policies

- 5.3.1 The Ministry of Forests, Lands & Natural Resource Operations should preserve the integrity of Provincial Forest boundaries in the long-term economic interests of the region and in recognition of the area's forest production.
- 5.3.2 Crown lease applications and development schemes involving land uses not compatible with forest development, public recreation, or conservation use of FOREST lands will not be supported or encouraged by the Regional District.

- 5.3.3 This plan designates as FOREST Crown lands identified by the Province to be within the forest land base, and also lands classified as private managed forest land under the Private Managed Forest Land Act.
- 5.3.4 FOREST areas may be extended or created through Plan amendment when new areas that meet the designation criteria are identified. FOREST areas may be reduced or removed if land is removed from the working forest or the <u>Private Managed Forest Act</u>.

- 5.3.5 The boundary between the Agricultural Land Reserve and the working forest in Columbia Valley should be contiguous and:
 - a. any lands to be removed from the *Provincial Forest* which are adjacent to the Agricultural Land Reserve shall be designated AGRICULTURAL in the Official Community Plan and an application shall be made to include them in the Agricultural Land Reserve; and,
 - any Crown lands adjacent to the working forest and excluded from the Agricultural Land Reserve should be designated FOREST (F) and included in the working forest.

- 5.3.6 The use of FOREST land for forestry-related activities is governed primarily by the Forest Act and the Forest and Range Practices Act.
- 5.3.7 FOREST areas shall be used only for:
 - a. Forestry activities including silviculture, logging, reforestation and stand tendering approved by the Ministry of Forests, Lands & Natural Resources Operations:
 - b. Conservation use:
 - c. Park and park reserve;
 - d. Local institutional;
 - e. Major institutional;
 - f. Natural campground use; and,
 - g. Recreation use.
- 5.3.8 Pursuant to Section 21 of the <u>Private Managed Forest Land Act</u>, forest management activities, as defined in the Act, shall be permitted on lands classified as private managed forest land.
- 5.3.9 Sustainable green energy projects, which do not involve the use of incinerators or the burning of fossil fuels, may be permitted in the FOREST designation subject to rezoning, where applicable, and comprehensive review of transmission facilities, hydrological impacts and habitat impacts.
- 5.3.10 The Province should consult with the Regional District respecting any plans or facilities for recreation use within the FOREST designation.

Subdivision Policies

5.3.11 Land within the FOREST designation shall be subdivided only when subdivision is required in the interests of responsible forest management, in which case no parcel smaller than thirty-five (35) hectares shall be created.

5.4 INSTITUTIONAL (I)

Description

The INSTITUTIONAL designation recognizes lands that have been identified or reserved for community facilities or infrastructure. It also includes lands intended to be used as churches, child care centres, health or educational facilities, and other assembly uses.

It is the policy of the Regional Board that:

General Policies

5.4.1 The Regional Board may consider the development of a community park in conjunction with a community facility, such as a community hall or fire hall, within the INSTITUTIONAL designation.

Designation Policies

- 5.4.2 This Plan designates lands identified and reserved for community uses and private lands currently zoned for civic, educational, religious, fraternal, hospital or cultural facilities as INSTITUTIONAL.
- 5.4.3 INSTITUTIONAL area may be created or extended through Plan amendment subject to:
 - a. established community need for expanded or improved facilities;
 - b. compatibility of the proposed use with surrounding existing and proposed land uses;
 - c. certification that services such as water supply and sewage disposal can be provided on-site or through an approved community service;
 - d. physical capability of the subject property to accommodate development in an environmentally sustainable manner; and,
 - e. projected traffic generation and parking requirements being adequate.

Use Policies

- 5.4.4 Land within the INSTITUTIONAL designation shall be used for only:
 - a. Accessory residential use;
 - b. Assembly use;
 - c. Conservation use;
 - d. Local institutional;
 - e. Major institutional;
 - f. Park and park reserve;
 - g. Low density commercial recreation; and,

- h. Recreation use.
- 5.4.5 With the possible exception of a caretaker residence, residential use shall not be permitted in the INSTITUTIONAL designation.

Subdivision Policies

5.4.6 Land in INSTITUTIONAL areas shall only be subdivided under circumstances where subdivision is required to facilitate efficient and effective delivery of services to the general public.

5.5 LIMITED USE (LU)

Description

The LIMITED USE designation is intended to constrain development in areas with significant geologic and flood hazards, limited road access, areas isolated from community services, zones of groundwater recharge and areas which are environmentally sensitive or otherwise best suited to low density rural uses. However, LIMITED USE lands may be re-designated in accordance with Plan policies if future studies show that an area can accommodate a broader range of uses without being affected by geologic hazards or damaging environmentally sensitive areas, and where access and other requirements can be met.

Subdivision policies of the LIMITED USE designation accommodate the creation of new parcels eight (8) hectares in area or greater. In recognition of the difficulties of site development within this designation, subject to zoning amendment, the clustering of parcels may be permitted in the LIMITED USE designation provided that average density of the parent parcel being subdivided will not exceed one parcel per eight (8) hectares. Clustered subdivisions will normally take the form of bare land strata developments with the remainder lands becoming common property that is protected from further subdivision, development, or disturbance by way of a restrictive covenant in favour of the Fraser Valley Regional District.

It is the policy of the Regional Board that:

General Policies

- 5.5.1 LIMITED USE areas are established to minimize development in remote, inaccessible, hazardous or environmentally sensitive areas with limited or no access to community services and to maintain low development densities.
- 5.5.2 Development shall be controlled and uses may be restricted in areas of natural hazard potential and environmental sensitivity.
- 5.5.3 Environmentally sensitive areas shall be identified, preserved and buffered from development.

- 5.5.4 The Plan Map designates lands with some or all of the following characteristics as LIMITED USE:
 - geologic hazard
 - flooding hazard
 - environmental sensitivity
 - limited community or development services
 - poor road access
 - lands best suited to low density rural uses.

- 5.5.5 LIMITED USE areas may be extended or created through Plan amendment.
- 5.5.6 LIMITED USE areas may be reduced and re-designated if future studies show that an area can safely accommodate a broader range of uses without environmental damage, unacceptable public risk, or excessive public expenditure on access or other public works.
- 5.5.7 The Regional Board may consider further study for lands designated LIMITED USE along Vedder Mountain Road to examine geotechnical hazards, future development potential, and the boundary with the City of Chilliwack.

- 5.5.8 LIMITED USE areas may be used only for:
 - a. Farm use;
 - b. Conservation use;
 - c. Local institutional:
 - d. Low density commercial recreation;
 - e. Park and park reserve;
 - f. Recreation use:
 - g. Single family residential use; and,
 - h. Associated rural residential use.
- 5.5.9 Notwithstanding 5.5.8, associated rural residential uses are permitted unless prohibited by the zoning bylaw.
- 5.5.10 Subject to rezoning, low density commercial recreation uses may be permitted in the LIMITED USE designation on parcels eight (8) hectares in area or greater.
- 5.5.11 Rezoning applications to permit low density commercial recreation uses shall include a hazard assessment and/or an environmental impact assessment and, if deemed necessary by the Regional Board, an engineering feasibility study to ensure that the proposed use will not result in unacceptable public expenditures or service demands.
- 5.5.12 Notwithstanding 5.5.8, land in the LIMITED USE area may also be used for resource extraction uses provided that the area is zoned for the use intended and has been the subject of a Plan amendment supported by studies which demonstrate that such uses:
 - a. will not adversely affect surrounding lands;
 - b. will not adversely affect the geological stability of adjoining lands; and,
 - c. are in keeping with the development objectives and policies of this Plan.

Subdivision Policies

- 5.5.13 Land in LIMITED USE areas shall only be subdivided in accordance with the standards of the Responsible Authorities, except that the parcel size shall not be less than eight (8) hectares.
- 5.5.14 Notwithstanding Section 5.5.13 of this Plan, subject to zoning amendment density averaging may be permitted to facilitate the clustering of parcels away from hazard or environmentally sensitive areas provided that average density of the parent parcel being subdivided, excluding road and park dedications, will not exceed one parcel per eight (8) hectares, and provided that each parcel created is zero point two (0.2) hectares in size or greater and is suitable for its intended use.
- 5.5.15 Where a clustered subdivision is proposed, the subdivider shall be required to register a restrictive covenant in favour of the Regional District which prohibits the subdivision or alteration of hazardous or environmentally sensitive areas except for:
 - a. alterations or construction necessary to protect the residential parcels from geotechnical or other hazards;
 - b. the location of services; and,
 - c. trails.
- 5.5.16 The covenanted area for clustered subdivisions should normally be continuous and not fragmented. However, in some circumstances, fragmentation may be desirable to avoid development in hazard areas or preserve identified environmental values.
- 5.5.17 Where possible, the covenanted area of a clustered subdivision should:
 - a. border Crown land, park, or a covenanted area on an adjacent property; and,
 - b. include stream corridors, wetlands, sensitive or hazardous slopes and other areas of hazard or environmental value.

5.6 LOCAL COMMERCIAL (LC)

Description

Existing commercial lands are identified in the LOCAL COMMERCIAL designation. At present, the supply of commercially designated properties in the Plan area is generally considered adequate for meeting local demands. With the exception of the resort node of Cultus Lake South, this Plan does not proactively identify new lands for commercial uses. However, new proposals may emerge which warrant new or expanded commercial designations. The Regional Board will consider new proposals as they arise and in accordance with the policies of this Plan.

The LOCAL COMMERCIAL designation accommodates commercial uses oriented towards meeting the day-to-day needs of Electoral Area E and H residents and visitors. This designation is applied to lands utilized for existing commercial activities or vacant commercial lands. It may be expanded by application.

It is the policy of the Regional Board that:

General Policies

- 5.6.1 Land designated LOCAL COMMERCIAL should accommodate the commercial needs of the local community.
- 5.6.2 Development proposals shall ensure that adequate on-site parking facilities and that safe access and egress are provided.
- 5.6.3 LOCAL COMMERCIAL uses shall provide adequate on-site sewage disposal and safe water supply as required by the Responsible Authorities.
- 5.6.4 Development proposals are encouraged to respect the historical and rural character of the area in selecting the proposed use, design and layout of new development.

- 5.6.5 The Plan map designates lands with existing commercial uses as LOCAL COMMERCIAL.
- 5.6.6 LOCAL COMMERCIAL areas may be extended or created through Plan amendment where:
 - there is a need for additional commercial services to serve the local community;
 - sewage disposal, water supply and site drainage facilities are adequate;
 - suitable access/egress exists or can be developed;
 - parking can be accommodated; and,

hazard mitigation and flood construction requirements can be met.

Use Policies

- 5.6.7 LOCAL COMMERCIAL areas shall be used for only:
 - a. Accessory residential use;
 - b. Local commercial use;
 - c. Local commercial mixed use; and,
 - d. Local institutional.
- 5.6.8 New local commercial uses should be:
 - a. accessible from a collector or arterial road to avoid increased traffic through residential areas;
 - b. served by an approved community water system; and,
 - c. served by an adequate on-site sewage disposal system or, where available, connected to an approved community sanitary sewer system.
- 5.6.9 Where a zoning bylaw amendment is proposed for a neighbourhood pub or similar use the following should be demonstrated:
 - a. nearby lands will not be adversely affected;
 - b. accessed is provided directly from a collector or arterial road;
 - c. adequate on-site parking is available; and,
 - d. the use will be served by an approved community water system.

Subdivision Policies

- 5.6.10 Land in LOCAL COMMERCIAL areas shall be subdivided only in accordance with the standards of the Responsible Authorities, except that the parcel size shall not be less than:
 - a. two (2) hectares where on-site water and sewage disposal services are proposed; or,
 - b. zero point five (0.5) hectares where the parcel will connect to an approved community water system.
- 5.6.11 Notwithstanding Section 5.6.10, consolidation of existing small lots which do not satisfy the parcel size requirements in the LOCAL COMMERCIAL designation is encouraged in order to provide space for on-site services and sufficient parking facilities in accordance with the requirements of the Responsible Authorities.

5.7 MOBILE HOME PARK (MHP)

Description

The MOBILE HOME PARK designation recognizes existing mobile home parks within the Plan area. The intent of the land use designation is to provide policies concerning servicing requirements, for the extension of an existing mobile home park, and the establishment of new mobile home parks.

It is the Regional Board's policy that:

General Policies

- 5.7.1 High standards for the servicing of MOBILE HOME PARK areas should be maintained to protect the long term safety and health of park residents.
- 5.7.2 MOBILE HOME PARK should be located in areas where a full range of community services are accessible, including adequate police and fire protection, schools, parks, recycling, and solid waste management.

- 5.7.3 The Plan map designates as MOBILE HOME PARK lands with existing mobile home parks that are:
 - a. zoned for mobile home park use;
 - b. generally free of geologic and flood hazards;
 - c. easily accessible by public road;
 - d. not within the Agricultural Land Reserve; and,
 - e. are serviced by adequate water and sewer disposal systems.
- 5.7.4 MOBILE HOME PARK areas may only be extended or created through Plan amendment provided:
 - a. comprehensive, integrated plans are presented which demonstrate that additional lands meeting the designation policies are identified;
 - b. development trends warrant such an extension or creation;
 - c. development is serviced by an approved community sanitary sewer system and an approved community water system;
 - d. the creation or extension does not contravene the Official Community Plan objectives or policies;
 - e. the proposed location has adequate access and is free of hazards; and,
 - f. environmentally sensitive habitat is protected.

- 5.7.5 MOBILE HOME PARK areas may only be used for:
 - a. Mobile home park;
 - b. Accessory residential use; and,
 - c. Recreation use.
- 5.7.6 All new mobile home parks and extensions shall be serviced by an approved community sanitary sewer system and an approved community water system approved by the Responsible Authorities.

Subdivision Policies

5.7.7 Land in MOBILE HOME PARK areas may only be subdivided in accordance with the standards of the Responsible Authorities except that the parcel size shall not be less than two (2) hectares.

5.8 RESIDENTIAL LIMITED USE (RL)

Description

The RESIDENTIAL LIMITED USE designation is intended to recognize existing small-lot residential development in areas with significant geologic and flood hazards, lands outside of a fire protection area, lands with limited road access, and lands generally best suited to low density residential development. Often these lands require off-site protective works such as dikes to ensure the safety of occupants. Development in RESIDENTIAL LIMITED USE areas may face limitations associated with hazards that are not normally to be expected in areas of small-lot residential development.

The RESIDENTIAL LIMITED USE designation captures some larger properties where there may be potential for subdivision. There is significant geotechnical uncertainty with these properties and they will require comprehensive hazard assessments and likely on-site mitigation. For these reasons, parcel sizes should be consistent with a country residential density to allow space for hazard avoidance, siting options, and protective works as may be required.

Small-lot residential properties within the RESIDENTIAL LIMITED USE designation may be redesignated to SUBURBAN RESIDENTIAL at such time as approved hazard mitigation works are installed to ensure the safety of the lands from hazards or hazards affecting the lands are otherwise shown to be within acceptable limits.

It is the policy of the Regional Board that:

General Policies

5.8.1 Creation of new parcels through subdivision in RESIDENTIAL LIMITED USE areas is discouraged, except where geotechnical assessment certifies that safe building sites exist on all proposed lots.

- 5.8.2 The Plan map designates lands with some or all of the following characteristics as RESIDENTIAL LIMITED USE:
 - a. existing small residential or rural lots;
 - b. high geological hazard risk;
 - c. high flooding and creek related hazard risk;
 - d. located in front of the erosion setback line for the Chilliwack River:
 - e. located outside of fire protection service area and rated as a 'high' or 'extreme' fire hazard area according to Map 3 Interface Fire Hazards, of the Plan; and,
 - f. limited or poor road access.

- 5.8.3 Notwithstanding Section 5.8.2, lands may be re-designated through Plan amendment provided:
 - a. approved community hazard mitigation works are installed and the hazard is reduced to threshold consistent with Regional Board policy; or
 - b. a site specific geotechnical report by a qualified professional advises the lands are safe for the intended use.

- 5.8.4 RESIDENTIAL LIMITED USE areas may be used only for:
 - a. Single family residential use;
 - b. Conservation use;
 - c. Park and park reserve; and,
 - d. Associated residential limited use.
- 5.8.5 Applications for rezoning to permit associated residential uses which involve a home-based business providing for the overnight accommodation of guests shall not be approved unless approved community hazard mitigation works are in place or the lands are otherwise determined to be safe for the use intended.

Subdivision Policies

- 5.8.6 Land in RESIDENTIAL LIMITED USE areas shall only be subdivided in accordance with the standards of the Responsible Authorities, except that the parcel size shall not be less than two (2) hectares.
- 5.8.7 Notwithstanding Section 5.8.6, if land is deemed safe through a comprehensive geotechnical hazard assessment and is consistent with Regional Board policies concerning hazard acceptability thresholds, the minimum parcel size may be reduced to one (1) hectare except that where an approved community water system is provided upon subdivision the minimum parcel size may be zero point five (0.5) hectares.

5.9 RESORT (RT)

Description

The RESORT designation is intended to ensure that resort developments maintain public access to natural assets, mitigate impacts to the natural environment, provide a balance of onsite and off-site amenities, and provide adequate water and sewer systems. It envisions self-contained, integrated developments that are compatible with the surrounding environment.

Development pressures, lake health, servicing and access to recreation amenities highlight the need for a more intense planning process in the form of a neighbourhood plan for Cultus Lake South area. Policies specific to RESORT lands in Cultus Lake South can be found in *Section 7 - Cultus Lake South Neighbourhood Plan*. The neighbourhood plan policies build on the policies of the RESORT designation.

It is the Regional Board's policy that:

General Policies

- 5.9.1 Development in RESORT areas should:
 - a. be compatible with the natural environment;
 - b. be in keeping with the scale and character of the surrounding area; and,
 - c. not negatively impact any natural resource including Provincial Parks.
- 5.9.2 Resort development within the RESORT designation in Cultus Lake South should be consistent with *Section 7 Cultus Lake South Neighbourhood Plan*.
- 5.9.3 Resort development should not result in diminished access to public lands and foreshore areas.

- 5.9.4 The Plan map designates land with some or all of the following characteristics as RESORT:
 - a. land suitable for resort development due to proximity to recreation amenities and natural areas with recreation opportunities such as Cultus Lake;
 - lands having adequate regional transportation access to sustain resort development; and,
 - c. lands generally free of hazards.
- 5.9.5 RESORT areas may be extended or created through Plan amendment provided:
 - a. additional lands that meet the designation policy criteria above are identified;
 - b. recreational development trends warrant such creation or extension;

- c. studies respecting the feasibility and necessity for approved community water and sanitary sewer services or equivalent have been completed; and,
- d. the policies of this Plan, the Regional Growth Strategy, and other plans adopted by the Regional Board are met.

- 5.9.6 RESORT areas shall be used for only:
 - a. Resort residential use;
 - b. Multi-family resort residential use;
 - c. Holiday park;
 - d. Commercial campground use;
 - e. Conservation use:
 - f. Recreation use:
 - g. Park and park reserve;
 - h. Golf course:
 - i. Local commercial mixed use;
 - j. Associated resort use; and,
 - k. Assembly use.
- 5.9.7 In keeping with the resort character and natural setting in the Plan area, provisions for a broad range of uses associated with resort development should be made wherever possible.
- 5.9.8 Facilities associated with and located in a resort development, including but not limited to clubhouse, golf course, tennis courts, outdoor pools and other similar amenities which can generally be referred to as associated resort residential uses should be permitted the RESORT designation unless prohibited by a zoning bylaw.
- 5.9.9 Resort uses shall be served by an approved community water system and an approved community sanitary sewer system.

Subdivision and Density Policies

- 5.9.10 Except as otherwise stated in *Section 7 Cultus Lake South Neighbourhood Plan*, the maximum average densities permitted in the RESORT designation are as follows:
 - a. the number of recreational camping sites or lots in a campground or a holiday park shall not exceed 40 sites per hectare of useable land;

- b. the number of park model sites or lots in a holiday park shall not exceed 24 sites or lots per hectare of useable land;
- c. the number of holiday homes sites or lots in a holiday park shall not exceed 4.5 sites or lots per hectare of useable land except that where both an approved community water system and an approved community sanitary system are provided, the density shall not exceed 12.5 holiday home sites or lots per hectare of useable land:
- d. the number of dwelling units within a resort residential use or a multi-family resort residential use shall not exceed 12.5 dwelling units per hectare of useable land:
- e. where a resort development would include two or more of the resort types listed above (i.e. camping sites/lots; park model sites/lots; holiday home sites/lots; and, resort residential or multi-family resort residential dwelling units), the maximum density permitted shall be 1.0 "Resort Unit" per hectare of useable land. "Resort units" shall be calculated as follows:
 - # Resort Units = (# camping sites/lots x 0.0250) + (# park model sites/lots x 0.0416) + (# holiday home sites/lots x 0.0800) + (# dwelling units x 0.0800)
- f. for the purpose of determining the number of sites, strata lots or dwelling units permitted, the term "useable land" shall include all of the lot area which can be used for camping, holiday homes, resort residential uses and associated activities except that the following shall be excluded from the calculation of useable land: the site for a residence for the owner, manager or employee; land with a slope greater than 25%; land deemed by the FVRD Director of Planning to be lacking adequate natural drainage of surface water; sensitive habitat including fish habitat as defined under the Provincial Riparian Area Regulation any other provincial regulation; and, all lands and waters within the high water marks of lakes, ponds, and watercourses. [Byl # 1533, 2019]
- 5.9.11 The Regional Board will support subdivision for a local commercial mixed use in the Cultus Lake South area as identified by Schedule 10B Cultus Lake South Neighbourhood Land Use Concept Map. A new parcel created for local commercial mixed use shall meet servicing requirements and comply with the policies in Section 7 Cultus Lake South Neighbourhood Plan.

5.10 RURAL (R)

Description

The primary purpose of the RURAL designation is to maintain the existing character of the Plan area, to support rural lifestyles, and to provide for densities that are compatible with existing development and levels of servicing. The RURAL designation is applied to existing rural lots that have good road access but may have potential geotechnical hazards, servicing limitations, or other constraints.

Subdivision policies of the RURAL designation accommodate the creation of new parcels two (2) hectares in area or greater. In recognition of the difficulties of site development within the Plan area, subject to zoning amendment, the clustering of parcels may be permitted in the RURAL designation provided that average density of the parent parcel being subdivided will not exceed one parcel per two (2) hectares.

It is the policy of the Regional Board that:

General Policies

- 5.10.1 RURAL areas are established to accommodate a variety of rural lifestyles and maintain the low density rural character of the Plan area.
- 5.10.2 RURAL areas shall generally limit the demand for infrastructure through the provision of on-site services.
- 5.10.3 The Regional Board may consider a broad range of uses in keeping with rural lifestyles and the environmental policies of the Plan whenever possible.

- 5.10.4 The Plan map designates lands with some or all of the following characteristics as RURAL:
 - a. outside the ALR and floodplain;
 - b. predominantly rural in character;
 - c. anticipated to be suitable for on-site servicing;
 - d. good access to public roads;
 - e. existing small acreage subdivisions within a rural context.
- 5.10.5 RURAL lands located south of Wingfield Creek may be suitable for future redesignation to SUBURBAN RESIDENTIAL provided that:
 - a. adverse effects of noise from the Chilliwack Fish and Game Protective Association's shooting range can be adequately addressed;

- b. suitable lands generally free of geotechnical and hydrological hazards are demonstrated; and,
- c. it is shown that the lands can be provided with services in accordance with this Plan and regulations of the Responsible Authorities.
- 5.10.6 Development on RURAL lands may be constrained by minor geological or flooding hazards. However, it is anticipated that safe building sites can be identified and protected through site-specific measures.
- 5.10.7 RURAL areas may be extended or created through Plan amendment where additional lands are shown to meet the designation policy criteria above, where it can be shown that safe building sites exist, and where lands are shown to be suitable for on-site services.

- 5.10.8 RURAL areas may only be used for:
 - a. Farm uses excluding intensive agriculture;
 - b. Conservation use:
 - c. Park and park reserve;
 - d. Local institutional;
 - e. Single family residential use; and
 - f. Associated rural residential use.
- 5.10.9 Notwithstanding 5.10.8, associated rural residential uses are permitted unless prohibited by the zoning bylaw.

Subdivision Policies

- 5.10.10 Land in RURAL areas shall only be subdivided in accordance with the standards of the Responsible Authorities, except that the minimum parcel size shall not be less than two (2) hectares.
- 5.10.11 Notwithstanding Section 5.10.10 of this Plan, subject to a zoning amendment density averaging may be permitted to facilitate clustering parcels to avoid hazardous or environmentally sensitive areas provided that the average density of the parcel being subdivided, excluding road and park dedications, will not exceed one parcel per two hectares, and provided that each parcel created is zero point two (0.2) hectares in size or greater and is suitable for its intended use.
- 5.10.12 Where a clustered subdivision is proposed, the subdivider shall be required to register a restrictive covenant in favour of the Regional District which prohibits the subdivision or alteration of hazardous or environmentally sensitive areas except for:

- a. alterations or construction necessary to protect the residential parcels from geotechnical or other hazards;
- b. the location of services; and,
- c. trails.
- 5.10.13 The covenanted area of a clustered subdivision should normally be continuous and not fragmented. However, in some circumstances, fragmentation may be desirable to avoid development in hazard areas or preserve identified environmental values.
- 5.10.14 Where possible, the covenanted area of a clustered subdivision remainder parcel of a clustered bare land strata subdivision should:
 - a. border Crown land, park or covenanted area on an adjacent property; and,
 - b. include stream corridors, wetlands, sensitive or hazardous slopes and other areas of hazard or environmental value.
- 5.10.15 The Regional Board or the Subdivision Approving Officer may require upon rezoning or subdivision of land that advance street and conceptual lot layout plans be provided to demonstrate how the proposed lot layout would facilitate future subdivision or subdivision of adjacent lands.

5.11 SUBURBAN RESIDENTIAL (SR)

Description

The purpose of the SUBURBAN RESIDENTIAL designation is to provide for hamlet settlements and a suburban lifestyle within an overall rural context. SUBURBAN RESIDENTIAL policies provide for the infilling of established areas and, in some cases modest expansion of existing hamlets.

Without community services, the minimum parcel size in SUBURBAN RESIDENTIAL areas is two (2) hectares. The minimum parcel size may be reduced to zero point two (0.2) hectares where the proposed development will be served by an approved community water system.

SUBURBAN RESIDENTIAL areas are not planned for community sanitary sewer systems, even for the long term. Community sanitary sewer systems are permitted, but they do not result in a reduction in the minimum parcel size policy. Where community sanitary sewer systems are proposed, engineering studies and related documentation will be required to demonstrate that the proposed developments will be stable for long term on-site sewage disposal and that no danger exists for ground-water pollution which could lead to environmental problems.

It is the policy of the Regional Board that:

General Policies

- 5.11.1 In the design and layout of new development in SUBURBAN RESIDENTIAL areas special consideration should be given to the following:
 - a. the character, scale, and layout of existing adjacent residential areas;
 - b. updating and improving servicing facilities of existing areas;
 - c. the traffic flow on existing residential streets and pedestrian circulation;
 - d. conservation of areas of natural, scientific, cultural significance; and,
 - e. the orderly growth of residential communities.

- 5.11.2 The plan map designates land with some or all of the following features as SUBURBAN RESIDENTIAL:
 - a. above the floodplain and generally free from geologic hazard;
 - b. already zoned for suburban residential densities or subdivided into small parcels;
 - c. easily accessible by public roads;
 - d. large parcels with a significant portion of the property suitable for small-lot development; and,
 - e. areas anticipated to be suitable for on-site sewage disposal at the planned density.

- 5.11.3 SUBURBAN RESIDENTIAL areas may be extended or created through Plan amendment provided:
 - a. comprehensive, integrated plans are presented which demonstrate that additional lands that meet the designation policies are identified;
 - b. development trends warrant such an extension or creation; and,
 - c. the creation or extension does not contravene the Plan objectives and policies.

- 5.11.4 SUBURBAN RESIDENTIAL areas may be used only for:
 - a. Single family residential use;
 - b. Local institutional;
 - c. Associated rural residential use;
 - d. Park and park reserve;
 - e. Recreation use; and,
 - f. Conservation use.
- 5.11.5 Notwithstanding Section 5.11.4, associated rural residential uses are permitted unless prohibited by the zoning bylaw.

Subdivision Policies

- 5.11.6 Land in SUBURBAN RESIDENTIAL areas shall only be subdivided in accordance with the standards of the Responsible Authorities except that the minimum parcel size shall not be less than:
 - a. two (2) hectare; or,
 - b. zero point two (0.2) hectares provided that the proposed development is to be serviced by an approved community water system; or,
 - c. zero point two (0.2) hectares where an approved community water and approved community sanitary sewer system is provided; or
 - d. five hundred fifty seven square meters (557m²) provided that the proposed development is located in Fraser Valley Regional District Electoral Area "H" and serviced by an approved community water system and an approved community sewer system. [Bylaw No. 1460, 2017]
- 5.11.7 Where land in SUBURBAN RESIDENTIAL areas is proposed to be developed on the basis of on-site sewage disposal, land shall only be subdivided in accordance with the standards of the Responsible Authorities and where:

- a. provision has been made for a "back-up" tile field on each lot; and
- an engineering study and related documentation has demonstrated that the proposed development is suitable for long term on-site sewage disposal and that no danger exists for ground water pollution which could lead to environmental or human health problems.
- 5.11.8 Where land is proposed to be subdivided and a portion of the parcel is subject to hazards which make the lands unsafe for residential development, each parcel created by subdivision shall meet the minimum parcel size policies of this plan exclusive of the hazard lands.
- 5.11.9 The Regional Board or the Subdivision Approving Officer may require upon rezoning or subdivision of land within the SUBURBAN RESIDENTIAL designation that advance street and conceptual lot layout plans be provided to demonstrate how the proposed lot layout would facilitate future subdivision or subdivision of adjacent lands.
- 5.11.10 Water systems serving development with zero point two (0.2) hectare parcels in the SUBURBAN RESIDENTIAL designation should provide sufficient water flows for fire protection and adequate fire hydrants.

6.0 Local Area Policies

The Plan area is comprised of distinct communities and neighbourhoods. While they have much in common, their needs and circumstances require unique policy approaches. This section of the Plan outlines policies intended to address the unique character of the individual communities within the Plan area. Cultus Lake South, which warrants its own neighbourhood plan, is addressed in Section 7.

6.1 Columbia Valley

Columbia Valley is characterized by its topography, limited road connections, natural beauty and valuable agricultural lands. The majority of Columbia Valley is prime farmland within the Agricultural Land Reserve (ALR) with a Class 2 land capability for agriculture rating as determined by the BC Land Inventory mapping in 1985. This means that lands have some limitations to agriculture and require moderate management for soil based activities.

Residents of Columbia valley identified the following as particular challenges for their community:

- need for expanded options for farm uses to compliment and diversify agriculture businesses;
- <u>demographic changes</u> as the population ages and few younger residents move into the community or operate local agriculture businesses and support community institutions;
- <u>land values</u> are often cited by residents as prohibitive to younger residents or agriculture businesses; and,
- out-of-date <u>soil quality mapping</u> which may not accurately represent actual soil characteristics in Columbia Valley and which may lead to regulatory decisions about agricultural land that do not match ground conditions.

In response to these pressures, local residents have expressed a desire for more flexible land uses, greater economic opportunities, and alternative housing options while maintaining the rural quality of life and agricultural character of the community. Residents also expressed a desire for a review of soil quality mapping to support agricultural land use decisions. The goal of the Plan is to provide a range of uses that are flexible and respond to changing market demands but maintain consistency with the Agricultural Land Commission Act and regulations.

Agri-tourism

Expansion of agri-tourism uses may provide interested farm operators an opportunity to complement and grow their business with a range of accessory tourist activities. ¹⁰ The Columbia Valley offers an attractive tourist destination given its picturesque agricultural setting between the mountains and close proximity to Cultus Lake. In nearby Agassiz and Chilliwack, there are a diversity of agri-tourism businesses highlighted in the Circle Farm program including cheese and honey producers, farm stay accommodations, and many more. The success of the

¹⁰ Agricultural Land Reserve Use and Subdivision and Procedure Regulation; "agri-tourism" means a tourist activity, service or facility accessory to land that is classified as a farm under the <u>Assessment Act</u>;

Circle Farm program highlights the growing consumer trends towards locally produced foods and direct farm-to-consumer retail. The Agricultural Land Commission supports many agritourism uses outright provided they are accessory to a farm use. Other more intensive activities where conflicts may occur with nearby land uses may require local government approval.¹¹ The expansion of agri-tourism uses will need to be sensitive to nearby farm operations so that holiday-makers and agriculture practices can beneficially co-exist.

The Plan provides policy which supports a number of agri-tourism uses accessory to a farm operation including natural campground, farm tours, and food and beverage sales. Expanded agri-tourism uses may require rezoning and/or approvals from Agricultural Land Commission.

Agriculture Plan

To address issues of farm diversification, agri-tourism, land value, and community demographics the development of an agriculture area plan undertaken in partnership with the Agricultural Land Commission and the Ministry of Agriculture is recommended. An agriculture plan allows for an intensive focus on agricultural capabilities of Columbia Valley. It would bring together agriculture producers to create a strategy for improving agricultural viability.

It is the policy of the Regional Board that:

- 6.1.1 The Regional Board should seek funding and partnerships with the Investment Agriculture Foundation, the Ministry of Agriculture and others for the development of an Agriculture Area Plan for Columbia Valley.
- 6.1.2 The Agriculture Area Plan should explore:
 - a. agri-tourism opportunities and develop a strategy for undertaking these opportunities;
 - housing, residential footprint, housing placement, and alternative housing forms, including consideration of the Ministry of Agriculture's Residential Uses in the ALR bylaw standard;
 - c. agricultural viability, including soil quality mapping and current and future market opportunities;
 - d. current and future market opportunities and strategies for attracting new farm businesses and diversifying existing farms;
 - e. parcel sizes associated with agricultural suitability;
 - f. improving access into and out of Columbia Valley and managing traffic issues for farmers;
 - g. a new survey of land capability for agriculture ratings at a larger scale than now available:

¹¹ Refer to the <u>Agricultural Land Reserve Use and Subdivision and Procedure Regulation</u> for more details.

- h. potential reconfiguration of farm boundaries in line with topographic features such as escarpments;
- i. availability of communication services and natural gas;
- j. aquifer capacity, groundwater health and options to minimize impacts including potential application of the Ministry of Agriculture's Water Demand Model;
- k. initiatives to avoid or reduce conflicts between agriculture and other land uses; and.
- I. trail development appropriate for agricultural areas.
- 6.1.3 The Regional District encourages the Department of National Defense and local residents to communicate about the use of DND lands in Columbia Valley to help reduce instances of incompatible uses that negatively affect agricultural operations.
- 6.1.4 The farming community is strongly encouraged to follow best management practices associated with the spreading of manure on fields and the burning of wastes to minimize air quality impacts, particularly fine particulates in the air. Farms are encouraged to review the Ministry of Agriculture's Beneficial Management Practices for crop types grown in Columbia Valley.

6.2 Chilliwack River Valley

The Chilliwack River Valley (CRV) is an area rich in recreational, environmental and economic values that is easily accessible to the large population of the Fraser Valley and Metro Vancouver. Residential and recreational homes are found in pockets along the river corridor, while visitors are drawn to hiking, all-terrain vehicle trails, river kayaking, fishing and other activities that occur through-out the valley. Institutional land uses, including correctional facilities, and resource uses such as logging and aggregate operations are also found in the CRV. Achieving a sustainable and stable balancing between the sometimes conflicting needs of these various land uses has been the subject of discussion and study over the years.

Recreation

Next to the Fraser River, the Chilliwack River Valley (CRV) supports the highest volume of recreational use of any watershed in the province. It is estimated that approximately 1.5 million users or more visited the area in 2005. While the watershed hosts a wide variety of outdoor activities – including camping, hiking, mountain biking, caving, kayaking, boating, whitewater rafting, and rock climbing – angling is the largest single recreational activity and the reason why the watershed has become a recreation destination for thousands every year. The combined fisheries for coho, chum, chinook, and steelhead contribute to over 90,000 angling days per year spent along the Chilliwack River.

At the same time, the intensity of recreational uses in the Chilliwack River Valley has created several issues for the community – such as noise, trespass, nuisance, traffic and waste - and conflict between users groups, residents and resource industries. Issues mainly revolve around

the high volume of users and the unmanaged nature of many recreational activities. Over the years, the concept of designating the CRV as a recreation corridor has been examined. 12 There is merit in this idea, but alternatives that merit exploration likely exist. As an initial step, this Plan advocates for the development of a management strategy involving the numerous stakeholders and users groups. This would provide a forum for initiating a more coordinated approach for managing activities in the Chilliwack River Valley without presupposing any particular outcome. The Chilliwack River Watershed Strategy provides an excellent base for beginning this work.

In 2007, an order pursuant to Section 58 of the <u>Forest and Range Practices Act</u> was issued for the lower part of the CRV (from Vedder Crossing to Tamihi Bridge). This order prohibits overnight camping, on-street parking and generally provides a greater level of enforcement for this part of the Chilliwack River Valley. This order has significantly improved recreation management in the lower part of the CRV, but hay have the unintended consequence of pushing issues to the upper Chilliwack River Valley and into the backcountry areas. As result, community members expressed concern for the increased interface fire hazards, garbage and dumping and illegal camping.

Environment

The Chilliwack River Valley (CRV) is home to six different species of salmon and numerous mammal, reptile and bird species. It is an important watershed in the Lower Mainland, given its relatively undeveloped landscape but is facing pressure from land use activities. The Watershed Issues and Recommendations report by Chilliwack River Watershed Strategy recognized the interconnectedness of all the activities in the watershed and the need to balance competing values. The report provides useful context and exploration of the issues. It outlines ten recommendations including the need for coordinated long term management of the CRV. The policies of this Plan support the recommendations of the Chilliwack River Management Strategy.

Agricultural Lands

Portions of the Chilliwack River Valley are located in the ALR. Some of these lands have soils that are very good for farming. Lands east of McFaul Road have an improved rating of Class 1 on the flats and Class 3 on the slopes above. In addition, soils near the west end of Auchenway Road are improvable to Class 2 and Class 3, as is much of Larson's Bench. However, large tracts of these lands are Crown lands or are located adjacent to the Chilliwack River and form part of the riverbed. As such, these lands have a soil capability rating of Class 5 meaning they have limitations that restrict the capabilities of the land to produce perennial forage crops. Plateau areas above the Chilliwack River Valley are also located in the ALR and on average have a Class 4 soil capability rating. This soil class has some limitations and requires special management that may restrict the range of crops.

Agricultural lands in the floodplain or channel of the Chilliwack River are sensitive to environmental impacts. Additionally, the geography of the Valley is mountainous with tributaries

¹² Watershed Issues and Recommendations, A Project Team Report from the Chilliwack River Watershed Strategy, January 2009.

draining into Chilliwack River. Agricultural activities in upland areas must take into account the environmental and safety implications and should exercise caution as activities may impact lands below.

Towards a Management Strategy

Managing the complex and competing values in the Chilliwack River Valley (CRV) has been the subject of study from a variety of perspectives through the years, including recreation, hazards and watershed-based perspectives. Each study has contributed to a better understanding of the issues and recognized the need for comprehensive management of the CRV. The current management of the CRV is a 'patchwork quilt' of interests and authorities. A management strategy is needed to bring these interests together and provide a framework for how we can balance and manage the needs of all who value the CRV; from crown land activities such as recreation and resource extraction to residential homeowners, and institutional operations.

It is the policy of the Regional Board that:

- 6.2.1 The Regional District recognizes the Chilliwack River Valley as a diverse area rich in environmental and scenic values, recreational opportunities, community and resource values.
- 6.2.2 To better manage the various activities, preserve environmental qualities and reduce conflict, a Crown land management strategy should be undertaken for the Chilliwack River Valley extending from Vedder Crossing to (and including) Chilliwack Lake Provincial Park.
 - a. The management strategy should be undertaken by the Province in collaboration with provincial and federal agencies, FVRD, the City of Chilliwack, Ts'elxweyeqw Tribes, local governments, residents and stakeholder groups;
 - b. Where possible, the management strategy should implement recommendations from the Chilliwack River Watershed Strategy's "Watershed Issues and Recommendations":
 - c. The management strategy should:
 - address recreation management throughout the Chilliwack River Valley;
 - ii. identify key habitat areas and a best practices for protection and stewardship;
 - iii. identify enforcement strategies for illegal dumping and illegal camping;
 - iv. outline strategies for communicating with residents, industry and recreation users during peak use periods;
 - seek to minimize conflicts between user groups and between recreation and residential uses;
 - vi. identify areas of scenic value throughout the Chilliwack River Valley for conservation through forestry processes;

- vii. identify different user thresholds (resource, recreation, etc.) and reclamation and restoration standards;
- viii. consider traffic volumes, road capacity on Chilliwack Lake Road and parking;
- ix. identify wildfire fire hazards especially for areas with a large number of recreation users;
- identify recreation user needs such as signage, garbage bins, and washroom facilities; and,
- xi. explore funding options to support ongoing enforcement and infrastructure.
- d. The Regional District will assist the Responsible Authority in developing a Terms of Reference for a management strategy.
- 6.2.3 The Regional Board will advocate for the Agricultural Land Commission to review existing Agricultural Land Reserve boundaries in Chilliwack River Valley in relation to the channel of the Chilliwack River, provincial parks and mountainous terrain.¹³
- 6.2.4 The Regional District will work with Ministry of Agriculture and Agricultural Land Commission to develop policies to minimize the hydrological and geological impacts associated with farming upland above settlement in the Chilliwack River Valley.
- 6.2.5 Recreational user groups should consult community groups and the Ts'elxweyeqw Tribes regarding recreational activities that may impact residents and First Nation interests.

6.3 Lindell Beach

As an integral part of Cultus Lake South, policies regarding development in Lindell Beach are addressed in detail in the Cultus Lake South Neighbourhood Plan found in Section 7 of this Plan and in the other polices of the Plan. This section focus on matters related to existing development and community issues specific to Lindell Beach.

Lindell Beach is a small cottage community located on the south shore of Cultus Lake. It is bordered by Frosst Creek at the western edge of the community. The Lindell Beach Residents Association was established in 1962, when the association purchased lease lots and a 32 acre green belt that forms the community as it exists today. The green belt today provides land for the water system, recreation amenities and gathering spaces.

Generally, the community is used as a summer recreational area. Few owners reside year-round at Lindell Beach. The population swells during the summer months and as a result the

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¹³ In response to the referral of this Plan prior to its adoption, ALC stated that, "the task of plotting the actual channel of the Chilliwack River, the limit of mountainous terrain, and possibly some provincial parks ... may be carried out... by FVRD... and may be processed under section 17(1)(b) of the Agricultural Land Reserve Use, Subdivision and Procedure Regulation, then may be submitted by the Regional Board for Commission review." Letter from the ALC to FVRD dated May 22, 2013 under ALC Planning File #46483.

Lindell Beach Residents Association has worked to address concerns with traffic speeds and safety, and monitoring the use of Frosst Creek fan area.

There are approximately 150 small urban size lots at Lindell Beach. Originally, small cabins dotted the landscape. In recent years, aging cabins have been replaced with larger single family dwellings. Construction and site development can be a challenge for owners when considering the location of lots on the shores of Cultus Lake in the riparian area, the Frosst Creek alluvial fan hazards, on-site sewage disposal, and storm drainage.

Lindell Beach is serviced by on-site individual septic systems. Small lot sizes and a larger homes result in limited space for septic disposal fields and adequate back up fields. Moreover, there have been concerns expressed about the proximity of a large number of septic systems on the lakeshore and potential impacts on the aquatic habitat.

Several years ago, the Lindell Beach Residents Association established a private water system. Today it is owed by the Residents Association and operated by Corix Utilities. As described above, new construction trends are shifting toward larger homes using greater quantities of water. As a result of these trends, the water system may reach its limits. It could reasonably be expected over the life of this Plan that the water system may need upgrades.

The purpose of these policies and Development Permit Area 5-E is to provide guidance and regulations to assist in site development while protecting riparian areas.

- 6.3.1 New development in Lindell Beach will be encouraged to be compatible with the surrounding neighbourhood and to enhance the cottage-resort character of the community.
- 6.3.2 The Lindell Beach Residents Association is encouraged to consider connection to, or creation of, an approved community sanitary sewer system to serve the Lindell Beach community.
- 6.3.3 In the absence of an approved community sanitary sewer system, and to avoid the possibility that over-building on individual lots may result in the community being required to upgrade shared servicing systems on an emergency basis, regulations to limit the density of development on lots at Lindell Beach should be implemented.
- 6.3.4 The Regional Board will support efforts by the Lindell Beach Residents Association to partner with the Ministry of Transportation and Infrastructure to undertake traffic calming techniques at the conclusion of a traffic review.
- 6.3.5 The Regional District and the Lindell Beach Residents Association should work together to produce an information pamphlet for property owners building in Lindell Beach.

6.3.6 The Regional District supports Lindell Beach Residents Association's efforts to engage BC Parks in developing a strategy to manage unregulated use and access at the Frosst Creek fan in Cultus Lake Provincial Park.

7.0 Cultus Lake South Neighbourhood Plan

Since the early 1920's, Cultus Lake has been attracting people from all over the province as an area for camping, cottages, and recreation. By the 1960's, resort developments had moved to the south end of Cultus Lake. In recent years, there has been strong pressure for redevelopment and new resort uses. This trend is expected to continue. Cultus Lake is a recreation, camping and resort area in high demand by growing FVRD and Metro Vancouver populations. Located at the south end of Cultus Lake, buffered by a provincial park, mountains and agricultural lands, Cultus Lake South is an attractive resort location. It is also an area of great environmental and aesthetic value.

Relationship between Neighbourhood Plan and Official Community Plan Policies

The Cultus Lake South Neighbourhood Plan is a component of the Official Community Plan for Electoral Areas E and H. Neighbourhood plan policies provide a robust policy framework to guide resort development in a way that achieves the goals and objectives of this Official Community Plan, particularly the objectives to:

- preserve the natural beauty and scenic values of the environment and rural landscape while protecting wildlife, aquatic habitat and water resources, particularly Cultus Lake and Chilliwack River;
- engage residents as stewards of the environment and natural beauty and foster them in this role;
- encourage sustainable development and building practices to create low impact development;
- support well-managed recreation, resort and resource activities to provide for local and regional needs in a sustainable manner;
- avoid development in hazardous locations; and,
- foster the resiliency of rural and resort communities through efficient servicing; diverse economic opportunities; strong internal and external connectivity; and, working with nature.

Overall, the neighbourhood plan provides policies to achieve the long term vision of a resort village that creates a connected and coordinated community that avoids isolated developments. It also provides for public amenities and access to Cultus Lake. This balanced approach to resort development is achieved through:

- specific land use controls which guide future development in Cultus Lake South;
- amenity requirements to ensure developments achieve a level of self-supporting recreation opportunities;
- community amenities such as trails and future community park site that provide connections to Cultus Lake, help to achieve a coordinated community and while offering passive recreation opportunities;
- servicing and fire protection;

- examine current traffic capacity of Columbia Valley Highway, safety and emergency access and evacuation:
- environmental performance; and,
- form and character guidelines to achieve high aesthetic quality developments.

Description of the Neighbourhood Plan Area

The Cultus Lake South Neighbourhood Plan area consists of about 155 hectares of land at the south end of Cultus Lake as shown on Schedule 10A. Generally speaking, it is defined by hillsides and Crown land to the north; Cultus Lake and the Cultus Lake Provincial park in the east; and, hillside and agricultural land in the south. It includes about 155 hectares (383 ac) of land, not all of which is developable. Portions of the Neighbourhood Plan area are subject to flooding and debris events associated with Frosst Creek or Watt Creek.

Development Potential in Cultus Lake South

Actual development potential depends significantly on site-specific conditions that require detailed on-the-ground assessment. However, for planning purposes it is useful to estimate development potential resulting from the policies of the Cultus Lake South Neighbourhood Plan. Plan policies provide flexibility in development and, as a result, various development scenarios resulting in different unit totals are possible. However, if it is assumed that land within the Resort Residential area is developed or redeveloped for Resort Residential uses rather than others uses also supported by the Plan, it is possible that the total number of units in Cultus Lake South will increase over the life of this Plan from 970 to about 1460. This amounts to a 50% increase in the total number of units. In this scenario, "units" includes dwellings, seasonal cabins, RV sites, park model sites, and camping spaces.

Assuming an average occupancy of 2.7 persons per unit, the current peak seasonal population of Cultus Lake South can be estimated at 2,620 people. Under the development scenario described above, the peak seasonal population could increase to as much as 3,940 people over the life of the Plan, an increase of 50%.

The above figures are provided for broad planning purposes only.

Long-Term Evolution of the Cultus Lake South Resort Area

The policies of this Plan support a variety of forms of resort development, including resort residential uses, in Cultus Lake South. The objective of these policies is to reinforce a strong resort atmosphere by requiring that resorts include significant recreational and social amenities within the developments; by providing robust form and character guidelines; and, by supporting comprehensive and coordinated resort developments (rather than small fee simple lots, for example).

Conversely, Cultus Lake South does not have the features and amenities desirable for suburban or small-lot residential areas such as convenient access to employment, transit service, social services, schools, or a full range of commercial services. In addition, the proximity to Cultus Lake as well as the Provincial Park, and the requirement for on-site amenities, increases costs and reduces affordability.

Nevertheless, it can be anticipated that longer-term demographic and economic trends, including:

- growing population and demand for housing;
- ageing population seeking to retire in places with natural amenities;
- technology and the changing nature of work decentralizing employment (i.e. telecommuting); and,
- inflationary price increases making it more difficult to sustain second residences that are only occupied for a fraction of the year;

will result in resort residential units being used as primary residences, or being occupied on a near year-round basis through off-season rentals or other arrangements.

While this projected evolution may culminate beyond the life of this Plan (if it happens at all), it is important to consider long-term implications because servicing capacities and forms are determined in the shorter term as development occurs. Plan policies anticipate this potential evolution in various ways, for example by ensuring that the servicing standards used for resort developments will support year-round peak occupancy and by providing a long-term vision for a single public sanitary sewer that serves all the communities of Cultus Lake.

7.1 Resort Land Uses

Most of the lands within the Cultus Lake South Neighborhood Plan area are designated as RESORT in this Official Community Plan. The land use policies below should be understood to refine the policies in the RESORT designation in Section 5 of this Plan and to supplement the policies of the other sections. Neighbourhood plan policies provide a robust policy framework necessary to achieve the objectives of this OCP in Cultus Lake South where environmental values, including aesthetics, are paramount and development is dynamic.

As shown on Schedule 10B – Cultus Lake South Neighbourhood Plan – Land Use Concept Map, the policies of this neighbourhood plan allocate land roughly as follows:

- 82 hectares (203 ac)for Resort Residential uses;
- 44 hectares (109 ac) for Resort Campground uses;
- 12 hectares (30 ac) for Low Density Resort uses; and,
- 15 hectares (37 ac) for Rural uses.

Specific policies for each of the neighbourhood plan land use areas follow.

7.1.1 Resort Residential

Resort Residential lands are located primarily north of Columbia Valley Highway in relatively close proximity to Cultus Lake. Resort Residential developments will be fully serviced with approved community water and sanitary sewer systems. Housing is compact and

developments will provide significant on-site recreational and social amenities. The built form in the Resort Residential area will be oriented toward compact site-built structures, such as cabins, cottages and attached ground-oriented resort dwellings, within a comprehensive strata development.

It is the policy of the Regional Board that:

- 7.1.1.1 A range of housing options should be provided in the overall Resort Residential area.
- 7.1.1.2 Unless specifically stated otherwise, Multi-family Resort Residential Use is only permitted within a comprehensive development on lands of 2 ha or greater. However, the Regional Board may consider unique re-development proposals for a smaller site.
- 7.1.1.3 The following uses are supported in a Resort Residential area:
 - a. Resort residential use:
 - b. Conservation use:
 - c. Park and park reserve;
 - d. Golf course; and,
 - e. Recreation use.
- 7.1.1.4 Notwithstanding Section 7.1.1.3, the use of land within the Agricultural Land Reserve shall be consistent with the Agricultural Land Commission Act, the Agricultural Land Reserve Use, Subdivision and Procedure Regulation and regulations and the orders of the Agricultural Land Commission. The Policies of this Plan should not be taken as support for the removal of land within the Cultus Lake South Neighbourhood Plan area from the Agricultural Land Reserve (ALR). Rather, resort developments adjacent to agricultural lands should be designed to be compatible with farm use on ALR lands.

7.1.2 Resort Campground

Resort Campground areas are located south of Columbia Valley Highway and west of the Frosst Creek bridge. Developments located in this area, will provide a variety of different forms ranging from RV camping sites, park model units, and holiday park developments. Developments will be fully serviced by providing community water and community sewer systems and will normally take the form of comprehensive strata or lease-lot developments with significant on-site recreational and social amenities for owners or users.

It is the policy of the Regional Board that:

7.1.2.1 The following uses are permitted in a Resort Campground area:

- a. Holiday park;
- b. Resort residential use;
- c. Commercial campground use;
- d. Recreation use;
- f. Golf course;
- g. Conservation use;
- h. Park and park reserve; and,
- i. Recreation use.
- 7.1.2.2 The Regional Board encourages the use of energy-efficient factory-built or modular cabins as an alternative to park model trailers and recreational vehicles.

7.1.3 Local Commercial

The map in Schedule 10B – Cultus Lake South Neighbourhood Plan – Land Use Concept Map, along with the policies below, encourage - but do not require - the development of a small-scale local commercial development in a central location within the Resort Residential area adjacent to Columbia Valley Highway. Resort Residential uses are also permitted in this location, however the development of a local commercial use to serve the needs of the community is strongly encouraged. In effect, the Local Commercial area functions as an "overlay" on top of the Resort Residential area in this location to indicate an opportunity to develop Local Commercial uses there.

In recognition of the seasonal nature of the resort community, the policies provide significant flexibility in an effort to support a viable commercial use. Local Commercial development may be 'mixed use' - allowing both commercial space and residential development to offset the seasonal nature of commercial activity.

The Neighbourhood Plan policies also recognize that flexibility may be needed in allowing commercial activity to be diversified on site, flexible parking space requirements, and utilization of outdoor space for complementary local commercial activities suitable to a resort village setting.

A Local Commercial use would also function as a gathering place for the community and a destination point for local trails. High quality aesthetic values including landscaping must be utilized and reflect the natural beauty surrounding this location and support aesthetic qualities of the resort village. The policies below will help to achieve this vision for commercial activity in Cultus Lake South.

It is the policy of the Regional Board that:

New Commercial Lands

- 7.1.3.1 Local Commercial uses should be adjacent to Columbia Valley Highway. They should function as a community node and be connected to resort developments by trails, pathways and roads.
- 7.1.3.2 Local Commercial uses shall be connected to an approved community sanitary sewer system and an approved community water system.
- 7.1.3.3 Flexibility and innovation will be required in developing Local Commercial uses in a seasonal resort area. The Regional District will work with proponents to foster achieve a viable local commercial use. For example, parking requirements may be reduced where a trail system connects developments to the site and bike racks is provided and on-street parking is available.
- 7.1.3.4 Local Commercial uses should cater to local needs including food service, grocery, general store-type retail and should provide social opportunities for the community.
- 7.1.3.5 Local Commercial uses may mix ground-level commercial uses with an upper storey for residential uses. Residential uses will be located in the same structure as the commercial use.
- 7.1.3.6 Local Commercial uses should be small-scale and intended only to serve the day-to-day needs of the local area. Individual commercial uses should not exceed about 1000m² in floor area.

7.1.4 Low Density Resort

Land located in the Low Density Resort area has limited connection to Cultus Lake and is constrained by topography and riparian areas which significantly constrain development. These lands are envisioned as an area of low density resort development with seasonal occupancy such as "cabin in the woods"-type developments. Allowable density in Low Density Resort areas will support on-site water and sewerage disposal services, but connection to approved community systems may be possible if such systems are available. On-site amenities will likely to be the natural vegetation with an 'experience nature' feel and potential for 'living off the grid'.

- 7.1.4.1 The Regional Board will work with applicants and governing authority to support innovative on-site servicing arrangements that minimize environmental impacts.
- 7.1.4.2 Density shall not exceed resort 4.5 units per hectare of usable land.

- 7.1.4.3 The following uses are permitted in the low density resort area:
 - a. Low density commercial recreation;
 - b. Campground;
 - c. Recreation use; and,
 - d. Conservation use.

7.1.5 Rural

The Cultus Lake South Neighbourhood Plan identifies an area of land on the Columbia Valley plateau for Rural uses. Rural uses are defined in Section 5.10 of this Plan. These lands are bordered by the Frosst Creek ravine and agricultural uses on surrounding parcels. Given this location, the lands are best suited to rural uses such as clustered rural estates rather than resort uses. The lands are designated RURAL in this Plan (see Section 5.10). However, the lands are identified in the Cultus Lake South Neighbourhood Plan because they are zoned Campground Holiday Park under the Zoning Bylaw for Electoral Area E and therefore may be developed for resort uses under the existing zoning.

It is the policy of the Regional Board that:

7.1.5.1 Resort development in lands identified for Rural uses in the Cultus Lake South Neighbourhood Plan are discouraged. Upon dialogue with the property owners, the Regional Board may initiate rezoning of the land to conform to the policies of this plan. Should the lands be developed for resort uses, significant buffers and other measures will be required to minimize potential impacts to and from surrounding agricultural uses.

7.2 Amenities

Amenities are an important element of any resort area. There must be a mix of public amenities and private amenities that bring people together, provide access to nature and opportunities for recreation or relaxation.

Amenities can be divided into three general categories:

- Public amenities- space that is available to all community members and the general public and is usually publically owned (i.e. Cultus Lake, community parks, land dedicated as park though the subdivision process, community trails)
- Semi-private amenities- activities and space dedicated to strata owners in a specific development (i.e. clubhouse, pool, internal trails, buffers areas, etc.). These amenities will often take the form of common strata property and for certainty does not include private amenity space, or an area for exclusive use by a single strata unit.
- Private amenities- an area exclusively used by an individual or single strata owner (i.e. balcony, backyard etc.).

It is the policy of the Regional Board that:

- 7.2.1 Resort developments should be self-sufficient in terms of recreational amenities required to support the development.
- 7.2.2 Public amenities will take the form of local parks, including land dedicated as park during subdivision processes, Provincial parks, and Crown land.
- 7.2.3 Semi-private and private amenities within resort developments should provide recreation opportunities, add to the overall diversity of recreation and leisure pursuits in Cultus Lake South; and, help to differentiate resort developments within Cultus Lake South.
- 7.2.4 Semi-private amenities for Resort Residential and Resort Campground uses shall include both indoor and outdoor recreational or social facilities. Common indoor amenity space should amount to at least 3 m² per dwelling unit.
- 7.2.5 Within each resort development, the minimum amount of land area devoted to semiprivate amenities - including open space, recreation, and environmental conservation - shall be:

Use	Minimum Amenity Space	
Resort Residential	Twenty percent (20%) of usable land	
Resort Campground	Twenty percent (20%) of usable land	
Low Density Resort	Sixty percent (60%) of the parcel or parcels comprising	
	the development	

[&]quot;Useable land" shall include all of the lot area which can be used for camping, holiday homes, resort residential uses and associated activities; it shall exclude the site for a residence of the owner, manager or employee, land with a slope greater than 25%, land lacking adequate natural drainage of surface water, sensitive habitat and lakes, ponds, and watercourses.

- 7.2.6 Where lands are identified for environmental conservation, they should be continuous with conservation areas on adjacent parcels if possible.
- 7.2.7 As lands are redeveloped or resort uses expanded, existing forested lands relied upon for screening, natural aesthetics, buffers, and recreation should be maintained to the extent possible.

7.3 Form & Character

Cultus Lake South is a special area, its natural beauty, green spaces and access to Cultus Lake create a place where people want to recreate. This demand has resulted in several resort residential developments since the 1950's. The demand for resort residential continues. To ensure new developments, re-developments and new phases or expansion of existing

developments achieve a high aesthetic value, unique developments and proper landscaping and buffering, a development permit area will be used to achieve these goals. To achieve form and character, guidelines, general policies and a form and character development permit area will be established for this area.

It is the policy of the Regional Board that:

7.3.1 Land proposed for resort development should be included in the Form and Character Development Permit Area 4-E.

7.4 Environmental Performance

Resort development proposals will demonstrate how a high standard of environmental performance will be achieved. The Cultus Lake South area appeals to people as a recreation destination and resort residential area because of its proximity to the lake and beautiful natural setting. Often these areas provide second homes for recreational pursuits. Science suggests that the health of Cultus Lake is in jeopardy; therefore development must not have a negative impact on lake health and the surrounding environment. The Regional Board is required by legislation to address the reduction of greenhouse gas emissions (GHGs). Environmental performance is one method to address GHG reductions for the Cultus Lake South area.

Environmental performance will be a consideration for the Regional Board when evaluating Official Community Plan and zoning bylaw amendment. Generally developments should be low impact, help achieve provincially mandated greenhouse gas reductions, conserve water and energy consumption and an overall long term sustainable development. To assist the Regional Board's evaluation an environmental performance checklist will be created. This will provide information about how a high level of environmental performance may be achieved.

- 7.4.1 Development proposals requiring a zoning bylaw amendment or Official Community Plan amendment will demonstrate how their proposal will achieve a high level of environmental performance with respect to services, greenhouse gas emissions, energy consumption, solid waste management, water consumption, habitat and landscaping. For example, development could include district heating systems.
- 7.4.2 Development proposals not requiring either an Official Community Plan or zoning bylaw amendment, should also strive for a high level of environmental performance.
- 7.4.3 Riparian habitat should be protected from development and, where riparian vegetation has been degraded, enhanced to improve habitat values. Landscaping should use primarily native species.

7.4.4 The Regional Board encourages the use of energy efficiency site-built, factory built or modular cabins as an alternative to park model trailers and recreational vehicles.

7.5 Trails and Community Parks

Policies in this section describe a trail and community park concept that will connect self-contained resorts to the larger resort village. It will offer recreational opportunities and places to gather while supporting an integrated and connected community.

A community park and trail network in Cultus Lake South will provide safe and convenient access to Cultus Lake, connect developments, provide gathering space, offer recreational opportunities, support healthy lifestyles, and provide transportation options.

In addition to creating connections, trails have a variety of health, social, environmental and economic benefits. Trails and gathering spaces offer opportunities for residents to interact and participate in their community. They provide a range of benefits ranging from: potential increases in property values, promotes healthy lifestyles, increased opportunities for active transportation, and potentially reduces the number of vehicle trips leading to a reduction in greenhouse gas emissions.

Schedule 10C – Cultus Lake South Neighbourhood Plan – Trail Concept Map identifies potential trail segments and community park locations. In many cases, conceptual trail segments take advantage of road right-of-ways or other opportunities. However, particularly where trails pass through private lands, each conceptual trail segment will require detailed review often in conjunction with development proposals to determine their feasibility and alignment.

Potential trails shown on Schedule 10C in the core Cultus Lake South resort area are the priorities. They consist of:

- a promenade trail within the right-of-way of Columbia Valley Highway from Frosst Creek to the BC Parks trail to the Maple Bay Day Use Area; this trail will provide a safe and attractive link to Cultus Lake; and,
- a trail looping to the north off Columbia Valley Highway which will provide recreational opportunities help build connections between resort developments.

If, in the future, it becomes possible to develop a formal trail from Lindell Avenue to the Maple Bay Day Use Area through the existing United Church Camp within Cultus Lake Provincial Park, such a trail should be added to the local trail system. In the meantime, residents are permitted by BC Parks to informally access Maple Bay via this route.

As the trails and park are intended to be used by local residents and resort patrons, no parking or staging areas are envisioned.

In addition to the trails, two potential community park locations are identified: 1) a natural community park next to Frosst Creek for nature appreciation and recreation; and, 2) a formal gathering space - such as a public square - adjacent to Columbia Valley Highway for socializing, gatherings, events and potentially vendors or a small farmers market. Both of these parks would be integrated with the community trail network.

Potential community park locations within Cultus Lake South are shown on *Schedule 10C*. However, the Regional Board may consider park dedication anywhere within the Plan area deemed suitable.

No trails or recreation uses are intended on the Frosst Creek delta deposit in Cultus Lake because of the high environmental values associated with the delta (including sockeye spawning habitat); the lack of infrastructure to support recreational use; and, the potential for facilitating access to unsuitable terrain on adjacent lands.

The policies below will guide the establishment of a community park and trail system in Cultus Lake South.

- 7.5.1 A local trail and community park service area should be established for Cultus Lake South to support the development of the trail network and community parks shown on Schedule 10C Cultus Lake South Neighbourhood Plan Trail Concept Map
- 7.5.2 Trail development and construction should be generally consistent with the concept map as shown on *Schedule 10C Cultus Lake South Neighbourhood Plan Trail Concept Map.* However, it is recognized that upon detailed investigation some trail segments or community parks shown may prove infeasible or undesirable and therefore would not be developed.
- 7.5.3 Potential trail connections shown on *Schedule 10C Cultus Lake South Neighbourhood Plan Trail Concept Map* in the lower Cultus Lake South trail system are the first priority, beginning with the Columbia Valley Promenade/multi-use trail connecting to Cultus Lake.
- 7.5.4 Land for trails and the proposed community parks should be secured as opportunities arise. However, construction of trails should only occur once sufficient population exists in Cultus Lake South to viably support annual operation and maintenance costs.
- 7.5.5 Trails and community parks should be designed to keep operations and maintenance costs at a supportable level.
- 7.5.6 Land and facilities for trails and community parks shown on *Schedule 10C Cultus Lake South Neighbourhood Plan Trail Concept Map* are anticipated to be gained through:
 - park dedication or cash-in-lieu at the time of subdivision pursuant to the dedication of park land provisions of Section 941 of the <u>Local Government</u> <u>Act</u>;
 - Road Use Permits from the Ministry of Transportation & Infrastructure; and,
 - application for use of Crown land.

- 7.5.7 As resources permit, the Regional District will seek a tenure for park purposes over the unused portion of land next to Frosst Creek legally described as Section 15, Township 22, Meridian E, New Westminster District Lease/Permit/License #236650, Part E 1/2, Legal Subdivision 6, Meridian ECM. Furthermore, the Regional District will seek to expand tenure as occupied portions of the property become available.
- 7.5.8 The Regional Board may attempt to negotiate access to land for trails or parks through right-of-ways, easements and other such mechanisms as required.
- 7.5.9 Where appropriate, at the design and construction phase of community trails or parks, a safety audit should be conducted to identify "crime prevention through environmental design" strategies to minimize opportunities for trails and parks to be used for illicit activities and to ensure that trail users feel safe using them.
- 7.5.10 A paved multi-use trail standard should be applied to the promenade trail along Columbia Valley Highway. All other trails in the lower Cultus Lake South trail system may be built to either an unpaved multi-use or an unpaved rural standard, whichever may be most applicable.
- 7.5.11 The Regional District will work with BC Parks through BC Parks park management planning processes to provide opportunities to connect community trails to BC Park's trail system. Furthermore, the Regional District will liaise with BC Parks to secure year-round access to Cultus Lake for residents of Cultus Lake South and Columbia Valley. If necessary, the Regional Board may consider implementation of a service area to address costs associated with year-round lake access for local residents.

7.6 Stormwater Management

Failure to manage stormwater resulting from land use change can cause flooding, loss of aquatic habitat and water pollution in downstream receiving waters¹⁴. The Cultus Lake South lowlands are situated on a deltaic area which slopes gently to the northeast towards Cultus Lake. Soils in this area are generally characterized as well to rapidly drained and pervious, and have low water holding capacity.¹⁵ It is, therefore, important that the water quality of stormwater disposed to the ground or surface waters is high so contaminants are not transferred to the aquifer or Cultus Lake. On-site stormwater management is one component of water conservation and is included in the environmental performance evaluation of development proposals. The policies below supplement those in Section 12.2 of this Plan.

The location of the Cultus Lake South resort area on Frosst and Watt Creek alluvial fans means that Development there may be subject to overland flood flows. The Frosst Creek dike, along with the requirements of Development Permit Area 1-E in this Plan, address flood hazards from Frosst Creek. Development on the Watt Creek fan will require hydrological review to address

¹⁴ British Columbia Stormwater Planning May 2012.

¹⁵ Piteau Associates Hydrogeological Review for Cultus Lake South Sewerage Study March 22, 2012.

peak overland flood flows, flow routes, and mitigation measures such as flood construction elevations (if required).

It is the policy of the Regional Board that:

- 7.6.1 Stormwater management plans should use current best practices and environmental conservation approaches for comprehensive on-site management of stormwater.
- 7.6.2 Resort developments on the Watt Creek alluvial fan which is approximately outlined in the 2006 report titled *Frosst Creek Fan Hazard Zones, Cultus Lake, BC* by Northwest Hydraulic Consultants will require assessment by a qualified professional to assess and mitigate alluvial fan hazards.

7.7 Servicing

Water

At the current time, development within Cultus Lake South is served by private community or individual on-site water supplies which draw from groundwater wells. These systems appear to adequately serve the area. In the immediate future, the Regional Board does not anticipate establishing a public community water system. However, this policy may change if a need becomes evident. Policies in Section 8.2 of this Plan outline the Regional Board's policy on acquisition of water systems, the operation of community water systems and other matters related to drinking water supply.

Sanitary Sewer

This section should be read in conjunction with Section 8.3 of this Plan which sets out an ultimate vision for a single public sanitary sewer system the serves all the communities of Cultus Lake and recreational uses within Cultus Lake Provincial Park.

The development of such a system would be a major infrastructure project requiring broad public support, partnerships, and significant funding from senior governments. It is likely to only happen in the medium to long term. Accordingly, interim polices are needed to guide development in Cultus Lake South, protect lake and groundwater health, and ensure actions in the short to medium term do not preclude the ultimate development of a public sanitary sewer system. The policies of this section provide interim guidance for sewage disposal in Cultus Lake South until such time as the ultimate vision of a public system serving all the lake communities is in place.

In Cultus Lake South, sewage disposal is currently provided by a range of methods from on-site septic tanks and fields on small lots to community sewer systems with sophisticated treatment systems serving larger strata resort developments.

As a part of the preparation of this plan, the "Cultus Lake South Sewage Planning Study" was undertaken in 2012 (Urban Systems). The study examines current sewage disposal practices in Cultus Lake South and projects the long term potential impact of these practices on the water

quality of Cultus Lake and the Columbia Valley aquifer. It outlines potential approaches for the FVRD to help mitigate these impacts and to protect water quality.

The study reveals that:

- Groundwater conditions within the study area have few site-specific constraints to ground disposal of sewage effluent via absorption trench drain fields or rapid infiltration basins. The depth to the water table in existing and potential future disposal locations is typically greater than 10m, and the soils are well drained. In some areas, proximity to operating water supply wells may limit a site's suitability.
- Continuation of current practices for dealing with domestic sewage at Cultus Lake South may ultimately result in overloading of nitrate both in the groundwater regime and the lake. Previous studies provide evidence of a trend to eutrophication because of increasing nitrogen concentrations. While there are sources of nitrogen other than domestic sewage, such as agricultural fertilization activities, it is evident that domestic sewage is a significant contributor to overall nitrogen loadings.
- Reduction of nitrate loadings should include treatment that achieves nitrification and denitrification of ammonia in domestic wastewater. This type of treatment is not uncommon in community wastewater treatment plants, but is more difficult to achieve on an individual on-site basis. Some of the existing treatment plants are already removing nitrate, while other can be easily modified to achieve nitrogen removal.
- The older subdivisions utilize on-site septic tank and leaching field systems and these do little to remove nitrates. Subdivisions close to the lake shoreline are suspected to create the highest nitrate loading to the lake.

The policies below provide interim guidance for sewage disposal and the protection of lake health. These interim policies:

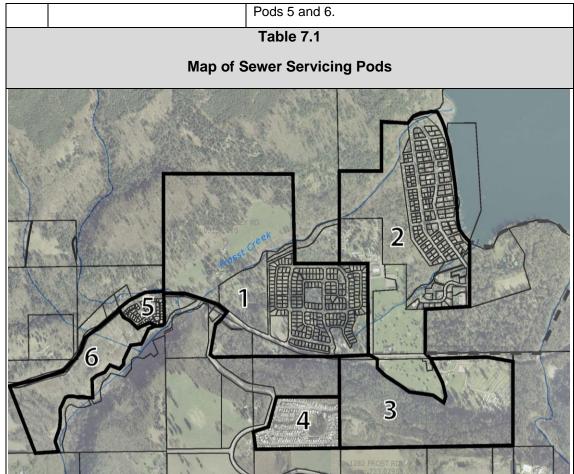
- ensure a high standard for treatment of sewage effluent;
- support efficient and cost effective sewage disposal systems;
- minimize the number of new systems developed in Cultus Lake South;
- recognize existing systems and arrangements while supporting public ownership of new systems; and,
- support the eventual transition to an area-wide public sanitary sewer system.

- 7.7.1 Development services should support continuous year-round occupancy. Servicing standards suitable only for seasonal occupation or predicated on reduced occupancy should be avoided.
- 7.7.2 It is anticipated that development in Cultus Lake South will be adequately served by private approved community water systems. However, the Regional Board may

- consider accepting ownership of water systems where community benefits are evident.
- 7.7.3 Resort developments shall provide community water systems, including fire hydrants, with sufficient water flow for fire suppression.
- 7.7.4 It is the policy of the Regional Board as set out in Section 8.3 of this Plan that a comprehensive strategy for the provision of sanitary sewer services for the communities of Cultus Lake and recreational uses within Cultus Lake Provincial Park. The interim sewage disposal policies of this section of the Plan should be reviewed and amended as required upon completion of the comprehensive strategy.
- 7.7.5 All new resort development shall be served by an approved community sanitary sewer system which achieves Class A ground discharge as defined by the BC Municipal Sewerage Regulation.
- 7.7.6 As existing ground sewage disposal sites are expanded, or as new one are developed, the phosphorus retention capacity of soils in the unsaturated zone at prospective disposal sites should be evaluated to confirm the expectation that phosphorus will be naturally attenuated. If it is not expected that phosphorus would be naturally attenuated, it may be necessary for the proposed method of sewerage treatment to address it.
- 7.7.7 Any new sewage disposal systems developed in Cultus Lake South area shall be designed and built in such a way as to readily facilitate connection to a future area-wide public sanitary sewer system.
- 7.7.8 Through the rezoning process, the Regional Board should explore opportunities to develop formal understandings with developers and private sewerage system owners regarding connection of the development to a future public area-wide sanitary sewer system should one be developed.
- 7.7.9 All new private community sanitary sewer systems should have adequate capital replacement reserves.
- 7.7.10 Except as noted in this Plan, the Regional Board may not support the development of private sanitary sewer systems that serve two or more strata developments or fee simple parcels.
- 7.7.11 Existing sewage disposal systems that present the greatest risk to lake and groundwater health should be a priority for the development of a community sanitary sewer system.

- 7.7.12 The Regional Board will support the monitoring of lake and ground water quality as recommended in the Cultus Lake South Sewerage Planning Study.
- 7.7.13 All components of sanitary sewer systems shall be designed to minimize odor emissions.
- 7.7.14 Table 7.1 below outlines the Regional Board's interim vision for sewer servicing in the Cultus Lake South area:

	Table 7.1				
	Interim Approach to Sewer Servicing in Cultus Lake South				
Pod	Existing	Future			
1	private community sanitary sewer system registered under the Municipal Sewerage Regulation (Environmental Management Act) and serving a single development	The existing treatment and disposal system serving "The Cottages" may be expanded to serve new development within Pod 1. As the system would serve two separate strata corporations, it is preferable that it be publically owned. The Regional Board will investigate the feasibility of acquiring this system.			
2	Various systems currently exist in this pod, including a private disposal system under the Municipal Sewerage Regulation and unsewered areas with individual septic fields under the Sewerage System Regulation (Public Health Act)	A public approved community sanitary sewer system should be developed to serve existing and future development within this pod. A modular system that can be expanded to serve future development within the pod and potentially elsewhere in Cultus Lake South, including adjacent lands within Cultus Lake Provincial Park, may be most preferable.			
3	private community sanitary sewer system under the Municipal Sewerage Regulation serving a single development	Development in this pod may be served by an independent private sewage system serving a single development or fee simple parcel. The existing system should be upgraded to achieve Class A effluent discharge. Alternatively, development should connect to a public approved community sanitary sewer system.			
4	various cluster septic systems under the Sewerage System Regulation (Public Health Act)	Development should be connected to a public approved community sanitary sewer system. Alternatively, development within this pod may be served by an independent private sewage system serving a single development or fee-simple parcel.			
5	private community sanitary sewer system registered under the Municipal Sewerage Regulation	Independent private sewage system serving a single development. The system should be upgraded to achieve Class A effluent discharge. Alternatively, development should be connected to a public approved community sanitary sewer system.			
6	Undeveloped property	Development should be connected to a public approved community sanitary sewer system with Class A effluent discharge. Alternatively, development within this pod may be served by an independent private sewage system serving a single development or fee simple parcel. There may be opportunities for a shared public system serving			



For clarity, it is the objective of the Regional Board to minimize the number of independent sewage treatment and disposal systems with Cultus Lake South. Accordingly, where possible it is desirable for a public approved community sanitary sewer system to serve more than one pod.

7.8 Fire Protection

Fire protection is provided by the Columbia Valley volunteer fire department for Cultus Lake South (CLS) area. As population growth and new developments increase, capacity of the fire department needs to be a central consideration when the Regional Board is considering zoning and OCP amendment applications that would facilitate new resort residential developments. In the life span of the plan, a variety of housing types including multi-family can be expected in CLS. Therefore the capacity and level of fire protection offered by a rural volunteer fire department must provide an adequate level of protection for new developments. One tool to ensure fire protection levels are adequate is an on-going dialogue with the Regional District's fire protection department and the local fire department's chief.

- 7.8.1 The Regional Board may require that that any zoning or official community plan amendment applications involving assembly or multi-unit residential uses be supported by a fire protection engineering report.
- 7.8.2 The Regional District should review the capacity of rural volunteer fire departments serving Electoral Areas E and H, particularly their ability and capacity to protect large buildings resort residential development; ensure that land use plans and policies are consistent with the level of fire protection available; and, if required, identify funding mechanisms for upgrading fire equipment and other fire department needs to keep pace with development expectations.
- 7.8.3 The Regional District, in conjunction with the Fire Chief for the Columbia Valley Volunteer Fire Department, will consider the volunteer recruitment, training needs and whether it would be desirable and practical to have on-call members during peak traffic weekends to ensure response times and generally support first response.
- 7.8.4 Where a new resort development or expansion of an existing resort is proposed, the proponent may be required to provide a comprehensive fire protection system designed by a professional engineer in conjunction with the FVRD and FVRD Fire Department.
- 7.8.5 Resort developments shall provide community water systems, including fire hydrants, with sufficient water flow for fire suppression.

7.9 Traffic

Columbia Valley Highway is the single access route into and out of the Cultus Lake area. It also serves an agricultural community at the end of Columbia Valley Rd. Roads fall under the jurisdiction of Ministry of Transportation & Infrastructure. As interest in Cultus Lake increases as a place for recreation, development pressure increases for expanded resort residential and camping opportunities. As part of the Neighbourhood Plan, the Regional District in partnership with ICBC, Ministry of Transportation and Infrastructure, BC Parks, and the City of Chilliwack in consultation with the Cultus Lake Park Board and other stakeholders, completed a comprehensive traffic study. The study evaluated capacity of the Columbia Valley Hwy, where traffic was generated from, safety concerns, feasibility of bike lanes, options/opportunities to mitigate and improve congestion, and finally, future capacity of the road based on demand growth and resort development.

Road Safety

Overall the study determined that collision rates were considerably lower than similar rural arterial roads around the province. As expected, there is an increase in accidents during peak periods in the summer months. However, data shows the accident rate is only slightly higher on the weekends. Intersections, specifically, Vedder Mountain Rd/Columbia Valley Hwy intersection, and Sunnyside Blvd, Leavens Rd, Sleepy Hollows Rd, and Lindell Ave area have

all recorded accidents. The report identifies potential geometric improvements that may improve road safety.

Emergency Access and Response

Cultus Lake South is serviced by a single access. The Neighbourhood Plan needs to consider emergency access and response in the event that Columbia Valley Hwy is blocked for a significant period of time. As explored in the traffic study, there are three possible alternative access routes that may be possible to use as emergency access routes in the event that evacuation is required at a time when Columbia Valley Highway is not passable. An update to the emergency management plan applicable to the Cultus Lake / Columbia Valley should be undertaken to address emergency access routes and evacuation procedures.

It is noted that the development of emergency access routes through land within the Agricultural Land Reserve (ALR) would require an application to the Agricultural Land Commission to approve the use of ALR lands as a transportation corridor.

Currently emergency response is provided by the Columbia Valley Fire Department. Often the volunteer fire department is first responder. As a department, they have ensured a high level of training to respond to a variety of different types of emergencies. These range from medical, car accidents and training for forest fire response. Based on discussions with some members of the fire department, they have long recognized that the distance from the City of Chilliwack and the traffic volume may hinder response times. As a result the fire department has sought to fill this gap.

Congestion

The study determined that throughout the majority of the year, except summer long weekends, Columbia Valley Highway has sufficient capacity to accommodate growth. However, during summer long weekends (or 'peak times'), Columbia Valley Hwy is congested and exceeds capacity. As a result pinch point areas such as the intersection at Vedder Mt. Rd and Columbia Valley Hwy and the round-about at Sunnyside Blvd have delays and long wait times. This accounts for approximately 4% of the year the road is over capacity.

According to the traffic study, future growth with a 20 year outlook advises that without management and/or geometric improvements Columbia Valley Hwy may exceed capacity through significant portions of the summer months. The growth forecast examines future development potential in the Cultus Lake South area, as well as, recreation demand within the BC Parks as regional and sub-regional populations grow and demand increases.

Resort Development

Resort development accounts for a small portion of the overall traffic volumes on Columbia Valley Hwy. According to the traffic study, Cultus Lake South accounts for approximately 13% during the peak holiday weekend times. With development forecasts added in, this number would increase into approximately 20%. Development forecast numbers are unlikely to be fully achieved due to certain constraints on the remaining large parcels currently not under consideration for development.

In the overall Columbia Valley Hwy corridor area, Cultus Lake South is a small contributor to the congestion issue. It is important to note that residents and property owners are able to alter travel habits to avoid peak traffic times during the summer. This differs significantly from day-use and temporary overnight (camping) visitors.

The Neighbourhood Plan provides provisions to reduce local traffic in the Cultus Lake South area by providing alternative transportation options to move people to the lake, commercial area and generally within the local area by foot or bicycle. Traffic volumes may be reduced overtime through the application of road improvements and traffic management opportunities as detailed by the traffic study.

The development of bike lanes on Columbia Valley Highway from Cultus Lake South to the City of Chilliwack boundary is necessary to support resort development and reduce automobile dependency. Bike lanes are strongly supported by the local community. Bike lanes are also addressed in Section 8.1 of this plan and shown on Map 4 – Transportation Network.

- 7.9.1 The Regional District will work with the Ministry of Transportation & Infrastructure, the City of Chilliwack, the Cultus Lake Park Board, BC Parks, Soowahlie Band and others towards implementation of the Cultus Lake South Traffic & Transportation Study and other initiatives to reduce traffic congestion and increase safety on Columbia Valley Highway.
- 7.9.2 The development of bike lanes on Columbia Valley Highway from Cultus Lake South to the boundary of the City of Chilliwack is strongly encouraged. The Regional District will work with the Ministry of Transportation & Infrastructure and others to support the development of bike lanes.
- 7.9.3 The Emergency Management Plan, and specifically the Emergency Evacuation Subplan for Cultus Lake South, should be updated within one year of the adoption of this Plan. These updated should include:
 - identification of emergency access/egress for Cultus Lake South and Columbia Valley;
 - b. emergency airlift locations in the event the road is closed and emergency vehicle access is denied;
 - c. the role, capabilities and capacities of the Columbia Valley Volunteer Fire Department in first response situations; and,
 - d. coordination with the RCMP and BC Ambulance Service regarding measures to ensure reasonable response times during peak summer periods when Columbia Valley Highway experiences congestion.
- 7.9.4 The Regional District will work with the BC Government, the Ministry of Forests, Lands & Natural Resource Operations, the Ministry of Transportation & Infrastructure,

City of Chilliwack, Cultus Lake Parks Board and others to evaluate secondary emergency evaluation routes, effectiveness of management strategies and data collection for on-going issues with congestion, and options for road improvements for Columbia Valley Highway.

- 7.9.5 If appropriate, the Regional District will consider the feasibility of creating a service area to support the maintenance of emergency evacuation routes.
- 7.9.6 All new resort developments should demonstrate to the Regional Board how the proposed new development will avoid creating new congestion and/or pinch points through access into and out of the development; and, apply creative solutions to minimize impacts of the development on peak traffic congestion on Columbia Valley Highway.

8.0 Infrastructure & Services

A key feature of regional districts is the use of separate, individual funds for each service. Every regional district service is accounted for separately using a dedicated service fund. Revenues and costs specific to one service cannot be shifted to or spread among other services. All costs associated with a service are paid only by those within the service area who benefit from it. With relatively few users on each system to share costs, rural services are especially intolerant to inefficiencies and spikes in costs.

Another characteristic of rural services is that the local environment is often depended on to both supply potable water and to receive wastewater, often within the same parcel of land. Sewage is typically discharged within the same drainage basin or aquifer that supplies drinking water. Also, rural areas tend to be served by multiple and diverse systems rather than single large systems. For example, there are many separate water systems within Electoral Areas E and H.

Accordingly, it is particularly important in Electoral Area E and H to ensure that services are efficient; that consistent standards are applied; that services will be stable and perform for the long term; and, that impacts to the natural environment are minimized.

While servicing levels within Electoral Areas E and H vary, typically residents and landowners should expect overall levels of service consistent with rural, or in some cases resort, environments.

The policies identify overarching guidelines for services within the Plan area. Policies specific to particular services are provided in the sections that follow.

It is the policy of the Regional Board that:

- 8.0.1 All services should be designed, operated, maintained and administered to minimize impact to the natural environment and to perform reliably and efficiently over the long-term. Low-impact servicing approaches are strongly encouraged.
- 8.0.2 Services for individual developments should support continuous year-round occupation. Servicing standards suitable only for seasonal occupation should be avoided.
- 8.0.3 Capital replacement reserves should be required for all community water, sanitary sewer services.
- 8.0.4 Development services should be provided in accordance with FVRD's *Subdivision and Development Control Bylaw*, the policies of the Regional Board (including this Plan, and the requirements of Responsible Authority.

8.1 Roads & Transportation

The major valleys of the plan are linked to the Vedder Crossing (City of Chilliwack) by Columbia Valley Highway and Chilliwack Lake Road. Electoral Areas E and H roads are owned by the

Province of British Columbia and managed by the Ministry of Transportation & Infrastructure. Road maintenance is undertaken by private contractors hired by the Ministry.

Columbia Valley Highway

Columbia Valley Highway functions both as a scenic park road and as an arterial connection to the community of Columbia Valley. The highway experiences congestion during periods of peak recreational demand during the summer months when traffic bottlenecks occur. The high weekend summer traffic volumes combined with illegal roadside parking raises concerns that emergency vehicles may not be able to quickly access the provincial park, campgrounds and residential areas. However, it would be inappropriate to change the highway for faster traffic flows at the cost of its scenic value. The aesthetic experience of travelling Columbia Valley Highway is important to the success of recreational and resort uses and to the overall character of the area. There is a strong desire within the community for bike lanes on Columbia Valley Highway from Leisure Valley to the City of Chilliwack boundary. Columbia Valley Highway is further discussed in *Section 7 – Cultus Lake South Neighbourhood Plan*.

Chilliwack Lake Road

Chilliwack Lake Road is periodically blocked by erosion and flooding events in the Chilliwack River or its hillside drainages. Recent major closures occurred in 1990 and 2006 when high water in the Chilliwack River caused significant damage to the road. Also in January 2009 a rain on snow event caused debris slide material to threaten Chilliwack Lake Road. Several other minor closures also occurred in this period.

Residents express concerns with high traffic volumes on Chilliwack Lake Road during peak summer recreation periods. Traffic count data illustrates these concerns. During the years 2005 to 2009, monthly vehicle counts in August increased each year from 138,793 to 179,853. In 2009, the July-August average vehicle count was 4.2 times higher than the average January-February count. This comparison may crudely indicate the ratio of local to recreational traffic. The traffic count figures referenced here are raw and are subject to data inaccuracies, but they clearly indicate seasonal traffic volumes.¹⁶

High traffic volumes in the summer months result in a bottleneck at the Vedder Bridge. An additional bottleneck may occur at the Tamihi Bridge because (as of June, 2011) it is signaled for one-way traffic only. Community concerns with traffic volume and bottlenecks are compounded by problems with speeding along long stretches of the rural road, recreational users parking on the roadside, narrow road shoulders and the mix of industrial, residential and recreational traffic. There is a strong desire in the community for bike lanes on Chilliwack Lake Road from Slesse Park to the City of Chilliwack boundary.

The road network linking the valleys of the Plan area with Chilliwack and the Fraser Valley are a significant constraint to development. Chilliwack Lake Road and Columbia Valley Highway are the only access and egress for the community. No reliable alternatives exist. In the case of

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¹⁶ Traffic counts were taken by FVRD Parks Department 2005-2009.

Chilliwack Lake Road, the situation is compounded by its vulnerability to erosion, flooding and debris movements.

A better understanding of the capacity of these roads, current traffic volumes and traffic patterns is needed in the short term. In the long term, major improvements - including identification, construction and/or upgrading of alternate access routes (if only for emergency purposes) - are required in the road system to alleviate the problems identified above. This Plan proposes the evaluation and designation of potential alternative access roads with a priority on securing emergency access/egress routes. Though they are not designated for such use, forestry roads may provide emergency egress but their conditions vary and they are not dependable. For the Chilliwack River Valley, a potential road alignment is identified south of the river using the route of the existing logging and military roads. For Columbia Valley, potential emergency routes are identified on Vedder Mountain – one to the north end of Cultus Lake and another over the mountain to the Fraser Valley. These routes should be evaluated and, if feasible, identified for emergency use. These potential routes are shown on Map 4 – Transportation Network.

With respect to local road networks, the plan provides for a clear hierarchy of road widths and for the submission of advance street plans in the subdivision process. The aim of these provisions is to control the pattern and design of the road network, discouraging through traffic on local residential streets, and encouraging the free flow of traffic on collector and arterial roads. In addition, plan policies provide for liaison with the City of Chilliwack and Ministry of Transportation & Infrastructure to ensure that the new development takes place in such a way as to protect the regional road network.

Roadway & Right-of-Way Widths

Road standards in Electoral Areas E and H are established in *Subdivision and Development Control Bylaw No. 1110-1992* (or as existing at the time) and by the Ministry of Ministry of Transportation & Infrastructure. Standards for new roads must be established in the context of local site conditions and engineering requirements. However, the following classifications may be viewed as general guidelines for right-of-way (ROW) and roadway widths in the Plan area.

The following classes of roads are recognized in this plan:

- An **ARTERIAL** is a road that primarily provides for through traffic usually on a continuous route. Direct access to abutting land is not a priority.
- A **COLLECTOR** is a road that provides for traffic movement between arterials and local streets with some direct access to adjacent property.
- A **LOCAL** road is primarily designed for providing access to adjacent properties with little or no provision for through traffic. Direct access is allowed to all abutting properties. The maximum length of a local street is normally 450 metres, though longer local roads exist.
- A CUL-DE-SAC is a local road termination providing a U-turn area of constant radius.

Table 8.1				
Guidelines for Roadway Widths				
Classification	Minimum Right-of-Way Width	Minimum Roadway Width		
Arterial	30 m	10 m		
Collector	25 m	10 m		
Local	20 m	8 m		
Cul-de-sac	18 m	15 m radius		

Notes:

- For more information, see Province of BC, Ministry of Transportation, BC Supplement to TAC Geometric Design Guide 2007 Edition and FVRD's Subdivision and Development Control Bylaw.
- Minimum roadway widths include the paved surface plus required shoulders.
- The minimum ROW width for a Cul-de-sac without a curb is 20 m with a 15 metre turning radius.
- Standards for roadway and right-of-way widths may vary with local conditions, engineering requirements, and requirements for underground services. Also, it is the policy of the Ministry of Transportation that any roadway designated as a "significant network element" must have a minimum pavement width of fourteen meters, measured curb to curb.
- In hillside locations, and wherever necessary, the minimum road right-of-way width will be increased to contain cut and fill slopes at stable angles of repose.

Non-standard road ROWs and undeveloped road ROWs exist in the Plan area.

The road network and existing and future road classifications in the Plan area are shown on *Map 4 - Transportation Network*. This map also identifies potential new road connections which, in the long term, require study to determine feasibility and alignment. Any such study would be done in conjunction with the Ministry of Transportation & Infrastructure and adjacent municipalities.

Access

Under the provisions of the <u>Land Title Act</u> and the applicable land use and subdivision control bylaws of the FVRD, each new parcel must be provided with adequate legal access and vehicle parking. In the case of high traffic generating uses, the policies of the Plan recognize the need for more than one legal access, especially for emergency vehicles, and traffic impact analyses.

Transit

BC Transit and the City of Chilliwack partner to operate the Cultus Lake Summer Shuttle bus service which provides a transit connection between Chilliwack and Cultus Lake Elementary School (within the Cultus Lake Park Board lands). The service runs from early July to Labour Day.

There is no public transit service to Chilliwack River Valley or Columbia Valley. The cost of serving low density rural areas with transit is usually prohibitive and service is not anticipated in the foreseeable future. However, the feasibility of extending the Cultus Lake Summer Shuttle to

Lindell Beach should be explored in the future as the seasonal population in the Lindell Beach area increases.

- 8.1.1 The Regional Board may require that development proposals include a traffic impact analysis report prepared by a qualified professional.
- 8.1.2 The Ministry of Transportation & Infrastructure, the City of Chilliwack and FVRD should complete a detailed technical study of the road capacities and projected demands for traffic on the two arterial roads within Electoral Areas E and H which connect with the City of Chilliwack. The study should consider the upgrade of the Vedder Crossing bridge and the intersection of Vedder Road and Chilliwack Lake Road.
- 8.1.3 The Ministry of Transportation & Infrastructure, the City of Chilliwack, FVRD and the Ministry of Forests, Land & Natural Resource Operations, should complete a detailed technical study of potential alternative road access to the Chilliwack River Valley and Columbia Valley with a priority on securing a route for emergency access and egress. Potential routes are shown on Map 4 Transportation Network. In the interim C.F.B Chilliwack should be requested to maintain leases on existing roads south of the Chilliwack River.
- 8.1.4 Traffic speed though the settled area along Chilliwack Lake Road between Vedder Road and Tamihi Bridge should be monitored and maintained at safe levels for the surrounding communities.
- 8.1.5 The Province of BC should review the relevant provincial legislation regarding the control of roadside parking along provincial highways and on Crown land and implement more effective tools to manage illegal roadside parking, including improved ticketing processes and opportunities for permitted on-road parking areas. Columbia Valley Highway should be used as a case study to inform this effort.
- 8.1.6 New roads within the Plan area should:
 - a. provide for extension and connection to existing or proposed roadways adjacent to or beyond the subdivision;
 - b. provide alternate route choices where possible;
 - c. be aligned to minimize stream crossings and avoid environmentally sensitive areas; and,
 - d. minimize impacts to agriculture operations and avoid fragmenting agricultural lands
- 8.1.7 Each new parcel of land should have frontage on, and reasonable and practical access to, a public road.

- 8.1.8 Land uses in the Plan area shall be provided with adequate and safe access for all traffic including emergency vehicles. Existing, new and expanded commercial and residential developments shall be provided with legal access commensurate with the use proposed.
- 8.1.9 Access for residential uses on side roads should be constructed in accordance with the Ministry of Transportation & Infrastructure standards outlined in *Location, Design and Construction of Residential Driveways on Side Roads Outside Municipalities*.
- 8.1.10 Where existing collector or arterial roads have deficient right-of-way widths, the Ministry of Transportation & Infrastructure should secure, where possible, additional land to remove all or part of the deficiency.
- 8.1.11 Upgrades to Chilliwack Lake Road and Columbia Valley Roads should include road shoulders which provide suitable and safe designated paths for pedestrian, cycling uses and in agricultural areas for horse riding.
- 8.1.12 In order to protect the scenic value of the area, natural vegetation should be maintained wherever possible along Columbia Valley Highway and Chilliwack Lake Road where the road right-of-ways are adjacent to Crown land or public parkland.
- 8.1.13 Street lighting should be provided at major intersections, or along specific segments of roads there the need is generally recognized by local property owners, in cooperation with the Ministry of Transportation & Infrastructure.
- 8.1.14 Illegal roadside parking along Chilliwack Lake Road and Columbia Valley Road should be reduced through improved enforcement abilities and efforts.
- 8.1.15 Landowners are encouraged to:
 - a. maintain private driveway culverts and watercourse crossings to preserve their capacity to pass high flows; and,
 - b. upgrade substandard driveway culverts so that they can pass 1:200 year storm flows.
- 8.1.16 The feasibility of a seasonal transit service to connect the Lindell Beach area with the Cultus Lake Park Board lands and transit service within the City of Chilliwack should be explored.

8.2 Drinking Water

Drinking water in Electoral Area E and H is obtained from individual, on-site ground or surface water supplies and a variety of multi-user water systems.

FVRD Water Systems

Bell Acres Water Supply & Distribution System

The Bell Acres water system service area was established in 1993. This system provides the subdivision of Bell Acres with untreated potable water from a groundwater well. A 410 m³ reservoir provides storage for the system.

There are nearly 30 customer accounts on this water service (in 2011), most of which are metered. This system has adequate capacity in place to meet existing and anticipated future growth demands. Subject to favorable hydrological conditions and upgrade of the well pump, the system could potentially serve up to 200 homes.

The Bell Acres water system provides flows for fire protection in accordance with Fire Underwriters Survey guidelines. Eight hydrants are installed on the system.

Parkview (East Cultus Lake) Water Supply & Distribution System

The Parkview (East Cultus Lake) water system service area was established in 1986. This system provides the Parkwood subdivision with untreated potable water from a groundwater well. A 113 m³ reservoir provides storage for the system.

There are almost 70 customer accounts on this water service (in 2011), most of which are metered. This system has an adequate quantity of water to meet both current and future water requirements.

The Parkview water system provides firefighting flows to five hydrants. However, there is insufficient storage to meet rural residential fire flow standards. Upgrades are planned to address storage and water pressure issues.

Policies that guide FVRD's delivery of water system services are found in *Sustainable Service Delivery for Community Water Systems: Policies to Guide Service Delivery in FVRD's Electoral Areas* (February 2010) which has been adopted as the official policy of the Regional Board. This policy identifies the levels of services FVRD will provide its water system users. The policies of the Regional Board respecting water conservation policies may be found in The *Electoral Area Water Conservation Program*.

The location of the Bell Acres and Parkview water systems and service areas are shown on *Map 5- Local Service Areas*.

Private Water Supplies

Many residents of the Plan area obtain drinking water though individual, on-site ground or surface sources. In 2011, there were about 45 surface water licenses and 285 known groundwater wells for domestic water use in Electoral Areas E and H. Many of the wells, perhaps more than a quarter, are subject to potential overland flood flows and should be flood-proofed to avoid contamination in the event of a flood.

In addition to the individual on-site supplies, there are a variety of private multi-user water systems. Some private water services, such as the Lindell Beach system, are professionally operated and consistently meet provincial standards. However, in some areas of existing

residential and resort development, small shared water services of uncertain engineering standards and legal status have been established. Unclear use rights, no provision for maintaining the water supply, and lack of fire protection are problems with these systems.

It is anticipated that requests for FVRD to take over substandard water systems will continue, and perhaps increase in frequency, as water systems age and user expectations change. The Regional District will consider such requests in accordance with the policies set out in Sustainable Service Delivery for Community Water Systems: Policies to Guide Service Delivery in FVRD's Electoral Areas (or as updated) and the policies of this Plan.

Bylaws, Policies & Regulations

Water supplies and systems within Electoral Areas E and H are regulated by local bylaws and policies and also by provincial regulations. FVRD bylaws and policies generally:

- apply at time of development to ensure that new development is served by appropriate water supplies, such as *Subdivision and Development Control Bylaw* and the policies of this plan; or,
- guide the development, expansion, operation and management of FVRD water services, such as those discussed above.

Provincial legislation deals primarily with licensing, permitting, construction and operating standards. The use and allocation of surface water is regulated under the Water Act. The Ground Water Protection Regulation (BC Reg 299/2004) establishes construction standards applicable to individual, on-site water wells. The Drinking Water Protection Act covers all water systems other than single-family dwellings (and systems excluded through the regulation). It outlines requirements for water suppliers to ensure that the water supplied to their users is potable and meets the requirements of the Act and the water supply system's operating permit. The Drinking Water Protection Act requires approval of water system construction proposals by public health engineers; minimum water treatment standards; monitoring/testing of systems; water systems to meet water quality standards; and, public notification of water quality problems. It also prohibits the introduction of anything into a domestic water system, well recharge zone or an area adjacent to the drinking water source that results in a health hazard.

The following policies are intended to ensure that new water systems - and expansions to existing systems - accord with land use policies and will be sustainable over the long term. They should be considered alongside the individual land designation policies which identify servicing levels required for subdivision and development.

It is the policy of the Regional Board that:

8.2.1 The official policies of the Regional Board with respect to water system service delivery, governance, cost recovery, priorities, and acquisition policies are those set out in Sustainable Service Delivery for Community Water Systems: Policies to Guide Service Delivery in FVRD's Electoral Areas (February 2010) or as amended by the Regional Board.

- 8.2.2 The Regional District may consider expansion of the Parkwood and Bell Acres Water Supply and Distribution Systems in accordance with the policies set out in Sustainable Service Delivery for Community Water Systems: Policies to Guide Service Delivery in FVRD's Electoral Areas (February 2010) and under the following conditions:
 - a. the costs of extending the service boundary are financed exclusively by the new area to be serviced and the cost is sustainable;
 - b. the ability to service unconnected parcels within the original service area is not negatively affected;
 - c. the capacity of the water system to supply the added demand, along with any improvement necessary, is determined by a qualified professional engineer;
 - d. there will be no negative impacts to the water supply source;
 - e. expansion of the system is consistent with the land use objectives and policies of this plan; and,
 - f. expansion of the service area is unlikely to result in subsequent demands or expectations for service in locations where development at serviced densities is not desirable.
- 8.2.3 The Regional District may consider the acquisition of existing or new water systems in accordance with the policies set out in *Sustainable Service Delivery for Community Water Systems: Policies to Guide Service Delivery in FVRD's Electoral Areas* and where acquisition and improvement of the system is consistent with the land use objectives and policies of this plan and unlikely to result in subsequent demands or expectations for service in locations where development at serviced densities is not desirable.
- 8.2.4 The Regional District should develop a source protection plan for the Bell Acres water and Parkwood (Cultus Lake East) water system wells.
- 8.2.5 The provision of safe and reliable water supplies, and the protection of existing water supplies and sources, will be a consideration in all zoning and community plan amendments and in subdivision referrals.
- 8.2.6 When subdivision is proposed which would create parcels less than eight hectares in area, the Responsible Authority should require the developer to provide a report by a professional engineer which confirms the ability of each water supply to provide a suitable quantity of potable water which meets Canadian drinking water standards. The report should include:
 - a. accurate location sketch of the well or intake (and supply line where applicable);
 - b. well log provided by well driller that is prepared in accordance with accepted standards, or a sketch of the surface water intake;
 - c. pump test and/or quantity test results;

- d. recovery test results;
- e. water quality test results from the laboratory;
- f. certification that the water supply is capable of meeting the quantity requirements year-round and that the water meets the Guidelines for Canadian Drinking Water Quality; and,
- g. in the case of groundwater sources, identify the type of aquifer from which the well will draw water and any implications for drinking water quality and quantity as well as the sustainability of the supply.
- 8.2.7 Applications for zoning and community plan amendments to facilitate new development may be required to include a report by a qualified professional engineer. The report should:
 - a. provide reasonable rationale and assurances respecting the feasibility and longterm suitability of the proposed water supply;
 - b. assess the compatibility of the proposed water supply with other on-site services (such as a sewage disposal field) or nearby services on adjacent lands;
 - address the cumulative impacts the proposed water supply may have on the source and determine whether the proposed supply will adversely affect existing water supplies drawing from the same source; and,
 - d. in the case of groundwater sources, identify the type of aquifer from which the well will draw water and any implications of the aquifer type for drinking water quality and quantity as well as the sustainability of the supply.
- 8.2.8 Individual, on-site water supplies which rely solely on treatment systems to produce potable water that meets the *Guidelines for Canadian Drinking Water Quality* are strongly discouraged and should be avoided for new subdivision and development.
- 8.2.9 All owners of water supplies are strongly encouraged to implement source control measures to prevent contamination of water sources and supply systems.
- 8.2.10 In accordance with the <u>Ground Water Protection Regulation</u>, landowners are strongly encouraged to:
 - a. promptly deactivate or close unused wells to prevent contamination of the aquifer; and
 - b. flood-proof wells in locations subject to potential flood flows.

8.3 Sewage Disposal

FVRD Sanitary Sewer Systems

The Cultus Lake Sanitary Sewer System is owned by the Fraser Valley Regional District (FVRD) and operated by the Cultus Lake Park Board. The system consists of gravity main, pump stations, force main, septic tanks, and disposal fields. There have been recent proposals to expand the service area of this system to include unserviced lands within the jurisdiction of the Cultus Lake Park Board and lands within nearby parts of Electoral Area H. The policies of this plan support evaluation of opportunities to expand the area of the Cultus Lake Sanitary Sewer System to serve a broader area. However, it is preferable to develop a common sanitary sewer system that would serve all the communities of Cultus Lake, including campgrounds and other uses of BC Parks lands.

A Comprehensive Strategy for Sanitary Sewer Services that Protect Cultus Lake

Cultus Lake has unusually high nitrogen and phosphorus concentrations which are leading to eutrophication of the lake and degradation of the quality of the lake for aquatic species, including Cultus Lake Sockeye, and recreational uses. Recent reports indicate that continuation of current practices for dealing with sewage may ultimately result in overloading of nitrate both in the groundwater regime and the lake. At the same time, demand for recreation and resort uses surrounding Cultus Lake is high and will likely increase as the overall Lower Mainland population grows. Accordingly, the volume of sewage generated by land uses surrounding Cultus Lake will also increase over time.

A central objective of this plan is to protect aquatic habitat and water resources, particularly Cultus Lake. Certainly, human sewage is but one source of nitrogen in Cultus Lake. Agricultural wastes, fertilizer, and waterfowl may also be important sources. The proportion of nitrogen in the lake that can be attributed to sewage is not known but there are strong indicators that it is a significant source. And, the volume of sewage will increase as land use intensifies. Perhaps most importantly, sewage may be the source of nutrients that is most readily addressed. As a result, area-wide participation in a pubic sanitary sewer system is likely the most effective way of dealing with protection of lake water quality.

Ultimately, a single sewerage system serving all the communities of Cultus Lake and also recreation uses within Cultus Lake Provincial Park – potentially connecting to the City of Chilliwack sanitary sewer system - may be most efficient and offer the highest level of protection for Cultus Lake.

The policies below reflect the desire of the Regional Board to protect water quality in Cultus Lake, and in doing so to protect aquatic species, recreation values and the regional economy. They establish an ultimate vision for a single public sanitary sewer system serving the communities of Cultus Lake and Cultus Lake Provincial Park.

In 2013, FVRD will undertake a preliminary engineering feasibility study of a single sanitary sewer system for the communities of Cultus Lake. This report will provide a basis for an interagency process, involving the public, first nation, stewardship groups and other, to develop a

comprehensive strategy for sanitary sewer services for the communities of Cultus Lake and the protection of lake health.

The development of such a system would be a major infrastructure project requiring broad public support, partnerships, and significant funding from senior governments. It is likely to happen in the medium to long term. Accordingly, interim polices are needed to guide development in Cultus Lake South, protect lake and groundwater health, and ensure actions in the short to medium term do not preclude the ultimate development of a public sanitary sewer system. Interim policies for sewage disposal in Cultus Lake South are provided in Section 7.7.

Individual On-site Sewage Disposal Systems

Sewage from most homes within the Plan area is managed with individual on-site septic fields. Soil and groundwater conditions vary throughout the Plan area. In some locations, ground-based sewage disposal may be limited by hydro-geological conditions. Replacement of failed or under-performing fields in these areas may be complex or costly. Where conventional septic fields are not possible, the policies of this Plan support under certain conditions the use of innovative on-site disposal systems, including package treatment plants, which meet Provincial requirements.

Bylaws, Policies & Regulations

The discharge of sewage (including treated effluent) into the environment in British Columbia is regulated under the <u>Public Health Act</u> and the <u>Environmental Management Act</u>. When the following conditions apply, sewage discharge is subject to the <u>Sewerage System Regulation</u> of the Public Health Act and is regulated by the Fraser Health Authority:

- the discharge is domestic sewage; and
- the discharge is not into a water body; and
- the discharge is not onto (vs. into) land; and
- the total design daily discharge on a property is less than 22,700 litres (5,000 gallons) per day.

The regulation also applies to shared systems for domestic sewage disposal from more than one parcel provided that the total design discharge is less than 5,000 gallons per day. For context, design discharge from residences might be 300 to 375 gallons per day (for 3 or 4 bedrooms, respectively), so 13 to 16 separate residential lots might be served by a <u>Public Health Act</u> system.

In all other cases the <u>Environmental Management Act</u> applies and the process is administered by the Ministry of Environment.

Various FVRD bylaws and policies are relevant to the provision of sewage disposal systems in Electoral Areas E and H. The policies of this plan address servicing levels as they relate to development density and expectation of the Regional Board for evaluation of proposed means sewage disposal. Subdivision and development servicing bylaw and zoning bylaws set out regulatory requirements.

The availability of suitable areas for on-site sewage disposal will be a central consideration in development approvals, the layout and design of new subdivisions, and in the siting of development within existing parcels. This Plan requires that alternate sewage disposal fields be identified and that engineering studies be undertaken at the time of subdivision or zoning amendment to ensure that the proposed development will be viable in the long term.

- 8.3.1 Through dialogue a multi-jurisdictional joint planning initiative with the City of Chilliwack and other agencies, the Regional Board will develop a comprehensive strategy for the provision of sanitary sewer services for the communities of Cultus Lake and recreational uses within Cultus Lake Provincial Park that will protect Cultus Lake from being negatively affected by sewage disposal. The strategy will:
 - define common concerns with lake health as it is impacted by sewage disposal and identify a shared vision for addressing these concerns;
 - b. incorporate scientific research related to lake health;
 - assess service options and determine which is most feasible, including exploring the possibility of connecting to the City of Chilliwack sanitary sewer system;
 - d. estimate costs and funding mechanisms for sewer infrastructure, including the generation of revenues from recreational uses such as camping;
 - e. facilitate public dialogue and the formation of partnerships; and,
 - f. seek infrastructure investment agreements and commitments to common actions.
- 8.3.2 In conjunction with Policy 8.3.1, or as an interim measure, the Regional District may consider the potential for expansion of the existing Cultus Lake Sanitary Sewer System to serve unserviced parts of the Cultus Lake Park Board lands and adjacent lands within Electoral Area H.
- 8.3.3 Where it is not possible to develop a conventional septic field to serve a development which is permitted pursuant to the zoning bylaw on an existing lot, other innovative onsite disposal systems including package treatment plants, that meet the requirements and regulations of the responsible authority, may be supported by the Regional Board.
- 8.3.4 The use of "Type 3" individual on-site package sewage treatment plants in new parcels to be created by subdivision and in new developments requiring rezoning is discouraged.
- 8.3.5 The Regional District will participate in dialogue with provincial agencies, professional associations and others concerning the implementation and use of environmentally progressive sewage disposal systems.

- 8.3.6 The method, cost, long-term performance, and environmental impact of proposed methods of sewage disposal will be central considerations in zoning and community plan approvals and subdivision referrals.
- 8.3.7 All new developments shall provide on-site sewage disposal that meets the requirements of the <u>Public Health Act</u> or the <u>Environmental Management Act</u>, as applicable.
- 8.3.8 Where on-site sewage disposal is proposed, new development shall be required to provide secure back up sewage disposal field locations.
- 8.3.9 Holding tanks for sewage shall not be supported.
- 8.3.10 Applications for zoning and community plan amendments to facilitate new development may be required to include a report by a qualified professional engineer to demonstrate the feasibility of sewage disposal. The report must certify that the proposed system will not result in environmental contamination or risk to human health and should address:
 - a. the authorities having jurisdiction and their relationship to the approvals required for the servicing of the site;
 - b. the provincial regulations and criteria on which compliance with the regulations will be determined:
 - c. the adequacy of the system for the proposed development and long-term performance of the system;
 - d. the inter-relationship of all systems proposed for the site, including the layout of the proposed systems and the setbacks and protection zones that will influence the siting of the various components; and,
 - e. where appropriate, hydro-geotechnical and geotechnical parameters of the site, including:
 - seasonal water table elevations with respect to performance of the inground disposal systems;
 - ii. the property of the soils which underlie the site;
 - iii. the transmissivity of the soils; and,
 - iv. the suitability and stability of underlying soils to accept the proposed hydraulic loading.
- 8.3.11 All sewage disposal systems require maintenance and stewardship. Land owners are encouraged to conduct regular inspection and maintenance of disposal systems to avoid environmental contamination. Where systems are inadequate, land owners are encouraged to upgrade them to meet current Provincial standards.

8.4 Solid Waste Management

All waste management initiatives in the FVRD are governed by and implemented through the *FVRD Solid Waste Management Plan*. The latest draft of the Solid Waste Management Plan is

intended to be submitted for approval by the Ministry of Environment in 2013. It contains the following targets under consideration by the FVRD Board:

- 30% reduction in the residential waste by the year 2016; and,
- overall 85% waste diversion rate by the year 2016.

FVRD does not currently provide waste collection or disposal facilities to residents living in Electoral Areas E and H. Residents may contract with private haulers for waste collection and recycling services or take their garbage, recyclables and yard waste directly to the Bailey Landfill in the City of Chilliwack. Wood and yard waste may also be dropped off at the Parr Road Green Depot (City of Chilliwack) for transport to a central composting facility for processing.

In order to meet progressive waste diversion targets, new developments must ensure that there is adequate room reserved in development plans for the provision/placement of solid waste bins, recycling bins and food waste bins. It is most likely that in the near future, recycling and food waste collection will be mandatory and therefore new developments should attempt to incorporate space for this provision into their development plans. As all residents/businesses in EA E must arrange for their own garbage services through private contractor it is particularity important that adequate space is provided for a full range of waste diversion bins.

Illegal dumping of residential garbage, construction waste, stolen vehicles and other materials has been a problem in the Chilliwack River Valley. Dumping presents an environmental hazard and degrades the aesthetic and recreational experience of the area. FVRD has created an illegal dumping hotline (1-800-655-3867 or 1-800-655-DUMP) to receive and track reports of illegal dumping and dump sites. Reported information is logged and referred to the appropriate agency or organization for clean-up. The hotline supports public outreach and tracks dumping activities and patterns over time to assist with prevention efforts.

Community groups, notably the Chilliwack-Vedder River Clean-up Society, are on the front-lines combating the effects of illegal dumping in Electoral Areas E and H. Since 2002, the Chilliwack-Vedder River Clean-up Society has organized volunteers three times each year to remove dumped wastes from the riparian zone of the Chilliwack River. To date they have removed over 60 tonnes of refuse. This volume indicates the magnitude of the problem and also the incredible benefit that the Chilliwack-Vedder River Clean-up Society and others like them provide to the environment and the community.

As much of Electoral Areas E and H are forested there are high wildlife populations. Landowners must ensure that waste containers are not accessible to wildlife. The FVRD Parks Department offers a Bear Aware program to assist residents and business owners in minimizing bear interactions and with the proper management of garbage bins to avoid bear/human conflicts.

This Official Community Plan supports the *FVRD Solid Waste Management Plan* which should be consulted for detailed guidance respecting waste management, composting, recycling and waste reduction.

It is the policy of the Regional Board that:

- 8.4.1 By the year 2016, residential waste from Electoral Areas E and H should be reduced in accordance with the targets in the FVRD Solid Waste Management Plan.
- 8.4.2 Access to recycling, composting and disposal facilities should be ensured:
 - a. new developments shall ensure that there is adequate room reserved in development plans for the provision/placement of solid waste bins, recycling bins and food waste bins; and,
 - b. the Responsible Authorities are strongly encouraged to provide adequate waste and recycling bins provided at recreational sites.
- 8.4.3 Residents are encouraged to adopt as their own the target of the *FVRD Solid Waste Management Plan* to reduce residential waste by 30% by the year 2016. For most people, this reduction can be readily achieved by backyard composting of organic kitchen wastes and recycling all "blue bag" recyclable materials.
- 8.4.4 Residents and business owners should ensure that garbage and waste containers are not accessible by wildlife.
- 8.4.5 Residents are encouraged to avoid the burning of garbage and wastes which results in reduced air quality and emissions of fine particulates which may pose a health hazard.
- 8.4.6 The Regional District will encourage citizen efforts to clean up dumped material and monitor for illegal dumping. As opportunities and resources permit, the Regional District will support voluntary community clean-up efforts particularly to assist with tipping fees.
- 8.4.7 The Regional District will work with Provincial ministries, Royal Canadian Mounted Police, Insurance Corporation of BC, and appropriate organizations to combat the dumping of stolen vehicles and solid waste.

8.5 Utilities & Communication Services

Residential electricity and telephone service are broadly available within the Plan area. Natural gas, cable, cellular and high-speed internet services are only available to portions of the Plan area.

At the time of writing this Plan, cellular phone and high speed internet services are only available to portions of Electoral Areas E and H. Cellular phone service is important for the safety and convenience of those living or working in the Plan area. High speed internet access is vital to the social, economic and environmental health of the community and is highly desired by residents. Like most rural areas, the dispersed settlement pattern in Electoral Areas E and H presents inherent challenges for social, educational and economic interactions. Residents have limited transportation options, little in the way of public space, and few commercial

services or cultural amenities. Internet access reduces these barriers and provides access to diverse communities, markets and educational opportunities. What is more, the internet will undoubtedly be a part of any strategy for rural sustainability, including efforts to reduce local greenhouse gas emissions as required under Provincial law.

It is the policy of the Regional Board that:

- 8.5.1 The Regional Board will advocate for the provision of high speed internet services and reliable cellular phone services to all of Electoral Areas E and H. In situations where cell tower infrastructure is installed in a local community, the Regional Board will advocate that cell service be provided to local residents as a first priority.
- 8.5.2 All development should be coordinated with, and provision will be made for, essential community services such as electrical, natural gas, telephone and cablevision servicing, at levels appropriate to the proposed development.
- 8.5.3 The Regional Board supports the extension of natural gas to Columbia Valley.

8.6 Protective Services

Structural Fire Protection

Electoral Area E and H are served by three different fire departments:

- The Chilliwack River Valley Volunteer Fire Department has a hall at 48665 Chilliwack Lake Road. It serves a portion of the Chilliwack River Valley generally between Baker Trails and Alison Pools.
- The Columbia Valley Volunteer Fire Department has a hall at 1202 Kosikar Road. It serves the communities of Columbia Valley, Lindell Beach, and Cultus Lake South. The Chilliwack River Valley and Columbia Valley Volunteer Fire Departments are administered by Fraser Valley Regional District.
- Properties near the north end of Cultus Lake receive fire protection services from the Cultus Lake Volunteer Fire Department which has a hall at 75 Sunnyside Boulevard. The Cultus Lake Volunteer Fire Department is administered by the Cultus Lake Park Board.

All three volunteer departments are dispatched through the E-911 system. Fire service areas and the location of fire halls are shown on *Map 5 - Local Service Areas*.

Fire protection requirements for new development are determined under the BC Building Code and the BC Fire Code. In addition, FVRD uses the Fire Underwriters Survey guidelines regarding the design of water systems that provide flows for fire protection.

A couple of challenges related to the provision of fire protection services in Electoral Areas E and H seem imminent:

 Resort development in the Cultus Lake South area is evolving toward higher density resort residential uses and sometimes includes large assembly structures such as a

- clubhouse. This scale and density of development may challenge rural volunteer fire departments.
- FVRD may anticipate receiving requests for fire protection services for developments in areas that may be difficult to service for a variety of reasons, including distance from existing fire halls, access, availability of water, scale of buildings, and potential for wildfires.

In order to respond to these challenges, it will be important to develop: clear understandings about the capacity and limitations of the rural volunteer fire departments to protect large buildings and higher density resort developments; reliable mechanisms for fire equipment upgrades; effective land use policies that address fire protection; and, means to ensure the long-term financial and operational viability of fire protection services.

E911 Services

The Plan area receives ambulance, police and fire services through E-911 operations. Police services are provided by the Royal Canadian Mounted Police from the Chilliwack Detachment. Ambulances are also dispatched from Chilliwack. Response times for emergency services are consistent with rural areas.

Emergency Management

In British Columbia, local governments are responsible for providing the initial response to most emergencies that occur within their boundaries. The FVRD Emergency Plan complies with the British Columbia Emergency Response Management System (BCERMS) to ensure coordinated and organized response to emergencies in the form of a standardized response structure. During emergency response and recovery operations, FVRD is responsible for:

- Notifying those who may suffer loss or may be harmed by an emergency or impending disaster;
- Coordinating the provision of food, clothing, shelter, and transportation services;
- Establishing the priority for restoring essential services provided by the Regional District; and,
- Recommending to service providers the priorities for restoring essential services not provided by the Regional District.

The objectives (in order of priority) of any response are to:

- 1. Provide for the safety and health of all responders
- 2. Save lives
- 3. Reduce suffering
- 4. Protect public health
- 5. Protect government infrastructure
- Protect property

- 7. Protect the environment
- 8. Reduce economic and social losses

Actions are guided by the FVRD Emergency Response & Recovery Plan.

The following policies are intended to provide general information for residents and property owners concerning various emergency services and level of protection in Electoral Areas E and H as well as providing guidance to the Regional Board when land use proposals are located in areas of potential wildfires.

It is the policy of the Regional Board that:

- 8.6.1 The Regional Board encourages Neighbourhood Watch, Block Watch, Citizens on Patrol and similar programs within the community.
- 8.6.2 The Regional Board may require re-zoning or official community plan amendment applications involving assembly or multi-unit residential uses be supported by a fire protection engineering report. Local volunteer fire departments and/or the manager of fire protection should provide comments concerning the local fire department's ability to provide adequate fire protection, response times and overall capacity of the fire department to protect multi-unit residential developments.
- 8.6.3 The Regional District should review the capacity of rural volunteer fire departments serving Electoral Areas E and H, particularly their ability to protect large buildings in a resort residential development; ensure that land use plans and policies are consistent with the level of fire protection available; and, if required, identify funding mechanisms for upgrading fire equipment and other fire department needs to keep pace with development expectations.
- 8.6.4 Lands outside of fire protection service areas, or lands without public fire protection, should generally remain at low rural development densities.

8.7 School & Library Services

<u>Schools</u>

Electoral Areas E and H lie within Chilliwack School District #33. It is within the school boundaries, for Cultus Lake Elementary, Mount Slesse Middle and Sardis Secondary schools. School District #33 provides bus service to the Plan area. A fee may apply. Home schooling support is available through the School District.

In accordance with Division 10.1 of the <u>Local Government Act</u> and *Board of Education of School District No. 33 Capital Bylaw No. 2007 School Site Acquisition Charge Bylaw* (or as updated), on behalf of School District No. 33 FVRD collects school site acquisition charges at the time of subdivision of land in Electoral Areas E and H. The rate is determined by the School District.

Library

While there is no library within the Plan area, residents are served by Fraser Valley Regional Library branch in Chilliwack. Canadian National Institute for the Blind provides a library service for the visually impaired.

- 8.7.1 The Regional Board will continue to consult with the School Board concerning developments in the Plan area which may impact school enrolment or the provision of school services.
- 8.7.2 The Regional District will continue to collect school site acquisition charges on behalf of Chilliwack School District #33.

9.0 Recreation & Cultural Resources

Electoral Areas E and H have two distinct recreational areas: the Chilliwack River Valley and Cultus Lake.

Chilliwack River Valley

The Chilliwack River Valley provides a rich wilderness experience in formal parks and on Crown lands. There are two Provincial parks, Chilliwack River Provincial Park west of the Bell Acres hamlet and Chilliwack Lake Provincial Park surrounding Chilliwack Lake, and a variety of recreation reserves along the river corridor. Parks and recreation reserves provide a diversity of outdoor experiences and opportunities including fishing, kayaking, nature appreciation and others. The Regional District operates Thompson Regional Park near the Chilliwack River. Thompson Regional Park has a short walking trail, an informative interpretive centre, and enhanced habitat for salmon and aquatic species.

In addition to parks, the crown land base provides a multitude of informal and formal recreation opportunities. Cheam Ridge Regional Trail, operated by the Regional District, provides a unique opportunity to hike Cheam Mountain while offering views of the Fraser Valley below.

Increasingly, this area is attracting more users; estimates are as high as 1.5 million visitors a year. Unmanaged recreation activities and illicit uses of Crown lands are a significant problem in the Chilliwack River Valley. Recently, the Province, working with partners such as the Regional District, improved management of recreation in the lower part of the valley below the Tamihi Bridge by prohibiting camping, managing parking, controlling access to the River. These efforts have significantly improved the situation below the Tamihi Bridge, but ongoing management is needed there and new efforts are required to address recreation management issues in the upper River Valley above the Tamihi Bridge. Another issue that requires attention is the status of informal trails. Throughout this land base, trails have been established without legal protection. While they are without legal status, these trails are relied upon for recreation and backcountry access and, in some cases, are well established. The Province is working to formalize these trails and recreation sites.

Cultus Lake

Cultus Lake is one of the most intensively used recreation areas in the Lower Mainland. It receives 1.5 to 3 million visits each year from people from all over Metro Vancouver and further afield. Cultus Lake is a premier recreation lake in southern British Columbia and it is a significant river of the local economy. Visitation numbers are expected to grow in the coming years as population continues to increase.¹⁸

Cultus Lake provides a resort-oriented water-based recreation experience. Resort residential areas exist at the north end and south end of the lake. The remainder of the lakeshore area is Provincial Park with vehicle access camping sites. The lake is intensively used by boating

¹⁷ Chilliwack River Watershed Strategy: Watershed Issues and Recommendations. January 2009. Pg. 3

¹⁸ FVRD Regional Parks, March 25th, 2003

enthusiasts for a variety of marine pursuits. Recent concerns have been raised about the recreation capacity of the lake.

9.1 Regional Parks

According to the *FVRD Regional Parks Plan*, Official Community Plans and the Regional Parks Plan should complement each other. The policies set out in this section are meant to accomplish this. However, the *Regional Parks Plan* should be consulted for the official policies of the Regional District related to Regional Parks.

One Regional Park currently exists in Electoral Area E. Thompson Regional Park is located along Chilliwack River Road adjacent to Chilliwack River Provincial Park in close proximity to the Chilliwack River Valley Fire Hall and the nearby commercial area. It acts as a focal point for the Chilliwack River Valley community. Comprised of an interpretive centre, salmon restoration project and trail loop, it offers a stopping point for visitors and recreationists coming to the area.

Cheam Ridge Regional Trail is a 4.5 km trail up to view plateaus of the Fraser Valley. This is one of the few formalized trails in the area and provides access into the wilderness area for nature and wildlife viewing. FVRD and Ts'elxweyeqw Tribe Society have a successful partnership for the management of this trail and others in the area.

The FVRD Regional Parks Plan guides the development of regional parks and also identifies potential new parks and sites of interest. No potential new parks are identified in Electoral Areas E and H. However, the quality of recreation opportunities and environments in the plan area may attract proposals for Regional Park development in the future.

Thompson Park and Cheam Regional Trail are shown on Schedule 9 - Parks.

- 9.1.1 Regional Park planning, development and management should include strategies to identify and mitigate potential negative impacts to the local area, including traffic, vandalism, crime, dumping, trespass and noise, which may result from Regional Parks and Park facilities.
- 9.1.2 Local area residents in Electoral Areas E and H will be consulted respecting the development of Regional Parks and local parks facilities within the Plan area.
- 9.1.3 Provincial initiatives to formalize informal trails and recreation sites will be encouraged by the Regional Board.
- 9.1.4 The Regional District may support partnerships for the operation and maintenance of trail systems where feasible opportunities exist. Priority should be given to existing trail systems and to lands adjacent to river and lakes.
- 9.1.5 Opportunities for partnerships with Ts'elxweyeqw Tribe in recreation management, trail planning, and interpretation should be explored.

9.2 Community Parks & Recreational Resources

During the course of public consultation on this Plan, residents and APC members identified the need for alternative transportation routes around Cultus Lake and connecting to other residential areas. Development of trails and bike lanes would provide a number of benefits, including reducing road congestion, supporting recreation and resort development, reducing GHG emissions and encouraging active lifestyles. Partnerships and further study are needed to support the development of trail and bicycle infrastructure.

The <u>Local Government Act</u> requires the allocation of park land at the time of subdivision. In certain instances, cash in lieu may be provided to a local government. It is the policy of the Regional Board that lands identified as potential parks or trails will be dedicated at the time of subdivision. Furthermore, the Regional Board may accept or require park dedication upon subdivision in any location within the Plan area provided that the Board deems the site suitable for park purposes. In other cases, the Regional Board may accept cash-in-lieu of land to assist with the creation of a trail network and linear park system or other local priorities. As a general principle, cash-in-lieu contributions should remain in the local community for the benefit of the area's residents.

- 9.2.1 Where lakes, waterfront, parkland or public assets exist, private resort development shall not result in decreased public access to publicly owned amenities.
- 9.2.2 Access to public lake trails, dykes, flood protection works, key angler access points and popular recreation sites should be maintained.
- 9.2.3 Opportunities for partnership with the Province and local community groups should be explored for the operation of trails.
- 9.2.4 Community park proposals involving the following may be considered by the Regional Board:
 - a. partnerships for funding and ongoing maintenance;
 - b. lands with unique natural features, distinctive landscapes or outdoor recreation potential;
 - c. facilities for outdoor activities for youth; and,
 - d. existing community facilities and sites.
- 9.2.5 New subdivisions requiring the dedication of park land under Section 941 of the <u>Local Government Act</u> shall provide park land in an amount not less than five (5) percent of the land being subdivided or an equivalent value. With respect to park dedication upon subdivision, the entire Plan area may be considered by the Regional Board for future park purposes.

- 9.2.6 Notwithstanding Section 9.2.5, the Regional Board may consider accepting an area of land less than five (5) percent of the land being subdivided where improvements acceptable to the Regional Board have been made to provide park infrastructure on dedicated park lands.
- 9.2.7 Priorities for the acquisition of park land are:
 - a. lands adjacent to Thompson Regional Park;
 - b. lands or corridors necessary for the development of a local trail network; and,
 - c. lands that provide access to water bodies with recreational values.

However, the Regional Board may accept park dedication in any location within the Plan area that the Regional Board deems suitable for park purposes.

- 9.2.8 Where a developer wishes to dedicate an amount of park land in excess of five (5) percent of the land proposed for subdivision, the Regional Board may consider a minor reduction in the minimum parcel size for subdivision, subject to the approval of the Responsible Authority, provided that the excess does not include lands that would otherwise be conserved through other means.
- 9.2.9 Notwithstanding Section 9.2.5, the Regional Board may elect, at the discretion of the FVRD Board, to require cash-in-lieu of park land dedication pursuant to Section 941 of the Local Government Act, or a combination of land and cash-in-lieu.
- 9.2.10 Landscaping of any community park or trail should, as much as possible, involve the use of native plant species.
- 9.2.11 Trails and recreation use areas on Crown land should be formally identified so that community interests in the trails can be addressed during the planning of resource activities.
- 9.2.12 A network of roadside and off-road routes for pedestrian and cycling use should be identified and developed over time within and between the settled areas with a priority on routes to community meeting spaces, school and commercial services.
- 9.2.13 Trails within agricultural areas should, to the extent possible, follow existing road rightof-ways and parcel boundaries and should not bisect agricultural parcels or impede farming operations.

9.3 Rural Landscape Aesthetics

The 2010 *Community Planning Survey* indicates that maintenance of the rural landscape is important to communities in Electoral Areas E and H. The policies of this Plan attempt to maintain the rural landscape in a variety of ways. Perhaps most importantly, the density levels

established herein are generally rural. The policies in this section suggest basic ways landowners can develop property in a way that maintains or improves landscape aesthetics.

- 9.3.1 In order to preserve and enhance rural landscape aesthetics, landowners are encouraged to:
 - b. design buildings and structures that reflect the culture, history and environment of the surrounding community;
 - c. utilize trees and plantings to define home sites;
 - d. integrate utility buildings and structures into the surrounding landscape by planting buffers, preferably of native plants species to reduce visual impacts; and,
 - e. restore riparian zones, preferably with the planting of appropriate native species.

9.4 Cultus Lake

Located approximately 10 km from the City of Chilliwack, Cultus Lake is a recreational 'hotspot' during the summer months for people from all over Metro Vancouver and southern British Columbia. Campers, cottagers, boating enthusiasts, swimmers and hikers are attracted to the area. On average, 1.5 to 3 million people visit the area annually. ¹⁹ Its close proximity to Metro Vancouver and the Fraser Valley make it an attractive vacation and day use, vacation and resort area.

Over the years, recreation demand has increased and the number of visitors continues to grow. This has created issues with increased traffic volumes, illegal parking, access to the lake, and lack of enforcement. Tensions have increased as overflows of recreation users and visitors have led to conflicts in some residential communities. Enforcement is a critical tool for reducing conflicts and creating a place for everyone.

Access to the lakeshore is another problem for visitors and residents. As demand has increased, public access to the lake has decreased due to re-development of private lands, foreshore tenures, and various other impediments. This has created tensions in the past between visitors and residents. Residents and visitors alike express the need for improved access to the lake year round, including trails and bike lanes.

Cultus Lake provides sensitive habitat for Cultus Sockeye and endangered species such as Cultus pygmy sculpin. Development and activities within the riparian areas can impact these species.

Developments on the shore area of Cultus Lake are impacted by the lake's water level. The outlet at the north end of the lake is controlled by the Cultus Lake Park Board in partnership with Ministry of Environment. A permit was issued by the Ministry of Environment which establishes a water elevation of 44.50 metres Geodetic Survey of Canada from March 15th to September 15th. In recent years, the Regional District and Lindell Beach Residents Association

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¹⁹ Cultus Lake Aquatic Stewardship Society website, accessed July 2012.

have been working with these parties to maintain the lake level to ensure drainage and septic systems are not impacted by high water levels.

It is the policy of the Regional Board that:

- 9.4.1 Publicly owned lands surrounding Cultus Lake should be maintained in public ownership for the use and enjoyment of the broader regional population.
- 9.4.2 The Responsible Authority, in partnership with other provincial agencies, FVRD, the City of Chilliwack, the Cultus Lake Park Board, First Nations and community groups should undertake a Management Plan for Cultus Lake. The Management Plan should address:
 - recreation carrying capacity of the lake;
 - health of the lake, surrounding ecosystems and impacts on Cultus Sockeye;
 - impact of various lakeshore users on the lake;
 - moorage issues and access issues; and,
 - enforcement strategies to address parking, nuisance and illegal activity.
- 9.4.3 Where possible, the Regional District should seek partnerships with federal and provincial agencies, local groups and the Cultus Lake Aquatic Stewardship Strategy (CLASS) to reduce negative impacts of recreational and resort uses surrounding Cultus Lake.
- 9.4.4 Until a management plan is complete, the Regional Board may not support further applications for new moorage/boat docks.
- 9.4.5 The Regional District will continue to work with the Department of Fisheries and Oceans, Ministry of Environment, Cultus Lake Park Board, and Lindell Beach Residents Association on issues related to lake levels.
- 9.4.6 The Regional District should partner with BC Parks and other agencies to undertake a feasibility study of a trail network connecting Cultus Lake Park Board to the Cultus Lake South Area.
- 9.4.7 The Regional Board will advocate to BC Parks for the need for additional public access points at the south end of Cultus Lake, the end point for trail connections from the surrounding Cultus Lake South area, and a Cultus Lake circular trail system.
- 9.4.8 Local residents should be provided with year round access to Cultus Lake.

9.5 First Nations and Cultural Heritage

Electoral Areas E and H are located within the traditional territory of the Stó:lō people, and in particular the Ts'elxweyeqw Tribe. A small portion of Nlaka-pamux First Nation traditional

territory also extends into the Chilliwack River drainage area.²⁰ Soowahlie Indian Reserve lands are located in the Plan area.

The *Stó:lō Heritage Policy Manual* identifies a variety of First Nations heritage resources that are relevant to land use planning:

- The Sxwôxwiyám Sites are evidence of the transformation, witnessed by Stó:lō ancestors, in which the world changed from a more chaotic, less fixed, state to a more orderly and circumscribed place where things are "right". Transformation sites are identified within the Chilliwack River watershed and include areas such as Mount McGuire, Mount Slesse and the Cheam Ridge. ²²
- The Xá:Xa Sites are spiritually potent "taboo" places in the landscape, including questing places, sites associated with spiritual beings, spirited places and locations where cultural items are stored.
- Stl'aleqem: Stl'aqeme sites are also considered spiritually potent "taboo" places where certain spiritual beings inhabit parts of S'olh Temexw and are essential to Stó:lō wellbeing. They are sacred and immovable. According to the Stó:lō atlas, Apel, a large maggot inhabits the rock bluffs and deep bays above southeast Cultus Lake and T'litego Spa:th, an underwater bear inhabits Cultus Lake.²³
- Traditional Activities Sites are locations where cultural activities are, or were, carried out including spiritual activities, food and medicine collection, resource extraction, settlement areas, travel and other activities.
- Material Culture Objects and Sites provide evidence of past activity.
- Ancestral Human Remains.
- Locations with Halkomelem place names.

Many or all of these resources occur in the Plan area. There are approximately 60 documented aboriginal and non-aboriginal archaeological sites, and at least 12 settlement sites with a Halkomelem name (place name), in the Chilliwack River Valley area.²⁴ In addition to documented sites, many undocumented sites, traditional use and cultural heritage sites exist throughout the Plan area. Many of these sites are actively used today.

Unfortunately, some heritage resources in the Plan area have been significantly impacted, and in some instances rendered unusable because of development on the landscape, recreation and other activities. Access to these sites has become an issue. By deactivating logging roads, trails become inaccessible and impact aboriginal people's ability to access traditional use sites and culturally important sites. Water flow and quality are critical for some traditional use practices and require a higher level of consideration when new uses are proposed in these

²⁰ Chilliwack River Valley Historical Society. In the Arms of the Mountains: A History of the Chilliwack River Valley. 2006. Pg. 9

²¹ Brian Thom. Sxwoxwiyam Seyt te Xwelmexw (Central Coast Salish Transformation Stories): Connecting Humans and Non-humans through Kinship and Place. September, 1997.

²² Chilliwack River Valley Historical Society. In the Arms of the Mountains: A History of the Chilliwack River Valley. 2006. Pg. 9

²³ Albert (Sonny) McHalsie. Stl'aleqem Sites: Spiritually Potent Places in S'olh Temexw. A Stó:lō Coast Salish Historical Atlas. ed.. Douglas & McIntyre: Vancouver, 2001. Pg. 8-9

²⁴ Chilliwack River Valley Historical Society. In the Arms of the Mountains: A History of the Chilliwack River Valley. 2006. Pg. 9

²⁵ Chilliwack River Valley Historical Society. In the Arms of the Mountains: A History of the Chilliwack River Valley. 2006. Pg. 15

areas. Specifically, Slesse Creek watershed and Liumchen Creek watershed are of critical importance for Stó:lō environmental and cultural values.

Local history books identify trail networks found by European settlers in the Plan area. These trails are presumed to have been used by aboriginal peoples. Similar paths are indicated as travel routes and extrapolated travel routes as shown in the Stó:lō Atlas. Approximately 15 different travel routes are identified in the Chilliwack River Valley, Cultus Lake and Columbia Valley. These trails could be considered traditional activity sites with the Chilliwack River watershed and Cultus Lake area.

Dialogue with First Nations is necessary to gain better understanding of the cultural resources that may be present and how they may be protected or managed.

The Archaeology Branch and Stó:lō Research and Resource Management Centre will be able to provide landowners who have archaeological resources on their property with advice on how to proceed with development in a way that will avoid or minimize damage to archaeological and heritage resources. That advice may include a recommendation to engage a professional archaeologist to conduct an archaeological impact assessment. The Archaeology Branch and Stó:lō Research and Resource Management Centre should also be notified if archaeological material is found on one's property. Landowners should be aware that it is an offence under the Heritage Conservation Act to remove heritage objects from archaeological sites or disturb archaeological sites, including unmarked and undocumented sites.

- 9.5.1 The Regional District will respect First Nation heritage sites and objects.
- 9.5.2 The Regional District should consider known and potential heritage and archaeological resources during land use planning processes.
- 9.5.3 The Regional District will welcome opportunities for dialogue and sharing knowledge of heritage.
- 9.5.4 The Regional District will liaise with first nations and the Archaeology Branch regarding archaeological values during development review processes.
- 9.5.5 Proposals for significant developments in areas of known archaeological value should be made known to first nations and referred to the Archaeology Branch of the Ministry of Forestry, Lands & Natural Resource Operations for consideration under the Heritage Conservation Act.
- 9.5.6 The Regional Board may require an archaeological impact assessment for zoning and community plan amendment applications related to developments in areas of known or potential archaeological value.

²⁶ David M. Schaepe. Stó:lō Communication and Transportation Routes, c 1850. A Stó:lō Coast Salish Historical Atlas. ed.. Douglas & McIntyre: Vancouver, 2001. Pg. 61

- 9.5.7 As opportunities arise, the Regional District will liaise with first nations regarding external funding opportunities to improve archaeological sites mapping.
- 9.5.8 Any discovery of archaeological artefacts should be reported to the Archaeology Branch of the Ministry of Forests, Lands & Natural Resource Operations, relevant first nations or others as appropriate.
- 9.5.9 Property owners proposing development in an area of known or potential archaeological resources should contact the Archaeology Branch of the Ministry of Forests, Lands & Natural Resource Operations for advice and guidance on how to proceed in a way that will avoid or minimize damage to the archaeological resource.

10.0 Hazard and Risk Management

The <u>Local Government Act</u> requires that official community plans contain statements and map designations respecting restrictions on the use of land that is subject to hazardous conditions. As well, Section 56 of the <u>Community Charter</u> stipulates that if a building inspector considers that construction would be on land that is subject to, or is likely to be subject to, flooding, mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche, the building inspector may require the owner of land to provide the building inspector with a report certified by a qualified professional that the land may be used safely for the use intended.

Lands within Electoral Areas E and H are subject to a variety of hazards, including geological and mountain stream hazards; flooding and erosion from the Chilliwack River; seismic slope instability and soil liquefaction caused by earthquakes; and, wild fires. These hazards are a significant constraint to land use and development within the Plan area.

10.1 Geologic & Stream Hazards

While stream and slope hazards have always been present in the Plan area, they became a focus for government agencies in the 1970's, particularly in forestry applications. In 1978, the Ministry of Environment undertook generalized 1:50,000 scale hazard mapping that identified the majority of the settled areas north of the Chilliwack River as having potential for landslide and flooding hazards. Following changes in provincial legislation that required local governments to address hazards in planning and development approvals, it was necessary to obtain more precise geotechnical information on the Chilliwack River Valley than the 1978 mapping provided and to identify possible means of minimizing, controlling, and/or mitigating potentially hazardous situations.

In 1987, the Regional Board commissioned Thurber Consultants LTD to undertake a geotechnical assessment of the slope along the north escarpment in the Chilliwack River Valley. This study, *Geotechnical Assessment of Slope Stability in the Chilliwack River Valley* (June, 1988) was generally positive and set aside or greatly clarified the mapping work undertaken by the Ministry of Environment. No massive potential landslide was identified in the study area, and the potential for problems in active basins was found, in most cases, to be resolvable either by proper building siting or, in some cases, minor hazard mitigation works.

In subsequent years it became apparent that there were specific areas where the requirement for further site-specific investigation tended to cluster. A comprehensive analysis for the purpose of developing a hazard management plan for the Chilliwack River Valley as a whole was warranted to identify methods of protecting existing development as well as continuing the policies of hazard avoidance for new development. In 1992, the slope hazards in the Chilliwack River Valley were reassessed as part of a secondary study by Hay and Company Consultants Inc. (HAYCO) for the Ministry of Environment. *The Chilliwack River Management Study* also included an assessment of the river hazards. The purpose of the study was:

"to prepare a natural hazard management outline plan for the Chilliwack River Valley, focusing on the long term, to protect development in the study area against damage from river flooding and erosion and from debris flooding and landslips associated with tributary streams."

The findings of the slope hazard assessment were generally consistent with the findings of Thurber Consultants. However, this study went one step further by producing hazard maps which created zones of risk for each type of slope hazard based on the probability of the event.

The slope hazards identified include:

Channelized Hazards debris flows (or debris torrent) debris floods

Debris flows and debris floods are usually generated in the gully systems along the Valley escarpment. Debris flows involve considerable amounts of sediment and debris including trees and boulders with small amounts of water, and are relatively confined to small areas at the mouth of the gullies, normally near the apex of the alluvial fans. The associated mapping produced by HAYCO detailed the probability of such events occurring in a given area. Generally, development will be discouraged in the high risk areas as debris flows can result in considerable damage and even loss of life. In some cases, remedial work may be prescribed by a geotechnical engineer to establish a safe building site.

Debris floods involve uncontrolled water flow which can result in water damage to unprotected buildings (especially basements), erosion, deposition of gravel and timber debris and silting damage. In general, new construction in these areas can be protected with minimal design and siting precautions. For example, in several situations new construction may require careful siting and a concrete foundation raised to an elevation prescribed by a geotechnical engineer.

Unchannelized Hazards slumps, slides debris avalanches/earth flows rock slides/rock falls

The area subject to potential unchannelized slope hazards, such as landslip, includes all of the presently undeveloped slope above the Valley floor and a safety buffer at the crest and toe of the slope. Hazards in these areas are variable and highly site-specific. As a result, development generally may only proceed after further detailed investigation. The majority of these areas are Crown lands. The Crown should be encouraged to be cautious in proceeding with any new development, including logging.

In 2006, the Regional District commissioned Northwest Hydraulic Consultants to develop recommendations for the mitigation of hazards associated with Frosst Creek, which has a history of serious flooding events. The study, *Frosst Creek Fan Hazard Zones – Cultus Lake, BC* (2006), delineates hazard zones and identifies flood construction levels for the various zones. This work was updated in 2011 to reflect subsequent improvements to the Frosst Creek flood protection infrastructure that were made. The Frosst Creek study also identified the adjacent Watt Creek Fan to west, and indicated that it has real potential for future events to occur.

These studies have yielded a better understanding of the nature of the geotechnical and stream hazards present in Electoral Areas E and H. Accordingly, this plan can establish clear policies

regarding geotechnical hazards. For other areas within the Plan boundaries, geotechnical issues are not considered a major concern for permitted development, and will be assessed on a site-specific basis at the time of building permit applications or evaluated on an area-wide basis as resources permit. In general, any problems which may arise are expected to be localized concerns which should fit within the existing policies of the Plan.

For FVRD's Electoral Areas as a whole, the Regional Board has adopted as policy the *Hazard Acceptability Thresholds for Development Approvals by Local Government*--a series of hazard acceptability threshold matrices. These matrices attempt to define how "safe" a situation has to be in order for it to be "safe enough" to allow development to proceed. Thus, they establish acceptable levels of risk relative to each hazard type and development type and were developed from the case-by-case decisions of the Regional Board regarding site-specific geotechnical reports submitted in accordance with Section 56 of the <u>Community Charter</u>. They are used as guidelines for regulatory responses to a specific hazard of a given probability of occurrence. This Plan supports the continued evolution and use of these matrices.

Policies regarding management of risk and hazards as they relate to forestry activities are provided in Section 13.1 of this Plan. FVRD's Floodplain Management Bylaw establishes flood construction elevations and setbacks that apply to streams outside of alluvial fan areas. Known and potential hazard areas identified in the reports discussed above are shown on *Map 2 - Geologic & Stream Hazards* and included in development permit areas. The policies below complement development permit areas and the floodplain management bylaw to provide direction for hazard and risk management, land use planning, and the approval of development subject to geohazards.

It is the policy of the Regional Board that:

- 10.1.1 Residential development shall be directed away from lands susceptible to hazards and lands with severe building or road foundation limitations.
- 10.1.2 Reducing exposure to risk and minimizing the consequences of hazard events will be central concerns in land use planning decisions.
- 10.1.3 The Ministry of Environment *Flood Hazard Area Land Use Management Guidelines* should be considered by the Regional Board when developing land use policy and regulation for alluvial fan and flood-prone areas.²⁷
- 10.1.4 The following principles should be applied to development approvals on lands subject to geologic and mountain stream hazards:
 - as a priority, development should be sited to avoid hazards; where it is impossible or impractical to avoid a hazard, mitigation measures may be considered;
 - b. proposed developments within the 200 year floodplain of a natural watercourse should be flood-proofed to a 1:200 year standard;

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²⁷ Ministry of Environment. Flood Hazard Area Land Use Management Guidelines. May, 2004 (or as updated).

- c. where construction would be on land that is, or is likely to be, subject to hazards, a Building Inspector may require site-specific geotechnical or hydrological engineering reports prepared by a professional engineer or geoscientist to certify that the land may be used safely for the use intended; and,
- d. the precautionary principle should be applied to development approvals in instances where there is both risk of serious or irreversible harm and significant scientific uncertainties.
- 10.1.5 Acceptable hazard thresholds for development approvals should follow those set out in Hazard Acceptability Thresholds for Development Approvals by Local Government or equivalent Regional Board policy as it exists at the time.²⁸
- 10.1.6 Geotechnical studies submitted in support of development approvals should meet the requirements outlined in *Assistance to Developers and Building Permit Applicants Undertaking Geotechnical Studies* (or Regional Board policy as it exists at the time) and the applicable guidelines of the Association of Professional Engineers and Geoscientists of British Columbia, including *Guidelines for Legislated Landslide Assessments for Proposed Residential Development in British Columbia* or *Guidelines for Legislated Flood Hazard Assessments in a Changing Climate in BC.*²⁹
- 10.1.7 In circumstances where land is subject to geological hazards, the Regional Board may give special consideration to offset the constraints caused by geotechnical problems. Special considerations may include altering siting and subdivision policies through a Development Permit or Development Variance Permit in accordance with the results of a geotechnical study. These considerations may allow greater flexibility within a safe building area.
- 10.1.8 Property owners are advised that the following activities may exacerbate hazards and contribute to slope failure and should generally be avoided:
 - placing fill, organic wastes, and debris along or below the crest of slopes;
 - excavation on steep slopes or at the base of slopes;
 - discharge of surface or ground water on or below the crest of slopes; and,
 - cutting trees on or below the crests of slopes.
- 10.1.9 The Regional Board may consider accepting ownership and maintenance (via a service area) of hazard mitigation works that:

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²⁸ Regional District of Fraser Cheam. Hazard Acceptability Thresholds for Development Approvals by Local Government. November, 1993 (or as updated).

²⁹ Fraser Valley Regional District. Assistance to Developers and Building Permit Applicants Undertaking Geotechnical Studies (or as updated); Association of Professional Engineers and Geoscientists of British Columbia. Guidelines for Legislated Landslide Assessments for Proposed Residential Development in British Columbia. May, 2008 (or as updated). Guidelines for Legislated Flood Hazard Assessments in a Changing Climate in BC,

- a. are designed by, and constructed under the supervision of, a qualified professional engineer to standards acceptable to the Regional Board;
- b. meet the requirements of applicable provincial and federal legislation;
- c. benefit a significant area;
- d. are environmentally, economically and socially sustainable over the long term; and.
- e. involve an acceptable and reasonably predicable maintenance and cost profile.
- 10.1.10 As opportunities arise, stream channels should be returned to Crown ownership to facilitate environment management, particularly any hazard mitigation works that may be required in the future.
- 10.1.11 The Regional District should consider the possibility of increases in the frequency of flooding, landslides and debris flows due to climate change when making decisions respecting land use and hazard policies.
- 10.1.12 Senior governments should implement a regional hydro-climactic threshold advance warning system to alert residents when conditions are present which significantly elevate the risk of debris flow initiation.

10.2 Floodplains

Locations within identified floodplains are subject to flood construction elevations and setbacks set out in FVRD's floodplain management bylaw. Two are discussed below as illustrative examples, but a number of other locations within the Plan area are subject to floodplain hazards.

Chilliwack River

In addition to many alluvial fan and mountain stream floodplains, a portion of the Plan area is within the Chilliwack River floodplain.

As noted above, the 1992 <u>Chilliwack River Management Study</u> included a detailed analysis of the hazards associated with the Chilliwack River. The findings of the river hazard assessment were not fully anticipated, particularly with respect to erosion. A series of maps were created which depicted the 1:200 year floodplain, the 100 Year Erosion Limit Line and an Erosion Setback Line. These maps are an integral part of this Plan, forming *Map 2 – Geologic & Stream Hazards*. The Flood Construction Level (FCL) identified by HAYCO to be used for flood-proofing standards is approximately 0.2 m above the FCL previously established by the Ministry of Environment. The 100 Year Erosion Limit Line represents an estimate of the potential for bank migration over the next 100 years unimpeded by hazard mitigation works such as bank protection or other channel controls. While a large number of existing lots are within this

cumulative erosion limit, not all the lots face an immediate threat. The Erosion Setback Line defines areas subject to possible erosion in the next major event (approximately 1:50 to 1:100 in frequency).

The hazard mapping produced by HAYCO reflects judgments or calculations based on information, techniques and knowledge available at the time mapping was undertaken. As such, it is subject to review, correction or adjustment from time to time as additional information and experience is made available. In 2003, the Chilliwack River erosion and flood hazard lines in the area of Baker Trails and Auchenway Road were reviewed by Golder Associates. Golder concluded that the Erosion Setback Line in both areas is at about the right place but that, "flood hazards may now be more severe than described earlier" due to significant changes that have taken place in the river channel.

The reports and resultant hazard mapping originally produced by HAYCO reflects judgements or calculations based on information, techniques and knowledge available at the time mapping was undertaken and they continue to provide a sound basis for understanding and management in the Chilliwack River Valley. However, given the report was completed in 1992 it is subject to review, correction or adjustment from time to time as additional information and experience is made available. Since this work was completed in 1993, the following changes have occurred:

- changes in river geomorphology which may affect the design flood profile;
- new flood protection infrastructure;
- new information, technologies and techniques for understanding river dynamics are available; and,
- Values and requirements regarding fish habitat and fisheries impacts have changed.

As such, the FVRD has commissioned three separate updates to the Erosion Setback Line in various specific locations of the Chilliwack River since the original report was issued. These updates are as follows:

- Northwest Hydraulic Consultants Ltd. Chilliwack River Sub-Area Six Review. Erosion and Flooding Hazards. February 20, 2003 and Northwest Hydraulic Consultants Ltd. Chilliwack River Sub-Area Nine Review. Erosion and Flooding Hazards. February 20, 2003;
- Northwest Hydraulic Consultants Ltd. Chilliwack River Erosion Setback Line Update Wilson Road to Baker Trails Area. January 22, 2016; and,
- Kerr Wood Leidal Consulting Engineers. Chilliwack River Slesse Park Erosion Setback Line Update. March 2, 2020.

On existing lots, the Erosion Setback Line guides where new construction can be permitted. Construction should be permitted outside of this Line (away from the river) where the property

owner is willing to offer a covenant acknowledging that although the property may be outside the Erosion Setback Line, it lies within the 100 Year Erosion Limit Line and may be affected in the long term by river erosion if bank protection is not completed. Residential construction closer to the River than the Erosion Setback Line should not be permitted without the implementation of mitigation measures designed and certified by a Professional Engineer with hydraulic geotechnical experience to reduce the probability of the site being affected by erosion.

Additionally, the Chilliwack River Hazard Management Outline Plan should be comprehensively updated. This work began in 2009 with the *Chilliwack River Fish-Hazard Management Strategy* – *Phase 1* report and should be continued.

Flood hazard management strategies should be coordinated with the Vedder River Management Plan Committee which oversees the management of flood protection infrastructure and stream channel maintenance on the Chilliwack River within the City of Chilliwack.

Blue Creek

Flooding problems associated with Blue Creek in Columbia Valley have been present since at least the 1980's. They were documented by the Ministry of Environment in 1985 and investigated by Thurber Engineering LTD on behalf of FVRD in 1998 and 2002. The following is a summary from the 2002 report by Thurber Engineering titled *Blue Creek, Columbia Valley Design of Water and Debris Retention Basins, Geotechnical Investigation*.

Blue Creek transports water, mud and gravelly debris in a confined channel to the lower reaches of its alluvial fan until it reaches Maple Falls Road. Sometime in the past, creek flows were directed beneath a low bridge and, eventually into a culvert on Maple Falls Road, into a deep natural depression north of the road. This action promoted seasonal drainage of agricultural land on the lower fan but it also allowed creek water and sediment to escape from the fan and to reach Maple Falls Road.

The depression is a glacial kettle that formed after a stranded mass of glacial ice was buried by glacial gravel. The buried ice melted away causing the surface materials to subside and form a closed depression with no natural drainage outlet.

Although Blue Creek water and sediment discharges may have been held in the depression for some time, it is likely that it immediately began to fill with mud, sand, gravel and organic debris. Rates of water and sediment delivery on Blue Creek probably increased drastically with the advent of logging in its upper basin located in Washington State.

Over the last several decades, the depression has filed with sediment and there is now no storage capacity to handle summer and winter flood flows. As a result, flood water covers Maple Falls Road where it forms a considerable hazard and threatens two homes with inundation. Excess water spills southwestward along the road and poses considerable nuisance or possible flood risk to three more homes.

Sediments have been periodically excavated from the kettle, but the benefit of such works appears to be very temporary. Blue Creek's flood hazards are conditioned by several technical problems, all of which make a long-term flood protection solution difficult and expensive to achieve. At the time of writing this Plan, the Province of British Columbia has funding to undertake a clean out of the kettle feature in co-operation with the property owner as early as June 2012. Nevertheless, the policies of this plan support continued efforts to work with local property owners to identify solutions to the Blue Creek flooding problem.

Flood Protection Infrastructure

A variety of flood protection infrastructure exists in the Plan area. Fraser Valley Regional District maintains the following infrastructure that provides a defined level of protection, meets provincial standards, and is routinely inspected and maintained:

- The Wilson Road Dyke is a standard dyke that protects the area surrounding Wilson Road and Chilliwack Lake Road from flooding and erosion from the Chilliwack River;
- The Frosst Creek dyke and debris dam provide flood protection to the community located on the Frosst Creek alluvial fan near the south end of Cultus Lake; the works consist of two debris basins and a dyke located along the south side of the creek;
- The Rexford Creek debris basin is designed to protect the Williamsburg development from debris flow and / or debris flood events; and,
- The Tank, Guy and Wash Creek training berms and debris basins provide protection from debris flows and floods to the Baker Trails Village.

In addition, there are a number of informal flood protection works that provide some level of protection but do not meet provincial standards and are not routinely inspected or maintained, including:

- Berms and stream bank protection (riprap) along the north side of Chilliwack River near Bell Acres and Slesse Park which reduce flooding and erosion but are discontinuous, subject to outflanking and overtopping and are damaged during high river flows;
- A debris basin within the road right-of-way on the south side of Chilliwack Lake Road on Bell Brook that is maintained by the Ministry of Transportation & Infrastructure as required; and,

 A range of flood protection works on private land constructed and maintained by property owners.

The policies of this plan guide the Regional Board when considering taking on new flood protection works. As well, they encourage senior governments to fund upgrades to "orphan" flood protection structures, which are not owned and maintained by a responsible authority, to meet provincial standards. In this event, the Board and the local community may wish to consider the formation of a local service area to provide for ongoing operation and maintenance of these flood protection structures. [Byl # 1599, 2020]

- 10.2.1 To reduce risk of flood damage and to ensure the maintenance of a natural wildlife habitat, development of public land along the banks of the Chilliwack River should be limited to park and associated uses.
- 10.2.2 New development which involves rezoning and subdivision should not be approved until the land is protected to the community standards outlined in the HAYCO report. Generally, this will mean that such development will not be permitted within the 100 Year Erosion Limit Line. The location of this line will be changed by Plan amendment from time to time as community protective works are completed or hazards are reassessed.
- 10.2.3 To take into account the most up to date status of completed bank protection and erosion hazards, building permit approval should be reviewed on a case-by-case basis. Building permit applications on existing lots may be approved before bank protection to community standards is completed. However, where the land is subject to immediate threat of erosion in the next major event, permits may not be available until protection is provided. This means that new construction will not be approved on building sites within the Erosion Setback Line where the level of risk exceeds the level deemed acceptable in the Hazard Acceptability Thresholds for Development Approvals by Local Government (or equivalent Regional Board policy as it exists at the time).
- 10.2.4 The Regional District will utilize floodplain management and zoning bylaws, official community plan policies and covenants to limit development within the floodplain and minimize exposure to risk.
- 10.2.5 The 1:200 year design flood will be the basis for flood proofing measures.
- 10.2.6 The Regional District will continue to rely on dykes and associated flood protection infrastructure combined with secondary (on-site) flood-proofing measures including the implementation of flood construction levels, siting, and floodplain setbacks to minimize exposure to flood hazards.

- 10.2.7 The Ministry of Environment Flood Hazard Area Land Use Management Guidelines will be considered by the Regional Board when developing policies, bylaws and regulations for the Chilliwack River floodplain within the Plan area.³⁰
- 10.2.8 The 1992 Chilliwack River Hazard Management Outline Plan should be updated to reflect current conditions and priorities as well as to balance the need for protection from hazards with environmental considerations. External funding will be sought for this work.
- 10.2.9 As a part of an update to the Chilliwack River Hazard Management Plan, or in preparation for it, the Regional District will seek external funding or advocate to senior governments to undertake a comprehensive quantitative flood risk assessment of the Chilliwack River floodplain to:
 - a. update flood profiles, paths and scenarios taking into account changes in river hydrology since the flood profile was last assessed;
 - b. comprehensively assess existing bank protection and flood protection works;
 - c. understand the potential for economic loss at various flood stages;
 - d. estimate the duration of inundation; and,
 - e. inform and guide the responsible authorities in the major investment required for improving existing infrastructure, developing new infrastructure and undertaking protective works under emergency conditions.
- 10.2.10 The Chilliwack River Hazard Management Plan, or any strategy to manage Chilliwack River hazards, should be coordinated with the City of Chilliwack and the Vedder River Management Plan Committee which oversees the portion of Chilliwack River downstream of the Plan area.
- 10.2.11 "Orphan" flood protection structures should be upgraded to provincial standards with funding from senior governments. In this event, the Regional Board and the local community will consider the establishment of a service area to provide for operation and maintenance.
- 10.2.12 The design of flood protection works should minimize negative impacts to riparian habitat and ecological processes.
- 10.2.13 Significant upgrades to flood protection works require major contributions from provincial and federal governments. Normally, senior governments should pay costs of capital improvements and the local community should pay costs for ongoing operation and maintenance through a Service Area.
- 10.2.14 The Regional District supports continued efforts to work with local property owners to identify solutions to the Blue Creek flooding problem.

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³⁰ Ministry of Environment. *Flood Hazard Area Land Use Management Guidelines*. May, 2004 (or as updated).

10.3 Earthquake Hazards

Seismic slope stability and soil liquefaction hazards may require specific consideration in development approvals. The BC Building Code requires that:

- the design of some buildings, notably buildings for assembly and institutional uses and buildings in excess of 600 m² in building area or exceeding three stories in height, address earthquake liquefaction hazards;
- the consideration of potential for slope instability and its consequences at a building site is an explicit requirement in designs of structures and their foundations; and,
- the seismic hazard probability level to be used in the consideration, particularly in assessment of seismic slope stability, is a 2%-in-50 year probability of exceedance.

It is the policy of the Regional Board that:

- 10.3.1 Investigation and design of buildings on liquefiable sites should utilize, to the extent applicable, the best practices outlined in the Greater Vancouver Liquefaction Task Force Report, Geotechnical Design Guidelines for Buildings on Liquefiable Sites in Accordance with NBC 2005 for Greater Vancouver Region (May 8, 2007) or as updated.
- 10.3.2 Geotechnical analytical techniques for evaluating seismic slope stability should follow any best practices found in *Guidelines for Legislated Landslide Assessments for Proposed Residential Development in British Columbia*, published by the Association of Professional Engineers and Geoscientists of BC (or as updated).
- 10.3.3 Senior governments are encouraged to commission geotechnical investigations to produce data or maps of the Plan area showing ground susceptibilities to seismic shaking and soil liquefaction to assist with development approvals.

10.4 Interface Fire Hazards

The Wildland-Urban Interface may be defined as the area where structures and other human developments meet or intermingle with undeveloped wildland or, in more general terms, where houses or commercial development and fairly dense forest vegetation are both present. Wildland-Urban Interface zones are at particular risk of wildfire. Fire is a natural part of forest ecology, but occurrences in interface zones, as well as the consequences, are greatly increased by proximity to human activities.

The slopes surrounding Columbia Valley, Cultus Lake South, and the Chilliwack River Valley have an extensive wildfire history, though few significant fires have occurred since about the 1960's. However, the climactic trend toward warmer, drier summers may elevate wildfire risk over time.

The consequences of interface fires can be great, including the loss of homes, business and even lives. The Ministry of Natural Resource Operations Coastal Fire Centre has developed

Wildland / Urban Interface Fire Hazard maps. Forest adjacent to private lands in the Plan area have received a high hazard rating. Interface Fire Hazards are mapped in *Map 3 - Interface Fire Hazards*. The risk of wildfires will increase if climate change results in reduced summer precipitation.

Suppression of wildfire on Crown land is the responsibility of the Ministry of Forests, Lands & Natural Resource Operations Wildfire Management Branch.

It is the Regional Board policy that:

- 10.4.1 New subdivision and development should be avoided in locations subject to unacceptable risk from wildfire hazards.
- 10.4.2 Buildings and structures within areas of high wildfire hazard should be designed and constructed to minimize risk of interface fire hazards to people and property. Where warranted, the Regional Board may consider establishing a development permit area for this purpose.
- 10.4.3 New subdivision and developments in Extreme, High, and possibly in Moderate, interface fire hazard areas may be required to demonstrate FireSmart techniques. Rezoning applications in wild fire hazard areas may require an overall assessment of the site for susceptibility to wildfire (from conditions both on and off-site). Subdivision applications may require an assessment of the site for susceptibility to wildfire (from conditions both on and off-site) and mitigation of the hazard. Such reports shall be prepared by a professional forester licensed in BC specializing in forest wildfire assessment. Completion of works that reduce the hazard may be required prior as a part of any development approvals.
- 10.4.4 When responding to the referral of an application for a tenure or activity on Crown Land, the Regional District may request a detailed wildfire hazard report for the site and development in areas neighbouring the site, including recommendations that reduce the hazard.
- 10.4.5 The Regional District will liaise with the Province regarding wildfire protection services.
- 10.4.6 Owners of land subject to wild fire hazard are encouraged to consider strategies to reduce the risk of damage from wildfire and to increase the ability to fight wildfire on the property, including:
 - f. building in accordance with the *BC FireSmart Homeowners Manual* which recommends the use of non-combustible materials and other building and fuel management techniques;³¹
 - g. utilizing fire resistant native plants in landscaping; and, applying "fire smart", "fire scaping", and fuel management strategies;

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³¹ Ministry of Natural Operations, BC Forest Service. The Homeowners Firesmart Manual, BC edition or as updated.

- h. installing a well, pump, low-flow-resistance piping, and full-flow yard hydrant system delivering at least 20 gallons per minute per house for sprinklers;
- i. installing well pumps in an approved way that allows safe and convenient connection to a portable electrical generator to supply the pump in the event of power outage;
- utilizing rain storage tanks or other means for producing or storing water for firefighting on-site;
- k. providing barrels or other means of quickly filling buckets and adding dish soap for extinguishment of small spot fires; and
- I. ensuring access to ponds, creeks, pools and other sources of water supply for fire protection.
- 10.4.7 Residents in Electoral Areas E and H, and visitors to it, should diligently observe Open Fire Bans initiated by the Province and practice "fire smart" behavior to reduce the risk of wildfire initiation.

11.0 Habitat

Electoral Area E and H communities are located in two primary ecological zones in the Cascade Mountain range: the Coastal Western Hemlock Zone and the Mountain Hemlock Zone. The Plan area is high in biological and cultural values. Nearly 200 identified species-at-risk can be found in the Plan boundary, some of which are identified below.

Table 11.1 Known Species at Risk in Electoral Areas E and H		
Mountain beaver	Tailed frog	North Cascade grizzly bear
Pacific giant salamander	Green-backed heron	Spotted owl
Oregon forestsnail	Great blue heron	
Marbled murrelet	Turkey vulture	
Pacific watershrew	Black-chinned hummingbird	
Long-tailed weasel	Hutton's vireo	
Red-legged frog	Shrew mole	
Keen's long-eared bat	Trowbridge's shrew	
Cultus pygmy sculpin	Townsend's big-eared bat	
Salish sucker	Painted turtle	
Phantom orchid	Rough-legged hawk	
Cliff paint brush	Bald eagle	
Tall bugbane	Osprey	
	Screech owl	
	Roosevelt elk	
	Alpine anemone	
	Cascade parsley fern	
	Short-fruited smelowskia	

^{*}Information compiled from FVRD "The Chilliwack River Watershed: A Backgrounder" 2005. "Chilliwack Watershed Strategy" 2009. Ministry of Environment, BC Species and Ecosystem Explorer, accessed September 1, 2011. www.gov.bc.ca/pub/eswp/search.do

Species such as the Cultus pygmy sculpin, the phantom orchid and pacific giant salamander are completely dependent on habitat provided in the Plan area.³²

Noxious Weeds

Noxious weeds are typically non-native plants that have been introduced to the region without the insect predators or plant pathogens that helped control them in their native habitat. They typically have aggressive growth which makes them difficult to control. Noxious weeds spread quickly and leave sensitive ecosystems in ruins.

The BC Weed Control Act imposes a duty on all land occupiers to control designated noxious plants. All residents are responsible for controlling noxious weeds on their private properties.

The FVRD works closely with the Ministry of Agriculture and Lands and the Ministry of Transportation and Infrastructure to cooperatively facilitate weed control efforts within the Region. The FVRD's Noxious Weed Control Program specifically targets Wild Chervil and

^{32&}quot; Chilliwack River Watershed Strategy: Watershed Issues and Recommendations" January 2009. P. 13

Tansy Ragwort. However, weed control staff are also active in identifying and mapping other aggressive species that are not currently Provincially designated noxious weeds including Giant Hogweed and Knotweed.

During the summer (beginning of May until end of August), the FVRD will pick up designated noxious weeds (Tansy Ragwort, Wild Chervil, Giant Hogweed and Knotweed) free of charge from Electoral Area E and H residents. Weeds must be bagged and appropriately labeled. To request a pickup, please call the Noxious Weeds phone number: 604. 702. 5067 or email weeds@fvrd.bc.ca.

11.1 Avoiding and Mitigating Impacts to Habitat

Official Community Plans may include policies related to the preservation, protection, restoration and enhancement of the natural environment, its ecosystems, and its biological diversity. However, the jurisdiction for environmental management falls on a variety of government agencies. The responsibility for stewardship is even broader. It extends in great part to individuals who live, work and play in the Chilliwack River Valley, Cultus Lake and Columbia Valley areas.

Accordingly, this Plan approaches the avoidance and mitigation of environmental impacts in a variety of ways. Planned land uses and densities are shaped by environmental constraints. Riparian Area Development Permit Area 5-E will protect fish and fish habitat and benefit amphibians, waterfowl, and other species that rely on riparian habitat. Groundwater and stormwater management are addressed in Section 12. Policies related to watershed protection, specifically from forestry-related impacts, are contained in Section 13 – Resource Stewardship. The policies below focus on the recognition and preservation of species at risk and biological diversity within the Plan boundary; cooperation and dialogue between responsible authorities; and, support for the efforts of community stewardship groups.

It is the policy of the Regional Board that:

- 11.1.1 New development should comply with the *Environmental Best Management Practices* for *Urban and Rural Development in British Columbia* (or as updated).
- 11.1.2 Applications for re-zoning and community plan amendment to facilitate new development may be required to include an assessment report prepared by a qualified environmental consultant to:
 - a. generally identify species and habitat present;
 - b. assess development-related impacts;
 - c. identify appropriate best practices; and,
 - d. provide strategies to avoid, mitigate or minimize impacts to species and habitats.

11.1.3 Land owners are recommended to:

³³ Local Government Act (1996, c. 323), section 878(d)

- a. retail as much of the natural vegetation cover as possible when clearing land for housing, or other forms of development;
- b. where possible, avoid land clearing between April 1st and July 30th to avoid conflicts with activities of nesting birds, their nests, eggs and trees; and,
- c. use native plants species for landscaping.
- 11.1.4 The Regional District encourages stewardship initiatives of responsible community groups and will support their efforts as resources permit, primarily through in-kind contributions.
- 11.1.5 The Regional District will, where practical and financially feasible, take an active role in conservation management in Electoral Areas E and H.
- 11.1.6 The Responsible Authorities are encouraged to undertake further environmental assessments to better understand impacts of activities, such as recreation use, resource extraction and land uses with sewage disposal on the environment in the Plan area.
- 11.1.7 The Regional District should continue to interact with other government agencies, community groups and others to enhance the livability and interaction of the Plan area in cooperation with the natural environment to ensure the continued stewardship of the area.
- 11.1.8 As opportunities arise, stream channels should be returned to Crown ownership to facilitate environmental management.
- 11.1.9 The BC <u>Weed Control Act</u> imposes a duty on all land occupiers to control designated noxious plants. All residents are responsible for controlling noxious weeds on their private properties.
- 11.1.10 Upon petition from local residents indicating strong community interest, the Regional Board may consider the development of a bylaw to require the removal of noxious weeds from private lands.

12.0 Ground and Surface Water

12.1 Groundwater

Groundwater is vital to both human and environmental health. In Electoral Areas E and H, groundwater is particularly critical as the majority of households rely on it for drinking water. As a result there is a strong connection between human health and groundwater quality. What is more, stream water quality is often dependent on a supply of clean and cold groundwater. Accordingly, groundwater also has a great effect on surface water quality and quantity and on overall environmental health.

Three main aquifers are located within the Plan boundary. Columbia Valley is underlain by an aquifer that flows towards Cultus Lake. The other two aquifers are located in the Chilliwack River Valley are unnamed.

The Ministry of Environment completed a study of the Columbia Valley aquifer in 2000. The aquifer is classified as 'highly transmissive' and provides water for residents, irrigation purposes and livestock watering.³⁴ Prior to the study in 2000, residents expressed concerns over contamination due to agricultural activities. The report found that small pockets of nitrate-nitrogen in groundwater were linked to manure storage and application issues. Authorities worked with the community to address these issues. Nitrate levels were shown to have declined in follow-up testing in conjunction with new manure management practices. Since the completion of the study, no new concerns about drinking water quality in Columbia Valley have emerged. Generally, the aquifer provides an abundance of water and is of high quality with low demand.

Aquifers in the Chilliwack River Valley are unnamed and largely unstudied. Two significant aquifers exist in the plan boundary and several perched aquifers are present in the Ryder Lake uplands area.³⁵ A larger aquifer is located beneath the Chilliwack River floodplain and flows from Slesse Park to Vedder Crossing. It is understood to have moderate productivity, moderate demand and a high vulnerability due to high permeability of the surface soils.³⁶

A second, smaller aquifer located at the junction of Slesse Creek and the Chilliwack River has moderate productivity and demand but low vulnerability.³⁷

- 12.1.1 The potential for negative impacts to groundwater and soil from ground-based disposal of sewage will be a primary consideration in land use planning.
- 12.1.2 Activities or developments that may result in potentially significant inputs to groundwater or significant groundwater withdraws, or which could otherwise

³⁴ Marc Zubel, Ministry of Environment. *Groundwater Conditions of the Columbia Valley Aquifer Cultus Lake, British Columbia*. January 2000.

³⁵ Fraser Valley Regional District for the Chilliwack River Watershed Strategy. The Chilliwack River Watershed: A Backgrounder. October 2005.

³⁶ Ibid

³⁷ Ibid

- negatively affect the groundwater system, will require hydrological assessment to identify and mitigate impacts.
- 12.1.3 The Regional District will participate in efforts of senior governments, community groups and industry representatives to collect data and develop strategies to protect groundwater for the long term.
- 12.1.4 The Regional Board will encourage responsible stewardship of groundwater resources, including:
 - a. agricultural practices that minimize the potential for groundwater impacts; and,
 - b. efforts to educate Electoral Area E and H residents and landowners about groundwater resources.
- 12.1.5 The Regional District will support the conservation of groundwater as outlined in the Electoral Area Water Conservation Program.
- 12.1.6 All property owners utilizing a groundwater-based potable water supply, and especially those with shallow wells, are recommended to have drinking water tested regularly. Unused wells should be deactivated or closed in accordance with the Groundwater Protection Regulation of the Water Act.

12.2 Stormwater

Stormwater is created when land alterations change the pre-existing water balance. When vegetation and soils are replaced with roads and buildings, less rainfall infiltrates into the ground, less is taken up by vegetation, and more becomes surface runoff.³⁸ Rural development, particularly the construction of impervious surfaces and land clearing, may increase stormwater flows and negatively impact streams, groundwater reservoirs and downslope properties.

Even relatively low levels of impervious cover can produce significant and often irreversible impacts on streams and aquatic resources.³⁹ Stormwater begins to have a negative impact on streams when the amount of impervious surface in a watershed equals as little as ten percent of the watershed area.⁴⁰ Parcel size is also an important indicator. Most residential developments with densities greater than one parcel per hectare will exceed 10% impervious area and alter drainage regimes.⁴¹

As a result, best management practices are needed at densities greater than one parcel per hectare, and where impervious cover may exceed 10% of the watershed area, to avoid:

³⁸ Ministry of Land, Water & Air Protection. Stormwater Planning: A Guidebook for British Columbia. May, 2002.

³⁹ Center for Watershed Protection. *Site Planning for Urban Stream Protection*. 1995.

⁴⁰ This is a generally accepted threshold. For a British Columbia source, see: Ministry of Land, Water & Air Protection. Stormwater Planning: A Guidebook for British Columbia. May, 2002. A Washington State example is: Derek Booth. Forest Cover, Impervious-Surface Area, and the Mitigation of Urbanization Impacts in King County, Washington. September, 2000.

⁴¹ Ministry of Land, Water & Air Protection. Stormwater Planning: A Guidebook for British Columbia. May, 2002.

- damage to aquatic environments;
- public expense for unplanned infrastructure; and,
- possible flood damage associated with increased runoff.

The policies below outline expectations for stormwater management for new developments and encourage landowners to develop and manage existing properties with stormwater in mind. Together with the other policies of this Plan, they respond to the need for stormwater management in Electoral Areas E and H.

- 12.2.1 Post-development stormwater flows should maintain natural flow patterns and water quality of receiving waters.
- 12.2.2 Foundation, roof drainage and other surface drainage should be disposed of on-site, returned to ground, and not be connected to collector systems for roads. The use of bio-swales, ponds, French-drains, rain barrels and other means of detaining and infiltrating stormwater on-site are encouraged.
- 12.2.3 Applications for zoning and community plan amendments to facilitate new developments at densities of one parcel per hectare or greater, or for commercial developments, should include a stormwater management plan prepared by a professional engineer to:
 - ensure post-development storm water flow volumes will not exceed predevelopment flow volumes in receiving waters;
 - b. maintain, to the extent possible, predevelopment flow patterns and velocities;
 - c. provide conveyance routes for major storms;
 - d. demonstrate the use of best practices;
 - certify that water quality of receiving surface and ground waters will not be negatively affected by stormwater surface run-off during and post development; and,
 - f. certify, where applicable, that there will be no negative effect on neighbouring properties.
- 12.2.4 Stormwater management plans should design for:
 - a. rainfall capture for minor storms (a 10 year return period rainstorm);
 - b. runoff control for major storms (a 100 year return period rainstorm); and,
 - c. where appropriate, flood risk management for extreme events and peak flow conveyance.

12.2.5 Where possible, landowners are encouraged to limit impervious surfaces- which include buildings, pavement and any surface through which water cannot pass – to 10% of the total lot area for large parcels and 25% or less of the total property area for smaller parcels. The use of aggregate, porous pavement, pavers, and similar materials is encouraged for driveways, patios and other surfaces that are often constructed of impervious materials.

13.0 Resource Stewardship

The resource industry is intrinsically tied to the history of communities in Electoral Areas E and H. Original settlers logged areas of Columbia Valley and established homesteads and farms. In the Chilliwack River Valley, after forests were cleared on the valley floor, settlers - often tied to the logging industry - made this area their home. Connections between area residents and resource industries remain today. However, the relationship has shifted. Residents of the Chilliwack River Valley are no longer so deeply connected to the resource sector as evident in the past.

Today, many residents choose to live in Electoral Areas E and H because of the proximity to nature and rural lifestyle rather than for reasons of employment in resource industries. Still, the resource sector remains vital for the local area and in the broader regional economy.

In recent years, tensions between resource proponents, provincial agencies and the local community have come to the forefront. Balancing the perspectives and interests of these groups can be a challenge. The 2009, the Chilliwack River Watershed Strategy (CRWS) brought together different groups to address these issues. Federal and Provincial agencies, First Nations, Fraser Valley Regional District, community members and stakeholders participated in developing this strategy. The purpose of the CRWS is to understand "...watershed values, based on sound science and local knowledge to assist in decision making that will promote and improve the sustainability of the Chilliwack River watershed." The CRWS identified the interconnectedness of the varying activities in the Chilliwack River Valley and their impacts on the watershed. Communication and information sharing were two of the key recommendations from the CRWS. This OCP shares that focus.

It is the policy of the Regional Board that:

- 13.0.1 Forest licensees, others undertaking industrial and commercial activities on Crown land, and Provincial agencies approving activities on Crown land are encouraged to consultant with local residents concerning proposed resource uses and Crown land uses in Electoral Areas E and H. This may include consultation with community members to address traffic concerns, environmental concerns, scenic values, and protection of local community assets.
- 13.0.2 Resource activities on Crown land should be coordinated with other Crown land uses, including recreation activities, resource gathering, First Nations cultural uses, and others. Resource activities should avoid impacts to environmentally sensitive habitats.

13.1 Forestry

Forestry in Electoral Areas E and H dates back to the days of original settlers clearing and establishing homesteads in Columbia Valley and in the Chilliwack River Valley. In the Chilliwack River Valley, forestry activities continue to be important to the economic prosperity of

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⁴² "Chilliwack River Watershed Strategy: Executive Summary" January 2009. Pg. iii

the area. In addition to the economic benefits, forestry activities provide access to the Crown land base for recreation.

In recent years, a distinct shift occurred in community values from a focus on resource extraction to one of recreational opportunities and protecting the natural environment.

The Chilliwack River Watershed Strategy identified several concerns about the impacts of logging on habitat, water quality and drinking water protection, stream hydrology, visual quality, flooding, landslides and erosion and cultural impacts. The strategy's goals and vision include emphasis on sustainable logging practices, respect for the various stakeholders' values, and improved consultation and information sharing. Ultimately, the Strategy suggests a watershed management approach.

Residents of the Chilliwack River Valley expressed the outlook that natural visual landscape is a community amenity. Residents have a strong interest working with the Ministry of Forestry, Lands and Natural Resource Operations to identify areas of high scenic value and, where possible, increase the visual rating for the Chilliwack River Valley as assigned by the Ministry.

In addition to the community perspective, it is equally important to understand forestry within a provincial framework; primarily in the context of the <u>Forest and Range Practices Act.</u> The <u>Forest and Range Practices Act</u> (<u>FRPA</u>), which took effect in 2004, contains objectives aimed at avoiding negative impacts to watersheds. Its predecessor, the 1995 <u>Forest Practices Code</u>, reduced the frequency of post-harvesting landslides in British Columbia. It is hoped that <u>FRPA</u> will further reduce forestry-related impacts on the watershed ecosystem. Many of the values identified in the Plan are shared with landscape and stand-level forestry strategies and objectives established in the <u>Forest and Range Practices Act</u>.

<u>FRPA</u>'s reliance on private sector professionals and its emphasis on due diligence will make communication between forest licensees, professionals, the Ministry and the community particularly important for determining the public interest, risks and hazard acceptability thresholds in Electoral Areas E and H. Forest licensees and provincial ministries have engaged in productive dialogue with residents. This dialogue should continue as new forestry activities are contemplated and resources are made available for higher level plans and remediation works.

Balancing provincial requirements and community expectations can be a challenge. The policies of this Plan can be a tool for improving understanding and dialogue by providing interested parties with a clear expression of community values. This plan also advocates for the development of a Crown land management strategy for the Chilliwack River Valley. This would provide a comprehensive watershed-based approach for addressing resource use in the River Valley.

The policies in this section will:

 assist the Regional Board in responding to Forest Stewardship Plans and other forestry referrals;

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⁴³ Forest Practices Board. Managing Landslide Risk from Forest Practices in British Columbia. July, 2005.

- support forestry activities that are compatible with down-slope and downstream rural land uses:
- guide the use of land that may be subject to hazardous conditions or that is environmentally sensitive; and,
- foster the preservation, protection, restoration and enhancement of the natural environment.

They may also assist forest licensees, professionals, and Provincial ministries in managing forestry activities; and, interpreting due diligence and matters of public interest within the local context.

It is the policy of the Regional Board that:

- 13.1.1 Forest licensees are encouraged to refer forest stewardship plans and site-level plans to the Regional District for comments respecting potential consequences or effects on private land, Regional Parks, water supplies, geological and hydrological conditions, recreation and other community values.
- 13.1.2 The Regional Board requests to be consulted respecting the deactivation of major forestry roads that are relied upon for recreational purposes.
- 13.1.3 The Regional District will develop, in consultation with the appropriate Provincial ministries, a crown-community interface policy to guide forestry operations in areas upslope and upstream of settlement areas and reduce the need for site-specific comments on individual forestry referrals.
- 13.1.4 Planning for forestry activities should be coordinated with recreation uses, visual quality and community values. The Ministry of Forestry, Lands and Natural Resource Operations are encouraged to coordinate with local residents to identify areas of high visual and scenic values.
- 13.1.5 The Regional District will advocate for the development of a Crown land management strategy for the Chilliwack River Valley to address long-standing land use conflicts relating to forestry and recreation on the crown/community interface lands. The Regional District will assist the Responsible Authorities in developing such a plan.
- 13.1.6 The Regional Board will advocate for the development of a single comprehensive plan for forestry in the Chilliwack River watershed to ensure holistic resource management, address the need for multiple impact assessment, and include culture and heritage in forest management decisions. As a component of such a planning process, the Ministry should consider identifying a single licensee or assemble multiple forest licensees under an "umbrella" organization to provide highly coordinated forestry planning/operations and a single point of contact for the public.

- 13.1.7 Forest licensees are encouraged to provide buffers where cut block units are located adjacent to recreation sites such as Cheam Ridge Trail and the Trans Canada Trail. Adequate buffers should generally range from 5 metres on each side of the trail to 30 metres where the site is located in a scenic area as designated by the Province.
- 13.18 Forest licensees are encouraged to provide a 30 metre buffer from all communities and settled lands adjacent to a proposed cut block and also along Chilliwack Lake Road.
- 13.1.9 Forest licensees and the province are encouraged to consult with, and refer Forest Stewardship Plans and site-level plans to Department of National Defence concerning any proposed activity within the vicinity of their land holdings.
- 13.1.10 The Regional Board recommends that, where forestry activities are proposed upstream or upslope of settled areas, forest licensees:
 - a. hold community meetings to present Forest Stewardship Plans and sitelevel plans to residents and receive community input;
 - directly consult the owners of property in the vicinity of proposed forestry activities during the development of Forest Stewardship Plans and also through operational phases to coordinate activities; and,
 - c. obtain reputable third-party certification of sustainable forest practices.
- 13.1.11 Forestry activities upslope and upstream of settled areas should be reviewed by a professional engineer or geoscientist to demonstrate that no increase in risk to human safety, private property, or water supplies will result.
- 13.1.12 Forest activities should be planned and undertaken in conjunction with the 1992 Hay & Company report titled "Chilliwack River Hazard Management Outline Plan" which recommends that:
 - a. the Ministry responsible for forests should establish a sustainable rate of forest harvesting;
 - b. the Ministry should develop and implement a program to retire old roads and landings throughout the Chilliwack River watershed;
 - c. harvesting should be well distributed through-out the watershed rather than concentrated in sub-basins;
 - d. harvesting should not increase flood peaks and sediment loads;
 - e. not more than 40 % of any sub-basin is logged over a five year period;
 - f. block sizes are limited to a maximum of 30 hectares with a 400 metre opening between blocks;
 - q. harvested cut blocks should be closed before adjacent areas are logged;

- h. best practices for construction and maintenance of forestry roads should be used throughout the watershed; and,
- disturbed areas around bridges, culverts, borrow and fill areas should be revegetated.
- 13.1.13 The Regional District will liaise with the Province regarding forestry uses, invasive plant management, forest health issues, and resource uses.

13.2 Aggregates and Minerals

The mining and processing of aggregate materials in Electoral Areas E and H has been a source of conflict. Many residents are concerned with potential cumulative environment impacts, impact on recreational activities, noise, dust, blasting, vibration, increased truck traffic, impacts to ground and surface water supplies, aesthetic impacts, health impacts, loss of rural lifestyle, and loss of property value associated with gravel operations. A recently developed gravel operation generated a great deal of conflict and community opposition.

There are various causes of this conflict, including:

- a lack of understanding on all sides of the issue;
- inability or unwillingness to adequately mitigate off-site impacts;
- inadequate enforcement or the perception thereof;
- insufficient regulatory tools;
- not enough local involvement in approval processes;
- absence of planning for suitable locations for aggregate extraction;
- lack of infrastructure, particularly roads, suitable to support industrial uses in rural areas;
 and,
- the benefits of aggregate production are dispersed throughout the region or sub-region while the negative impacts are locally.

Conflicts will likely persist if significant changes are not made in the regulation of aggregate extraction, the enforcement of regulations and the approval process for extraction sites.

This is a pressing problem because aggregates are essential for the infrastructure and economy of our Region; not only for supporting new development but for maintaining existing infrastructure. Demand for aggregates in the Fraser Valley Regional District appears to be increasing and is projected to double over the next 20-25 years. Furthermore, there is proportionate demand for aggregates in Metro Vancouver where supplies are limited or are unavailable. A large proportion, perhaps two-thirds, of aggregate produced in the FVRD is transported to markets in Metro Vancouver or adjacent jurisdictions.

Achieving the necessary change will require cooperation and coordination between local and provincial authorities, the aggregate industry and the community. Provincial legislation surrounding aggregate operations divides jurisdiction between provincial and local authorities,

though the primary authority rests with the Province of BC through the Ministry of Forests, Lands & Natural Resource Operations and the Mines Act. The extraction of aggregates may not be prohibited by local governments without the approval of the Minister of Mines. However, aggregate extraction is subject to local government powers to regulate removal and deposit of soil provided in Section 723 of the Local Government Act.⁴⁴ Moreover, processing of aggregates is a use of land subject to regulation and prohibition under zoning controls.

Given that:

- the experience of living alongside aggregate operations is similar in all Electoral Areas;
- aggregate is a commodity of regional, even provincial, importance; and,
- jurisdiction for the regulation of aggregate extraction and processing is divided between local and provincial authorities;

solutions may need to be found at the regional level rather than within individual community plans. There is a compelling need for regional planning for aggregates, impact mitigation strategies, and improvements to permitting processes.

The Regional District has taken the position that many locations within Electoral Areas E and H are generally unsuitable for aggregate operations. Access and transportation routes, recreational values, environmental qualities, Agricultural Land Reserve all appear to be largely incompatible with large-scale gravel operations.

The policies in this section are intended to:

- guide the Regional Board in its decisions respecting aggregate operations;
- assist the Regional Board in responding to Mines Permit and other referrals regarding aggregate operations;
- guide the use of land that may be subject to hazardous conditions or that is environmentally sensitive; and,
- foster the preservation, protection, restoration and enhancement of the natural environment and community.

It is the policy of the Regional Board that:

- 13.2.1 The Regional District will work with the Responsible Authorities and stakeholders to develop a strategy for aggregate extraction and processing in the electoral areas of the FVRD.
- 13.2.2 The Regional Board will not support new aggregate operations unless:
 - a. off-site impacts can be adequately mitigated;
 - b. regulatory and enforcement abilities are improved;
 - c. the approval of aggregate extraction sites occurs within a planned framework; and,

⁴⁴ Local Governments can prohibit extraction through Soil Removal & Deposit Bylaws (SRDBs). However, a SRDB that prohibits the removal of soil in any location requires the approval of the Minister of Energy, Mines and Petroleum Resources.

- d. it is demonstrated that infrastructure, particularly roads, are suitable to support industrial uses.
- 13.2.3 The Regional Board will not support industrial extraction of gravel from land in the Agricultural Land Reserve in the Columbia Valley.
- 13.2.4 The Regional Board will undertake a review of the Soil Removal and Deposit Bylaw boundary to consider whether it should be expanded to include all of Electoral Areas E and H.
- 13.2.5 A permit under FVRD's Electoral Area Soil Removal Bylaw is required prior to the removal of sand, gravel, or rock except as exempted by the bylaw. Notwithstanding the policies in this Plan, the Regional Board will issue a soil removal permit where an application meets the requirements of the Soil Removal Bylaw and any other applicable bylaws of the Regional District.
- 13.2.6 The Regional Board may support, in specific instances, short term aggregate operations approved by a temporary use permit, provided all other regulations have been met
- 13.2.7 In cases where gravel removal from a watercourse is required for public safety, the Regional Board will support the proposal provided all other regulations have been satisfied.
- 13.2.8 Aggregate operations should aggressively seek to mitigate off-site impacts and employ the best available methods including but not limited to screening, noise deflection berms, enclosure of processing equipment, wash bays for trucks, dust suppression systems, and blasting noise/vibration suppression.
- 13.2.9 The ability to effectively mitigate off-site impacts will be a major consideration in Regional Board decisions respecting zoning and community plan amendments related to aggregate and mineral uses.
- 13.2.10 The Regional District should develop policies and standards to assist mine proponents and operators, as well as the Responsible Authorities, in determining appropriate standards and means for the mitigation of off-site impacts.
- 13.2.11 All mining activities should maintain a "no disturbance" riparian buffer from streams, watercourses and wetlands to protect water quality, hydrological functions and riparian habitat.
- 13.2.12 The Regional Board recommends that all aggregate mining or quarrying proposals, including bulk samples and expansion of existing operations, be supported by professional assessment and mitigation of:

- a. cumulative environmental impacts:
- b. cumulative hydro-geological impacts including effect on ground and surface water quality and quantity, wells, and water movements;
- c. geotechnical and hydrological impacts;
- d. cultural (archaeological) impacts if appropriate;
- e. cumulative road maintenance, road safety, and traffic impacts and haul route assessments; and,
- f. community impacts including noise, dust, blasting and vibration.
- 13.2.13 The Regional Board recommends that mining proposals and associated technical information be presented to residents at a public meeting prior to the issuance of any permit or approval under the <u>Mines Act</u>.
- 13.2.14 The development, management and reclamation of aggregate extraction sites should follow the best practices outlined in the *Environmental Objectives and Best Management Practices for Aggregate Extraction* and *Aggregate Operators Best Management Practices Handbook for British Columbia.*⁴⁵
- 13.2.15 All sand, gravel and other sites used for commercial or industrial extraction of aggregate minerals should have a plan, approved by the Chief Inspector of Mines, for the safe operation, abandonment, recontouring and reclamation of the site. Progressive reclamation is strongly encouraged. Where necessary, there should be consultation between the Ministry of Energy & Mines, the proponent, and the Regional District to ensure there is no conflict between land use bylaws and the approved reclamation program.
- 13.2.16 The Regional District should amend its Soil Removal Bylaw to enable the collection of production-based fees from aggregate producers. The fees should be used to fund mitigation of negative off-site impacts associated with the aggregate industry; regulation, administration and enforcement related to the aggregate industry; and, long-term planning for aggregate uses.

13.3 Water Extraction

Water is an essential resource. It is a necessity for survival, a vital component of ecosystems, and also a commodity. Consideration of how we interact with surface water and ground water is important for our future wellbeing. Development and population growth are dependent on water resources; economic growth for communities is tied to water availability.

Generally, water extraction and water as a resource has been under the jurisdiction of the Federal and Provincial governments. Recently, the Province has begun efforts to update the

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⁴⁵ Ministry of Water, Air & Land Protection. *Environmental Objectives and Best Management Practices for Aggregate Extraction*. 2002 (or as updated). Ministry of Energy & Mines. *Aggregate Operators Best Management Practices for British Columbia*. April, 2002 (or as updated).

<u>Water Act</u>; if adopted the Province may take strides to regulate the extraction of ground water (previously unregulated), governance and decision making processes, and sustainability of the resource.

Community members have expressed concern over the protection of water and limits on extraction, especially commercial extraction. Others have indicated that certain areas of Electoral Areas E and H have been vulnerable to water shortages, especially during warmer dry periods. Managing and prioritizing water supply becomes critical for this reason.

It is the policy of the Regional Board that:

- 13.3.1 Where applications for zoning amendments, or Crown land referrals from the Province, for water extraction are received by the Regional District, priority access to water should be will be given to existing uses, domestic uses and farm uses.
- 13.3.2 In areas of water scarcity, the Regional Board will not support water license applications unless a comprehensive study has been completed.
- 13.3.3 Applications for commercial large volume extraction generally will not be supported by the Regional Board except in cases where a comprehensive water study was been undertaken and demonstrates:
 - a. existing and domestic uses will not be negatively impacted;
 - b. local ecosystems and habitat will not be impacted be the reduced water flows and volume;
 - c. alternative strategies which consider instances of water scarcity;
 - d. consultation will be undertaken with the community; and,
 - e. water quality and quantity will not be negatively impacted.

13.4 Independent Power Projects

Independent Power Producers (IPPs) are energy suppliers that are independent from government ownership or major public funding. IPPs sell their power to the BC Hydro grid. They generate power from a variety of sources such as wind, solar, geothermal or tidal movement. The most common form of IPP in British Columbia is run-of-river projects. Run-of-river projects generate energy from the movement of natural streams or watercourses.

Run-of-river projects are smaller in scale than traditional hydroelectric projects that often involve large dams, flooded areas and significant downstream impacts. A run-of-river project includes a relatively small retention area, a penstock (pipe) which transports the water downhill to the powerhouse where the energy is harvested, and a trail race which returns the water to the stream.

In the past decade, the Provincial government has identified green energy as a priority. Key legislation changes have enabled growth in the IPP industry.

Local Governments act in a reviewer/interested party role by submitting comments to the Province, but do not have a regulatory approving role. The Province limited Local Governments role in IPPs with legislative amendments to restrict the zoning powers of Local Governments. Thus, the approval of IPPs are largely a Federal and Provincial decisions.

In Electoral Area E there are ten IPP applications under review.⁴⁶ However, no operating certificates have been issued to date. The following table shows areas of proposed IPPs:

Centre Creek	2 applications	Under review
Chipmunk Creek	2 applications	Under review
Nesakwatch Creek	1 application	Under review
Pierce Creek	1 application	Under review
Post Creek	1 application	Under review
Slesse Creek	1 application	Under review
Tamihi Creek	2 applications	Under review

The Chilliwack River Watershed Strategy raised a number of concerns in regards to the growing interest in run-of-river proposals in the Plan area. Namely, they are:

- recreational, hydrological, ecological, visual, cultural and cumulative impacts;
- impacts to aquatic organisms and habitat;
- impacts to terrestrial wildlife and habitat;
- slope stability and integrity;
- visual quality impacts; and,
- First Nation traditional use.

As the Province continues to shift to green energy sources, more IPP applications can be expected in the Plan area. The FVRD is a popular area for IPP applications because of the mountainous terrain, elevation grades and proximity to the major population centre in BC. The Plan will provide guidance when the Regional District is responding to IPP referrals in Electoral Areas E and H.

It is the policy of the Regional Board that:

- 13.4.1 A Regional Energy Plan should be initiated prior to the approval of any run-of-river power projects.
- 13.4.2 In absence of a Regional Energy Plan, Independent Power Projects (IPPs) in the within the Plan area should be undertaken in a coordinated and comprehensive manner.
- 13.4.3 Where an IPP is proposed, the proponent should provide a comprehensive plan to:
 - a. identify and address geotechnical hazards and any potential downstream impacts;
 - b. identify and demonstrate how potential impacts will be mitigated to sensitive habitat, species at risk and other environmental values;

⁴⁶ IPP Watch website. Updated 2008. http://www.ippwatch.info/cms/index.php. accessed September 12th, 2011.

- c. address recreation impacts;
- d. examine view impacts and where possible locate structures and associated components outside of visual corridors; these include visibility from settled areas and recreation trails and sites;
- e. limit new road construction on the Crown land base to prevent illegal dumping; and.
- f. examine potential impacts of exposed conduit or power lines along forest service roads used by recreation users and logging vehicles.
- 13.4.4 Proponents should engage and consult with community members to provide information about the proposal and address concerns as expressed by the community.

14.0 Development Permit Areas

14.1 Frosst Creek Development Permit Area 1-E

Category of Designation

"Frosst Creek Stream Hazard Development Permit Area No 1-E" is designated pursuant to Section 919.1(1)(b) of the <u>Local Government Act</u> for the protection of development from hazardous conditions.

Area of Application

Development Permit Area 1-E encompasses the lands identified on *Schedule 3 – Frosst Creek Development Permit Area 1-E*.

Justification

Frosst Creek drains an area of approximately 30 square kilometers straddling the international boundary. It flows into Cultus Lake at Lindell Beach where it has created a broad alluvial fan which underlies a significant portion of the Cultus Lake South area.

Hazards associated with the Frosst Creek alluvial fan are documented in the report by Northwest Hydraulic Consultants titled "Frosst Creek Fan Hazard Zones, Cultus Lake, BC" which was done in 2006 and updated in 2011. This report identifies flood, debris, erosion, deposition hazards and delineates hazard zones based on the severity of potential hazards:

- Zone "X" represents a zone of significant hazard from channel erosion or avulsion. These areas are not protected by existing dikes and are within the proposed flood corridor of Frosst Creek. High velocity flows with the potential for scour or deposition of significant quantities of sediment are possible.
- Zone "A" represents a zone where high velocity overbank flows are possible. The resulting damage could include scour or deposition of significant quantities of sediment.
- Zone "B" represents a zone where overbank flows are possible with less consequence
 of damage. Depths of flow and velocities are shallower and slower than in zone "A" and
 sediment deposition would be of a smaller size.
- Zone "C" represents a zone where overbank flows have a low probability and if they
 were to occur, would be shallow with low velocities. Inundation upslope of barriers such
 as roads or within low points in the ground is the primary hazard.

These hazard zones are shown on Schedule 3 – Frosst Creek Development Permit Area 1-E.

Recently, dike upgrades have reduced hazards to significant portions of the Frosst Creek alluvial fan. This has helped to improve the situation for many properties. The impact of dike upgrades and sediment management works on Frosst Creek alluvial fan hazard zones was considered by Northwest Hydraulic Consultants (NHC) in 2011. NHC found that, "lateral erosion or channel avulsion will be limited by the presence of the standard dike and that the Frosst Creek floodway is bounded on the right bank by the presence of the standard dike. On

this basis, hazard zones were revised to reflect the additional protection provided by the upgraded dike and associated works. However, NHC determined that flood construction elevations are still required in areas protected by standard dikes. This is consistent with provincial policy which states that, "Buildings and manufactured homes in areas protected by standard dikes should meet minimum FCLs prescribed for the primary stream... and the FCL requirements for any internal drainage (minimum ponding elevations)."

Potential Hazards

The following conditions exist, or are expected to exist, within the development permit area:

- debris flood/flow and alluvial fan hazards; and,
- stream flooding, erosion and avulsion hazards.

Objectives

The objectives of Development Permit Area 1-E are to:

- direct development away from hazardous areas;
- allow for land use suitable under hazardous conditions, in accordance with geotechnical reports; and,
- ensure adequate professional evaluation of geological hazards and mitigation works;

so as to minimize the potential for damage to properties and the risk to life.

Activities requiring a permit

14.1.1 A development permit must be obtained prior to:

- a. subdivision of land;
- b. alteration of land; and,
- c. construction of, addition to, or alteration of a building or structure;

within the development permit area.

Exemptions

14.1.2 Notwithstanding section 14.1.1, a development permit may not be required for:

- a. construction of, addition to or alteration of buildings and accessory buildings or structures where:
 - i. it is demonstrated through building plans and a sealed Letter of Assurance from a professional engineer that flood construction elevations and scour protection are implemented in accordance with the recommendations of the "Frosst Creek Fan Hazard Zones Cultus Lake,"

⁴⁷ Province of BC, Ministry of Water, Land & Air Protection. *Flood Hazard Area Land Use Management Guidelines*. May, 2004.

- BC" report by Northwest Hydraulic Consultants; and, the guidelines of this development permit area are met; or,
- ii. the proposed construction is a single storey detached residential accessory building or structure, or addition thereto, which is not intended to be used for any residential occupancy and where the total floor area after the new construction or addition does not exceed 20 square metres (215 square feet); or,
- iii. the proposed construction is a building or structure or an addition to an existing building or structure which is intended to be used as a farm building of "low human occupancy" as defined in the National Farm Building Code of Canada and where the total floor area after the new construction or addition does not exceed 30 square metres (323 square feet); or,
- iv. the potential risk of any geotechnical hazard which may affect the site, as determined by a qualified professional geotechnical engineer in a certified site-specific geotechnical report, is within the levels deemed acceptable in the Regional Board policy Hazard Acceptability Thresholds for Development Permit Approvals by Local Government⁴⁸; and, where mitigation measures are not required either by the Regional Board policy Hazard Acceptability Thresholds for Development Approvals by Local Governments or by a qualified professional geotechnical engineer in a certified, site-specific geotechnical report; or,
- v. the type of construction, addition, or alteration does not affect or relate to matters of health, safety, or the protection of property from damage.
- vi. renovations that do not increase the amount of habitable area below the recommended flood construction elevations in the "Frost Creek Hazard Zones Cultus Lake, BC" report by Northwest Hydraulic Consultants." [Byl # 1264, 2014]
- b. removal of trees determined by a Certified Arborist or Registered Professional Forester (who is qualified to do tree risk assessment) to represent an imminent risk to safety of life and buildings:
- c. subdivision to facilitate a lot consolidation or a boundary adjustment, provided no additional parcels are created;
- riparian habitat enhancement or restoration works under the guidance of Provincial and Federal agencies;
- e. local and regional park facilities;

⁴⁸ Regional District of Fraser Cheam. *Hazard Acceptability Thresholds for Development Approvals by Local Government*. November, 1993 or as updated from time to time.

- f. emergency actions necessary to prevent, control or reduce immediate and substantial threats to life or property during flood, debris flood/flow, erosion, landslide, avalanche, stream avulsion and other geohazards events;
- g. repair, maintenance and improvement of flood protection infrastructure and all related ancillary or accessory works, regulated and approved by Federal or Provincial agencies;
- h. free-standing signs and signs attached to existing structures;
- i. public road and highway works; and,
- j. public infrastructure and public utilities.

Guidelines

In order to achieve the objectives of Development Permit Area 1-E, the following guidelines shall apply to the issuance of development permits:

Flood construction elevations & scour protection

- 14.1.3 Proposed development susceptible to flooding from Cultus Lake shall meet a flood construction elevation of 46.5 metres (GSC datum) or the unreduced flood construction levels set out in "Frosst Creek Fan Hazard Zones Cultus Lake BC, Final Report" by NHC, whichever is the greater.
- 14.1.4 In accordance with the recommendations of the "Frosst Creek Fan Hazard Zones Cultus Lake, BC" by Northwest Hydraulic Consultants, buildings and structures shall be protected from alluvial fan hazards as follows:

Hazard Zone	Hazard Severity	Description of Hazard	Required Hazard Mitigation
X	Very high	Significant channel avulsion and erosion	Development is not recommended; site-specific evaluation required
A	High	High velocity overbank flows; scour; sediment deposition	Flood construction elevation of 1.5 metres above local finished grade; scour protection at the base of the building pad or foundation
В	Medium	Medium velocity overbank flows; deposition of fine material	Flood construction elevation of 1.0 metres above local finished grade
С	Low	Low probability of low velocity flooding; deposition of fine material	Flood construction elevation of 0.6 metres above local finished grade

Where the proposed construction is a garage or a non-habitable storage building in in hazard zones A, B or C, the flood construction elevation may be reduced to 0.6 metres provided that building openings are oriented downstream (of Frosst Creek) and a Section 219 covenant in favour of the Regional District is registered to restrict the storage of goods and materials damageable by flood waters.

14.1.5 Where possible, buildings should be located a minimum of 7.5 metres away from any structure for flood protection or seepage control or any dike right-of-way used for protection works. In addition, fill for flood-proofing should not be placed within 7.5 metres of the inboard toe of any structure for flood protection or seepage control or the inboard side of any dike right-of-way used for protection works.

Site-specific geotechnical reports

- 14.1.6 Proposed construction, subdivision or alteration of land on the Frosst Creek alluvial fan may require a site-specific geotechnical report by a qualified professional engineer with training and experience in river and high energy creek engineering, pursuant to Section 920(11) of the Local Government Act.
- 14.1.7 Notwithstanding Sections 14.1.3 and 14.1.4, if a hazard mitigation strategy is proposed that differs from the requirements of this development permit area and the recommendations of the "Frosst Creek Fan Hazard Zones, Cultus Lake, BC" report by Northwest Hydraulics Consultants, a positive site-specific geotechnical report will be required to determine that the land is safe for the use intended and to certify and design any hazard mitigation works necessary to protect development in accordance with the policies of this Plan.
- 14.1.8 Development permits shall be in accordance with the recommendations of applicable site-specific geotechnical reports.
- 14.1.9 Geotechnical reports submitted in support of development permit applications shall meet the requirements outlined in *Assistance to Developers and Building Permit Applicants Undertaking Geotechnical Studies*⁴⁹ (or Regional Board policy as it exists at the time), and, as applicable, the *Guidelines for Legislated Landslide Assessments for Proposed Residential Development in British Columbia* or *Guidelines for Legislated Flood Assessments in a Changing Climate in BC* as updated from time to time.⁵⁰
- 14.1.10 The Regional Board may refuse to issue a development permit where the hazard frequency, as determined by a qualified professional engineer, exceeds the acceptability threshold for the proposed development stipulated in *Hazard Acceptability Thresholds for Development Approvals by Local Government*, or equivalent Regional

⁴⁹ Fraser Valley Regional District. Assistance to Developers and Building Permit Applicants Undertaking Geotechnical Studies.

⁵⁰ Association of Professional Engineers and Geoscientists of British Columbia. *Legislated Landslide Assessments for Proposed Residential Development in British Columbia*, May, 2008. Guidelines for *Legislated Flood Assessments in a Changing Climate in BC*, June, 2012. Or equivalent as it exists at the time.

Board policy as it exists at the time, or where a site-specific geotechnical report fails to certify that the land is safe for the use intended.⁵¹

Riparian Areas Regulation

14.1.11 Where the proposed development requires a riparian assessment pursuant to Development Permit Area 5-E, the site-specific geotechnical study shall be coordinated with the riparian assessment in order to provide a comprehensive development permit application.

Permit Conditions

- 14.1.12 Without limiting the range of permit conditions enabled by the <u>Local Government Act</u>, a development permit may:
 - a. include conditions or restrictions respecting the uses and densities permitted in the zoning bylaw, the sequence and timing of construction, areas to remain free of development, vegetation or trees to be planted or retained, natural drainage to be maintained or enhanced, or other matters as specified in Sections 920 (7)(a), (b), (c), (d) and (e) of the Local Government Act; and,
 - b. vary or supplement a bylaw under Division 7 or 11 of the Local Government Act provided that the variance or supplement is in accordance with the objectives and guidelines of Development Permit Area 1-E.

Permit Security

- 14.1.13 The Regional District may require the applicant to provide security in the form of cash or an unconditional, irrevocable and automatically renewing letter of credit in cases where:
 - a. security for the performance of conditions respecting landscaping is necessary;
 - the Regional District considers that damage to the natural environment could result as a consequence of a contravention of a condition in a development permit;
 - c. the Regional District considers that unsafe conditions could result as a consequence of a contravention of a condition in a development permit; and,
 - d. the permit holder is required to retain, restore or replace native vegetation.
- 14.1.14 The amount of the security shall be sufficient to cover the cost of any work that may be undertaken by the Regional District to address unsatisfied permit conditions; or, to correct deficient landscaping conditions, an unsafe condition, or damage to the natural

⁵¹ Peter Cave. *Hazard Acceptability Thresholds for Development Approvals by Local Government*. 1992 or equivalent Regional Board policy as it exists at the time

environment; that could reasonably be expected to result from the contravention of the permit.

Offence

14.1.15 Failure to:

- a. obtain a development permit where one is duly required; or,
- b. develop land strictly in accordance with a development permit issued; are offences under the <u>Local Government Act</u> and are contrary to the bylaws, regulations or policies of the Regional District. Upon summary conviction, penalties for offences may be up to the maximum set out in the <u>Local Government Act</u>.
- 14.1.16 Employees, officers and agents of the Regional District may enter, at all reasonable times, a property to inspect and determine whether the requirements of Development Permit Area 1-E and the terms and conditions of a development permit are being met.

14.2 Chilliwack River Development Permit Area 2-E

Category of Designation

"Chilliwack River Development Permit Area No. 2-E" is designated pursuant to Section 488(1)(b) of the <u>Local Government Act</u> for the protection of the natural environment and protection of development from hazardous conditions. [Byl # 1599, 2020]

Area of Application

Development Permit Area 2-E encompasses the lands identified on *Schedule 4 – Chilliwack River Development Permit Area 2-E & Chilliwack River Valley Slope Hazard* Development Permit Area 3-E.

Justification

Erosion and flooding hazards in the Chilliwack River Valley between Baker Trail Village and Slesse Park are documented by Hay & Company Consultants (HAYCO), Northwest Hydraulic Consultants Ltd. (NHC) and Kerr Wood Leidal Consulting Engineers (KWL)⁵². The maps produced by HAYCO as part of this study indicate the 1:200 year floodplain of the Chilliwack River and the estimated limit of erosion over 100 years. The original map produced by HAYCO (1992) and updates by NHC (2016) and KWL (2020), show the possible extent of erosion during a single major erosion event (the Erosion Setback Line). In addition, portions of this area were reviewed and updated in 2003 by Golder Associates. These studies and the hazards they assess are described in more detail in Section 10 of this Plan.

The hazards documented in the HAYCO, NHC and KWL reports present significant risks to the safety of people and property in the Chilliwack River Valley. Development Permit Area 2-E is established to reduce these risks when new development is proposed in potentially hazardous areas. It also provides guidelines to minimize the impact of development within the floodplain on water resources and riparian areas (which support river and stream bank stability). [Byl # 1599, 2020]

Potential Hazards

The following conditions exist, or are expected to exist, within the development permit area:

- flooding and erosion associated with the Chilliwack River;
- surface and ground waters susceptible to degradation; and,
- sensitive riparian zones which help to stabilize river banks and provide habitat for fish.

Northwest Hydraulic Consultants Ltd. Chilliwack River Erosion Setback Line Update – Wilson Road to Baker Trails Area. January 22, 2016.

⁵² Hay & Company Consultants Inc. Erosion Setback Line – Chilliwack River Valley. January 29, 1993.
Northwest Hydraulic Consultants Ltd. Chilliwack River Sub-Area Six Review. Erosion and Flooding Hazards. February 20, 2003.
Northwest Hydraulic Consultants Ltd. Chilliwack River Sub-Area Nine Review. Erosion and Flooding Hazards. February 20, 2003.
Northwest Hydraulic Consultants Ltd. Chilliwack River Erosion Setback Line Lladets. Wilson Road to Baker Trails Area, January

Kerr Wood Leidal Consulting Engineers. Chilliwack River Slesse Park – Erosion Setback Line Update. March 2, 2020.

Objectives

The objectives of Development Permit Area 2-E are to:

- minimize risk to life and damage to structures and properties from flooding and erosion hazards;
- direct development away from lands subject to potential river avulsion hazards;
- ensure adequate professional assessment and mitigation of river hazards during development approval processes;
- allow for land uses suitable under hazardous conditions, in accordance with geotechnical reports; and,
- minimize impacts of floodplain development on ground and surface water quality, river/stream bank integrity and riparian habitat.

Activities requiring a permit

- 14.2.1 A development permit must be obtained prior to:
 - a. subdivision of land;
 - b. alteration of land; and,
 - c. construction of, addition to or alteration of a building or structure; within the development permit area.

Exemption

- 14.2.2 Notwithstanding section 14.2.1, a development permit may not be required for:
 - a. construction of, addition to or alteration of buildings, accessory buildings or structures where:
 - i. the site is outside the Erosion Setback line; or
 - ii. the proposed construction is a single storey detached residential accessory building or structure, or addition thereto, which is not intended to be used for any residential occupancy and where the total floor area after the new construction or addition does not exceed 20 square metres (215 square feet); or,
 - iii. the proposed construction is a building or structure or an addition to an existing building or structure which is intended to be used as a farm building of "low human occupancy" as defined in the National Farm Building Code of Canada and where the total floor area after the new construction or addition does not exceed 30 square metres (323 square feet); or,
 - iv. the potential risk of any geotechnical hazard which may affect the site, as determined by a qualified professional geotechnical engineer with expertise in high energy river engineering in a certified site-specific

geotechnical report, is within the levels deemed acceptable in the Regional Board policy *Hazard Acceptability Thresholds for Development Permit Approvals by Local Government* or equivalent Regional Board policy as it exist at the time; and, where mitigation measures are not required either by the Regional Board policy *Hazard Acceptability Thresholds for Development Approvals by Local Governments* or by a qualified professional geotechnical engineer in a certified, site-specific geotechnical report; or,

- v. the type of construction, addition, or alteration does not affect or relate to matters of health, safety, or the protection of property from damage and the development proposal complies in all respects with the policies of this Development Permit area.
- removal of trees determined by a Certified Arborist or Registered Professional Forester (who is qualified to do tree risk assessment) to represent an imminent risk to safety of life and buildings;
- d. riparian habitat enhancement or restoration works under the guidance of Provincial and Federal agencies;
- e. subdivision to facilitate a lot consolidation or a boundary adjustment, provided no additional parcels are created;
- f. local and regional park facilities;
- g. emergency actions necessary to prevent, control or reduce immediate and substantial threats to life or property during flood, debris flood/flow, erosion, landslide, avalanche, stream avulsion and other geohazards events;
- repair, maintenance and improvement of flood protection infrastructure and all related ancillary or accessory works, regulated and approved by Federal or Provincial agencies;
- i. public road or highway works;
- j. public infrastructure and public utilities; and,
- k. forestry activities on Crown land undertaken under an approved Forest
 Stewardship Plan approved by the Ministry of Natural Resource Operations in accordance with the Forests and Range Practices Act.

Guidelines

In order to achieve the objectives of Development Permit Area 2-E, the following guidelines shall apply to the issuance of development permits:

14.2.3 Where possible, development should be sited to avoid hazards. Where it is impossible or impractical to avoid a hazard, mitigation measures may be considered.

- 14.2.4 A site-specific geotechnical report by a qualified professional engineer with training and expertise in high energy river engineering may be required pursuant to section 491 (4) of the Local Government Act. [Byl # 1599, 2020]
- 14.2.5 Geotechnical reports submitted in support of a development permit applications shall meet the requirements outlined in *Assistance to Developers and Building Permit Applicants Undertaking Geotechnical Studies* (or equivalent Regional Board policy as it exists at the time), and, as applicable, the *Guidelines for Legislative Landslide Assessments for Proposed Residential Development in British Columbia* or *Guidelines for Legislated Flood Assessments in a Changing Climate in BC* or as updated from time to time.
- 14.2.6 Buildings and structures shall not be sited in areas where the probability of a hazard event documented by a geotechnical engineer exceeds the level of acceptable risk for that event and that specific form of development established in the Hazard
 Acceptability Thresholds for Development Approvals by Local Governments.
- 14.2.7 Proposed developments susceptible to floodplain and/or located within the 200-year Floodplain of the Chilliwack River, other streams, lakes or other bodies of water shall be flood-proofed in accordance with the flood construction level and floodplain setbacks established by the Fraser Valley Regional District Flood Hazard Management Bylaw the recommendations of a qualified professional engineer with expertise in river hydraulics.
- 14.2.8 The maintenance of stream bank integrity and water quality shall be promoted in areas of land adjacent to and including the natural boundary of water courses by maintaining the appropriate vegetation.
- 14.2.9 The Erosion Setback Line is a general line for planning purposes and not intended as a layout line for construction of new development that may be situated close to the setback. Proposed developments sited within 15m of the established Erosion Setback Line may be required to determine through a topographic survey sealed by a British Columbia Land Surveyor the precise location of the Erosion Setback Line. [Byl # 1599, 2020]
- 14.2.10 Proposed developments within the 100-year Erosion Limit Line may be required to demonstrate through an engineering study, signed and sealed by a professional engineer registered in the Province of British Columbia, that the proposed sewage disposal, water supply and site drainage facilities are adequate and will not result in negative impact on the environment in the long term.
- 14.2.11 On-site sewage disposal, water supply and storm drainage systems may be prohibited in areas of unstable soil or areas where water is subject to degradation except as otherwise recommended in engineering studies.

- 14.2.12 A development permit may include conditions or restrictions respecting the uses and densities permitted in the zoning bylaw, the sequence and timing of construction, areas to remain free of development, vegetation or trees to be planted or retained, natural drainage to be maintained or enhanced, or other matters as specified in Sections 491 (1)(a), (b), (c), (d) and (e) of the Local Government Act. [Byl #1628, 2021]
- 14.2.13 A development permit may include conditions or restrictions respecting the uses and densities permitted in the zoning bylaw, the sequence and timing of construction, areas to remain free of development, vegetation or trees to be planted or retained, natural drainage to be maintained or enhanced, or other matters as specified in Sections 491(1)(a), (b), (c), (d) and (e) of the Local Government Act. [Byl # 1599, 2020]

14.2.14 Permit Security

- 14.2.15 The Regional District may require the applicant to provide security in the form of cash or an unconditional, irrevocable and automatically renewing letter of credit in cases where:
 - a. security for the performance of conditions respecting landscaping is necessary;
 - the Regional District considers that damage to the natural environment could result as a consequence of a contravention of a condition in a development permit;
 - c. the Regional District considers that unsafe conditions could result as a consequence of a contravention of a condition in a development permit; or,
 - d. the permit holder is required to retain, restore or replace native vegetation.
- 14.2.16 The amount of the security should be sufficient to cover the cost of any work that might be undertaken by the Regional District to correct deficient landscaping conditions, an unsafe condition, and damage to the natural environment that could reasonably be expected to result from the contravention of the permit.

Offence

14.2.17 Failure to:

- a. obtain a development permit where one is duly required; or,
- b. develop land strictly in accordance with a development permit issued;
- are offences under the <u>Local Government Act</u> and are contrary to the bylaws, regulations or policies of the Regional District. Upon summary conviction, penalties for offences may be up to the maximum set out in the <u>Local Government Act</u>.
- 14.2.18 Employees, officers and agents of the Regional District may enter, at all reasonable times, a property to inspect and determine whether the requirements of Development Permit Area 2-E and the terms and conditions of a development permit are being met.

14.3 Chilliwack River Valley Slope Hazard Development Permit Area 3-E

Category of Designation

"Chilliwack River Valley Slope Hazard Development Permit Area No 3-E" is designated pursuant to section 919.1(1)(b) of the <u>Local Government Act</u> for the protection of development from hazardous conditions.

Area of Application

Development Permit Area 3-E encompasses the lands identified on Schedule 4 – Chilliwack River Development Permit Area 2-E & Chilliwack River Valley Slope Hazard Development Permit Area 3-E.

Justification

The Chilliwack River Valley is subject to a variety of channelized and unchannelized slope hazards. The Chilliwack River Hazard Management Study included hazard zone mapping resulting from a secondary study of these hazards. Delineation of the areas affected by debris flow, debris flood and steep slope hazards, including the probability of such events, further enhances and clarifies the understanding of these hazards. This provides a basis for locating the boundaries of Development Permit Area 3-E. Hazards and hazard studies are described in more detail in Section 10 of this Plan. To protect new development from the geotechnical hazards present in the Chilliwack River Valley, the following conditions, objectives, and guidelines apply to DPA 3-E.

Potential Hazards

The following conditions exist, or are expected to exist, within the development permit area:

- debris flow or torrent and debris floods;
- rock slides and rock falls; and,
- slumps, slides, debris avalanche/earth flows.

Objectives

The objectives of Development Permit Area 3-E are to:

- direct development away from hazardous areas;
- allow for land use suitable under hazardous conditions, in accordance with geotechnical studies and the "Hazard Acceptability Thresholds for Development Approvals by Local Governments" or equivalent Regional Board policy as it exists at the time;
- ensure adequate professional evaluation of geological hazards and mitigation works;
 and,

 minimize the potential that new developments and alterations of land will increase hazards to downslope lands;

so as to minimize the potential for damage to property and the risk to life.

Activities requiring a permit

- 14.3.1 A development permit must be obtained prior to:
 - a. subdivision of land;
 - b. alteration of land; or
 - c. construction of, addition to, or alteration of a building or structure;

within the development permit area.

Exemptions

14.3.2 Notwithstanding Section 14.3.1, a development permit may not be required for:

- a. construction of, addition to or alteration of, a building, accessory building or structure where:
 - i. the potential risk of any geotechnical hazard which may affect the site, as determined by a qualified professional geotechnical engineer in a certified site-specific geotechnical report, is within the levels deemed acceptable in the Regional Board policy *Hazard Acceptability Thresholds for Development Approvals by Local Governments*or equivalent Regional Board policy as it exists at the time; and, where mitigation measures including, but not limited to siting requirements, are not required either by the Regional Board policy *Hazard Acceptability Thresholds for Development Approvals by Local Governments* or by a qualified professional geotechnical engineer in a certified, site specific report; ⁵³ or,
 - ii. the type of construction, additional or alteration does not affect or relate to matters of health, safety, or the protection of property from damage; and,
 - iii. the development proposal complies in all respects with the policies of this Development Permit Area.
- b. construction of a single storey detached residential accessory building or structure, or addition thereto, which is not intended to be used for any residential occupancy and where the total floor area after the new construction or addition does not exceed 20 square metres (215 square feet) provided that it involves no alteration of land, excavation of potentially unstable slopes, or the placement of fill on potentially unstable slopes;

⁵³ Regional District of Fraser-Cheam. Hazard Acceptability Thresholds for Development Approvals by Local Government. November 1993. Or equivalent Regional Board policy as it exists at the time.

- c. construction of a building or structure or an addition to an existing building or structure which is intended to be used as a farm building of "low human occupancy" as defined in the National Farm Building Code of Canada and where the total floor area after the new construction or addition does not exceed 30 square metres (323 square feet);
- d. removal of trees determined by a Certified Arborist or Registered Professional Forester (who is qualified to do tree risk assessment) to represent an imminent risk to safety of life and buildings;
- e. riparian habitat enhancement or restoration works under the guidance of Provincial and Federal agencies;
- f. subdivision to facilitate a lot consolidation or a boundary adjustment, provided no additional parcels are created;
- g. local and regional park facilities;
- h. emergency actions necessary to prevent, control or reduce immediate and substantial threats to life or property during flood, debris flood/flow, erosion, landslide, avalanche, stream avulsion and other geohazards events;
- repair, maintenance and improvement of flood protection infrastructure and all related ancillary or accessory works, regulated and approved by Federal or Provincial agencies;
- j. public road or highway works;
- k. free standing signs and signs attached to existing structures;
- I. public infrastructure and public utilities; and,
- m. forestry activities on Crown land undertaken under an approved Forest Stewardship Plan, approved by the Ministry of Natural Resource Operations in accordance with the <u>Forests and Range Practices Act</u>.

Guidelines

In order to achieve the objectives of Development Permit Area 3-E, the following guidelines shall apply to the issuance of development permits:

- 14.3.3 Where possible, development should be sited to avoid hazards. Where impossible or impractical to avoid hazards, mitigation measures may be considered.
- 14.3.4 A site-specific geotechnical report may be required pursuant to Section 9210(11) of the Local Government Act.
- 14.3.5 Development Permits shall be in accordance with the recommendations of the applicable geotechnical report or reports.
- 14.3.6 Geotechnical reports submitted in support of a development permit applications shall meet the requirements outlined in *Assistance to Developers and Building Permit*

Applicants Undertaking Geotechnical Studies⁵⁴ (or equivalent Regional Board policy as it exists at the time), and, as applicable, the Guidelines for Legislative Landslide Assessments for Proposed Residential Development in British Columbia or Guidelines for Legislated Flood Assessments in a Changing Climate in BC or as updated from time to time.⁵⁵

- 14.3.7 The Regional Board may refuse to issue a development permit where the hazard frequency, as determined by a qualified professional engineer, exceeds the acceptability threshold for the proposed development stipulated in *Hazard Acceptability Thresholds for Development Approvals by Local Government* or Regional Board policy as it exists at the time.⁵⁶
- 14.3.8 No alterations to the natural drainage or vegetation, and no construction or excavation should be permitted which might cause or contribute to hazardous conditions on the site or on adjacent lands.
- 14.3.9 Where development requires a riparian assessment pursuant to Development Permit Area 5-E, the site-specific geotechnical report shall be coordinated with the riparian assessment in order to provide a comprehensive development permit application.
- 14.3.10 A development permit may vary or supplement a bylaw under Division 7 or 11 of the Local Government Act provided that the variance or supplement is in accordance with the objectives and guidelines of Development Permit Area 3-E.
- 14.3.11 A development permit may include conditions or restrictions respecting the uses and densities permitted in the zoning bylaw, the sequence and timing of construction, areas to remain free of development, vegetation or trees to be planted or retained, natural drainage to be maintained or enhanced, or other matters as specified in Section 920 of the Local Government Act.

Permit Security

- 14.3.12 The Regional District may require the applicant to provide security in the form of cash or an unconditional, irrevocable and automatically renewing letter of credit in cases where:
 - a. security for the performance of conditions respecting landscaping is necessary;
 - the Regional District considers that damage to the natural environment could result as a consequence of a contravention of a condition in a development permit;
 - c. the Regional District considers that unsafe conditions could result as a consequence of a contravention of a condition in a development permit; and,

⁵⁴ Fraser Valley Regional District. Assistance to Developers and Building Permit Applicants Undertaking Geotechnical Studies.

⁵⁵ Association of Professional Engineers and Geoscientists of British Columbia. Legislated Landslide Assessments for Proposed Residential Development in British Columbia. May 2008. Guidelines for Legislated Flood Assessments in a Changing Climate in BC. June, 2012.

⁵⁶ Peter Cave. Hazard Acceptability Thresholds for Development Approvals by Local Governments. 1992

- d. the permit holder is required to retain, restore or replace native vegetation.
- 14.3.13 The amount of security shall be sufficient to cover the cost of any work that may be undertaken by the Regional District to address unsatisfied permit conditions; or, to correct deficient landscaping conditions, an unsafe condition, or damage to the natural environment; that could reasonably be expected to result from the contravention of the permit.

Offence

14.3.14 Failure to:

- a. obtain a development permit where one is duly required; or,
- b. develop land strictly in accordance with a development permit issued;

are offences under the <u>Local Government Act</u> and are contrary to the bylaws, regulations or policies of the Regional District. Upon summary conviction, penalties for offences may be up the maximum amount as set out in the <u>Local Government Act</u>.

14.3.15 Employees, officers and agents of the Regional District may enter, at all reasonable times, a property to inspect and determine whether the requirements of Development Permit Area 3-E and the terms and conditions of a development permit are being met.

14.4 Cultus Lake Resort Form and Character Development Permit Area 4-E

Category of Designation

"Cultus Lake Resort Form and Character Development Permit Area 4-E" is designated pursuant to Section 919.1 (e) (f) and 920 of the <u>Local Government Act</u>.

Area of Application

Development Permit Area 4-E encompasses the lands identified on *Schedule 5 – Cultus Lake Resort Form and Character Development Permit Area 4-E.*

Justification

This plan provides for resort development, including a variety of resort residential forms, resort-related commercial and recreational uses, and campgrounds, in designated areas. These developments will be located in places of recreational and aesthetic amenity, such as Cultus Lake, which experience high intensity of visitation and recreational use. Development in this area will be highly visible, and, in turn, will rely on the natural beauty and recreational amenity of the area. Visual values and recreational amenity are integral to the economy and community of these areas. Accordingly, there is a need to ensure that resort development is of a form and character which does not detract from the aesthetic experience of the area or resort uses and visual values on adjacent parcels. Development should reflect, and enhance, and the natural landscape of the area in which it is located. In addition, the concentration of resort development in nodes such as Cultus Lake South requires that developments are carefully designed to coordinate and be compatible with adjacent developments to create a cohesive functional resort node. The boundaries of Development Permit Area 4-E may be amended from time to time to include areas of new commercial, recreational, resort, or multi-family residential development in places of natural amenity within the Plan area.

Objectives

The objectives of Development Permit Area 4-E are to:

- protect the overall aesthetics of the area by ensuring resort developments demonstrate a high level of design and are integrated into the nature and built environment including maintaining visual values such as views of mountains, lake and the sky; maintaining the aesthetics and experience of a natural setting amongst and within resort developments; and, maintaining the experience of traveling on a scenic road or highway;
- ensure a gentle and sensitive transition between resort developments and between public and private realms through provisions to protect the aesthetic and amenity values by coordinating the character, form and scale of new development;
- provide for an integrated resort village of connected and coordinated, but individual and secure, private developments;
- provide architectural guidelines for buildings and structures that support diversity while maintaining cohesiveness; and,

 facilitate high-quality site development and landscaping that integrates into the broader community, preserves connections to landscape and natural aesthetics, and maintains visual privacy.

Activities requiring a permit

14.4.1 A development permit must be obtained prior to development of resort, resort residential, and commercial development, including campgrounds and holiday parks.

Exemptions

- 14.4.2 DPA 4-E guides the initial form and character of comprehensive resort development and commercial land uses. The intent is that a development permit will be required for new resort development or commercial uses at the time the overall development (including redevelopment or expansion of existing developments) is approved; for example, at the time of rezoning, or where zoning is already in place, upon issuance of a campground permit. It is not intended to apply to individual instances of construction with existing resort developments that pre-date the establishment of this DPA, or which have already received a permit under DPA 4-E. Accordingly, notwithstanding Section 14.4.1, a development permit is not required for the following:
 - a. replacement, reconstruction, addition or renovation to an existing building or structure, except assembly buildings; or,
 - b. placement of a park model trailer or recreational vehicle; or,
 - c. replacement, reconstruction, addition or renovation to an assembly building which would result in an increase in the building footprint by not more than 25%; or,
 - d. buildings and structures for utility or local institutional uses; or,
 - e. a building or structure subject to an existing form and character development permit; or,
 - f. a new single storey detached residential accessory building or structure, including garden sheds, gazebos, and similar structures, not intended to be used for any "residential occupancy" and which has a floor area not exceeding 20 square metres (215 square feet); or,
 - g. provision of additional landscaping or screening.

Guidelines

In order to achieve the objectives of Development Permit Area 4-E, the following guidelines shall apply:

Pedestrian Linkages

- 14.4.3 Where commercial services can be expected to be used by local residents, and where such services are adjacent to pedestrian routes or bikeways, commercial services shall be accessible from these public pathways.
- 14.4.4 Walkways or paths to allow for pedestrian movement within a development shall be provided. Covered walks, landscaping and special paving or surfacing are encouraged to connect buildings with pedestrian pathways, parking areas and roadways.
- 14.4.5 Pedestrian pathways shall be constructed of a uniform and complementary material used throughout the development to link all pedestrian routes and bikeways, and shall be buffered where feasible from roadways, vehicular traffic and parking areas.

Borders, landscaping and screening

- 14.4.6 Landscaping and screening along public roadways shall offer variety and provide opportunities for public views to lands beyond while maintaining privacy.
- 14.4.7 Points of access to the development, such as driveways and walkways, shall be landscaped and accentuated to provide a visually attractive entrance and sense of entry.
- 14.4.8 Landscape and screening shall define and buffer surface parking, waste bins, storage and service areas from residential units, pedestrian corridors and roadside views.
- 14.4.9 Landscaping should give preference to drought-resistant native species found locally and, where feasible, retain existing native vegetation.
- 14.4.10 Nursery stock used in landscaping and screening should meet or exceed the BC Landscape Standards established by the British Columbia Society of Landscape Architects and British Columbia Nursery Trades Association.
- 14.4.11 Parking areas shall be buffered from public roadways with landscaping or other appropriate means.
- 14.4.12 Edges between the 'public' realm and private spaces shall be softened through variation of building heights and roof pitches along the road corridor, open space or vegetated buffers, landscaping or other means.
- 14.4.13 The character of development, including landscaping and the form and character of buildings, shall provide for an attractive, safe and distinct edge along property frontages.

- 14.4.14 Building orientation and fenestration should provide "eyes on the street" where possible, particularly for public spaces.
- 14.4.15 For "gated" developments, main entry gates shall be set back from the street, constructed of high quality aesthetically pleasing materials and landscaped in such a way as to provide an attractive transition between public and private space. Gates, fencing and landscaping along road frontages shall be articulated and varied and shall not produce a "tunnel" or "wall" effect along the roadway.
- 14.4.16 A landscaped, treed buffer of at least 7.5 metres shall be required to separate resort developments from land uses and developments on adjacent parcels.
- 14.4.17 Existing trees should be maintained to the extent possible and, in areas lacking a sufficient collection of trees, should be supplemented with native tree species to enhance landscape aesthetics, privacy, screening and overall character.

Surfacing

14.4.18 Porous paving, 'eco-pavers' and similar surfacing materials are encouraged to facilitate infiltration of storm water and provide attractive surfaces.

Signs and Lighting

- 14.4.19 The size, location, and design of free-standing signs and other advertising structures not attached to buildings shall be compatible with uses and structures on adjacent properties. Fascia signage recessed into the façade of the building is strongly encouraged where building signage is required. The use, form and character of signage shall be consistent throughout the development.
- 14.4.20 The form and character, including architecture, materials, and colours, of structures supporting free-standing signs shall be consistent with and of comparable quality to that of the principle buildings. The use of natural materials is encouraged for structures supporting signs. Architectural sign supports are encouraged. Single and double pole sign supports are not permitted.
- 14.4.21 Site lighting shall be designed to minimize "light spill" onto adjacent lands and 'light pollution' in the night sky. Site lighting shall be designed to emit no light above horizontal through the use of shielding, 'full-cutoff' lights, or other means to direct light towards the ground or surface requiring illumination.

Siting, Design and Finishing of Buildings

14.4.22 For attached residential dwellings, facades should be stepped-back or staggered at differing intervals to prevent a monotonous or monolithic façade. A similar principle should be applied to single family structures and cabins to create visual interest.

- 14.4.23 The massing of buildings and structures shall respond to the scale of natural and built elements in the surrounding landscape.
- 14.4.24 Building massing and character should create visual interest that draws pedestrians through the environment; for example, by:
 - a. providing unique landmarks;
 - b. locating or siting buildings to frame vistas and define refuges;
 - c. varying building scale, color and design to provide visual interest.
- 14.4.25 Buildings and structures for resort residential dwelling units should not exceed 9.1 metres in height, excluding any required flood construction elevation. Buildings and structures such as clubhouses, recreation facilities and other non-residential structures should be of a height and scale which minimizes any negatively impact on adjacent properties or surrounding amenities, including views and sunlight penetration, and should be well set back from interior side property lines.
- 14.4.26 Buildings and structures shall be designed to address all adjacent public roads or highways, lakefronts and transportation routes. Where a building face, other than the front of a building, is visible from a road, highway, lakefront or transportation route, a visually attractive appearance shall be provided by a combination of landscaping, finishing and fenestration of the structure to a similar standard as the front of the building.
- 14.4.27 Blank and monotonous facades and roof lines shall be avoided. Building surfaces two stories high or exceeding fifteen (15) metres in length shall be relieved with changes of wall plane, roof articulation or other means of differentiation that provide visual interest.
- 14.4.28 For developments in which there are more than one building; a cohesive visual relationship between buildings and structures, including structures supporting signs, shall be evident. Buildings shall look coordinated but maintain variety, avoiding repetitive design or color patterns.
- 14.4.29 The architecture, including materials, of new developments shall reflect or compliment the surrounding natural and cultural landscape in a clear and well-articulated design concept.
- 14.4.30 New buildings and structures shall be constructed and finished with quality materials.
- 14.4.31 New buildings and structures shall be designed to minimize negative aesthetic impacts of rooftop mechanical equipment through the use of architectural screening, enclosing or integrating mechanical equipment into the roof and building design, or other means.

14.4.32 New buildings should be designed to maximize sunlight penetration to open areas and pedestrian areas except where shade is intentionally desired.

Utility Buildings

14.4.33 Utility buildings should meet guidelines to the extent feasible. However, it is acknowledged that utility buildings are built to a slightly lower architectural standard but should meet landscaping guidelines and fit within the overall character.

Information for Review and Approval

- 14.4.34 In order to assist with the review and approval of development permit applications, the Regional District Board may require:
 - a. where appropriate, a site schematic showing vehicular and pedestrian circulation, and the design and layout of pathways and linkages;
 - b. a survey of all existing trees which identified which treed will be retained;
 - c. a scaled landscaping plan;
 - d. a scaled plan showing the layout and design of parking areas, surfacing and lighting;
 - e. a scaled drawing showing the design, materials and colour scheme of proposed free-standing signs and sign supports;
 - f. a sample of proposed finishing materials and colours;
 - g. scaled architectural elevations of proposed buildings and structures, signed and sealed by a Member of the Architectural Institute of BC, showing finishing materials and colour schemes, and colour architectural renderings of the proposed development;
 - h. a written report, prepared by a Member of the Architectural Institute of British Columbia, outlining the design rationale for the development, including statements explaining how the design responds to the guidelines of this development permit area and 'fits' in relation, form, character and scale to nearby development and the natural environment;
 - i. a scaled site plan showing the siting of all proposed building and structures; and,
 - j. other information required to demonstrate that the proposed development meets the development permit area guidelines.

Permit Security

- 14.4.35 The Regional District may require the applicant to provide security in the form of cash or an unconditional, irrevocable and automatically renewing letter of credit in cases where:
 - a. security for the performance of conditions respecting landscaping is necessary;

- the Regional District considers that damage to the natural environment could result as a consequence of a contravention of a condition in a development permit;
- c. the Regional District considers that unsafe conditions could result as a consequence of a contravention of a condition in a development permit; and,
- d. the permit holder is required to retain, restore or replace native vegetation.
- 14.4.36 The amount of security shall be sufficient to cover the cost of any work that may be undertaken by the Regional District to address unsatisfied permit conditions; or, to correct deficient landscaping conditions, an unsafe condition, or damage to the natural environment; that could reasonably be expected to result from the contravention of the permit.

Offence

14.4.37 Failure to:

- a. obtain a development permit where one is duly required; or,
- b. develop land strictly in accordance with a development permit issued;

are offences under the <u>Local Government Act</u> and are contrary to the bylaws, regulations or policies of the Regional District. Upon summary conviction, penalties for offences may be up to the maximum set out in the <u>Local Government Act</u>.

14.4.38 Employees, officers and agents of the Regional District may enter, at all reasonable times, a property to inspect and determine whether the requirements of Development Permit Area 4-E and the terms and conditions of a development permit are being met.

14.5 Riparian Areas Development Permit Area 5-E

Category of Designation

"Riparian Areas Development Permit Area 5-E" is designated pursuant to Section 919.1(1)(a) of the <u>Local Government Act</u> for the protection of the natural environment, its ecosystems and biological diversity.

Area of Application

Development Permit Area 5-E consists of all those parcels of land:

- a. within the area of this Official Community Plan; and,
- b. entirely or partially within a Riparian Assessment Area, which is:
 - for a stream, the 30 metre strip on both sides of the stream, measured from the high water mark;
 - ii. for a ravine less than 60 metres wide, a strip on both sides of the stream measured from the high water mark to a point that is 30 metres beyond the top of the ravine bank; and,
 - iii. for a ravine 60 metres wide or greater, a strip on both sides of the stream measured from the high water mark to a point that is 10 metres beyond the top of the ravine bank.

For convenience, mapped streams are generally shown on *Schedule 6– Riparian Areas Development Permit Area 5-E.* Note that Riparian Areas Development Permit Area 5-E includes the Riparian Assessment Areas associated with <u>all</u> streams within the Plan area, whether mapped or unmapped, including but not limited to the streams shown on *Schedule 6– Riparian Areas Development Permit Area 5-E.*

<u>Justification</u>

Electoral Areas E and H contain streams and riparian areas that directly or indirectly provide natural features, functions and conditions that support fish life processes. The <u>Fish Protection Act</u> and the <u>Riparian Areas Regulation</u> require local governments to protect these streams and riparian areas when exercising powers with respect to residential, commercial and industrial development. In the opinion of the Regional Board, this development permit area provides a level of protection that is comparable to the <u>Fish Protection Act</u> and the <u>Riparian Areas Regulation</u>.

Objectives

The objective of Development Permit Area 5-E is to protect the natural environment, its ecosystems and biological diversity. More specifically, this DPA will protect streams and riparian habitat primarily through the involvement of qualified environmental professionals and the identification of Streamside Protection and Enhancement Areas (SPEAs) that should remain free of development, including the disturbance of soils and vegetation.

Activities Requiring a Permit

- 14.5.1 A development permit must be obtained prior to:
 - a. the subdivision of land;
 - b. residential, commercial, institutional or industrial development including:
 - the alteration of land;
 - ii. the disturbance of soil or vegetation; or
 - iii. construction of or addition to a building or structure;

within a riparian assessment area.

Exemptions

- 14.5.2 Notwithstanding Section 14.5.1, a development permit is not required for the following:
 - a. development that does not involve residential, commercial, institutional or industrial uses;
 - b. residential, commercial, institutional and industrial development that is demonstrated to be outside of a Riparian Assessment Area;
 - residential, commercial, institutional and industrial development within a riparian assessment area where the development is separated from the stream by a dedicated and developed public road right-of-way;
 - d. renovations or repair of a permanent structure on an existing foundation to an extent which does not alter or increase the building footprint area;
 - e. minor additions to an existing building or structure, such as an increase in floor area up to 25% of the existing footprint, provided that the addition is located on the side or part of the building or structure most distant from the stream; [Byl # 1264, 2014]
 - f. development in accordance with a registered covenant or approved development permit that pertains directly and explicitly to riparian habitat protection, which:
 - is registered in favour of the Fraser Valley Regional District and/or Provincial or Federal interests; and
 - ii. establishes a riparian buffer.
 - g. routine maintenance of existing landscaping or lawn and garden areas;
 - removal of trees determined by a Certified Arborist or Registered Professional Forester (who is qualified to do tree risk assessment) to represent an imminent risk to safety of life and buildings;
 - forestry activities on Crown land undertaken under an approved Forest Stewardship Plan approved by the Ministry of Natural Resource Operations in accordance with the Forest & Range Practices Act;

- j. riparian habitat enhancement or restoration works under the guidance of Provincial and Federal agencies;
- k. installation of seasonal play or recreational equipment on existing yard/lawn areas, such as sandboxes or swing sets;
- paths for personal use by the parcel owners, provided they do not exceed approximately 1.0 metre in width; are constructed of pervious natural materials with no concrete, asphalt, pavers or treated wood; do not involve structural stairs; require no removal of *streamside* vegetation; and do not impair *stream* bank stability;
- m. local and regional park facilities;
- emergency actions necessary to prevent, control or reduce immediate and substantial threats to life or property during flood, debris flood/flow, erosion, landslide, avalanche, stream avulsion and other geohazards events;
- repair, maintenance and improvement of flood protection infrastructure and all related ancillary or accessory works, regulated and approved by Federal or Provincial agencies;
- p. the development of an approved community water or sanitary sewer system that is not ancillary to a residential, commercial or industrial development;
- q. Federal and Provincial regulated utilities, including railways, transmission lines or a pipelines;
- r. public road or highway works;
- s. repair or replacement of an existing driveway, culvert or bridge; and,
- t. the construction of a single storey, detached residential accessory building or structure which is not intended to be used for any "residential occupancy" and which has a floor area not exceeding 20 square metres (215 square feet) and where:
 - i. the building or structure is located as far from the stream as possible and in the location on the parcel that minimizes impacts to riparian habitat; and,
 - ii. it is not possible to construct the building, structure or deck outside the riparian assessment area.
- 14.5.3 Where there is uncertainty regarding the location of development in relation to a Riparian Assessment Area or the nature of stream, the Regional District may require:
 - a plan prepared by a BC Land Surveyor or Qualified Environmental
 Professional to confirm whether the planned disturbance is within the Riparian
 Assessment Area; or
 - b. a report prepared by a Qualified Environmental Professional to determine if the stream satisfies the definition criteria.

Guidelines

In order to achieve the objectives of Development Permit Area 5-E, the following guidelines shall apply to the issuance of Development Permits:

Issuance of Development Permits

- 14.5.4 Each development permit application should, as a minimum, be accompanied by:
 - a. where applicable, an Assessment Report prepared by a QEP in accordance with the Assessment Methods and Development Permit Area 5-E guidelines for the purpose of determining the applicable SPEA and other measures necessary for the protection of riparian areas:
 - b. a scaled siting proposal clearly and accurately identifying all streams and water features, high water mark, top of bank, top of ravine bank, edge of wetland, riparian assessment area and the SPEA boundary in relation to existing and proposed property lines and existing and proposed development, as well as the locations of works and activities recommended in the Assessment Report; and,
 - c. written certification that the proposed development is consistent with the Guidelines of Development Permit Area 5-E and the <u>Riparian Areas</u> <u>Regulation</u>, and identifying any mitigation or compensation measures that are consistent with the Guidelines, including measures that may be specified as Development Permit conditions.
- 14.5.5 Pursuant to the <u>Riparian Area Regulation</u> and the <u>Local Government Act</u>, the Assessment Report prepared by a QEP should specifically consider and make recommendations respecting:
 - a. the siting of buildings, structures or uses of land;
 - b. areas to remain free of development;
 - c. the preservation, protection, restoration or enhancement of any specified natural feature or area;
 - d. works to preserve, protect, or enhance a natural watercourse or other specified environmental feature;
 - e. protection measures to be taken to preserve, protect, restore or enhance fish habitat or riparian areas, control drainage, or control erosion or protect the banks of watercourses; and,
 - f. timing of construction to avoid or mitigate impacts.
- 14.5.6 Where a development permit relates to the subdivision of land, an Assessment Report prepared by a QEP should:

- identify adequate building sites including but not limited to building locations;
 front, rear and side yard areas; site services including sewage disposal
 facilities and water supplies; access; and, parking on each proposed lot;
- b. identify streams that may be impacted by the proposed development; and
- c. consider whether any natural watercourses should be dedicated pursuant to Section 920(7)(c) of the <u>Local Government Act</u>.
- 14.5.7 The Regional District is authorized to issue a Development Permit after receiving:
 - a. notification by the Ministry of Environment that Fisheries & Oceans Canada and the Ministry have been:
 - i. notified of the development proposal; and,
 - ii. provided with a copy of an assessment report which meets the requirements of the Riparian Areas Regulation; or,
 - b. documentation demonstrating that Fisheries & Oceans Canada has, with respect to the proposed development, authorized the "harmful alteration, disruption or destruction" of fish habitat pursuant to Section 35 of the <u>Fisheries</u> Act or amendments thereto.
- 14.5.8 A development permit may include as a term or condition any recommendation made by QEP in an Assessment Report respecting:
 - a. the siting of buildings, structures or uses of land;
 - b. areas to remain free of development;
 - c. the preservation, protection, restoration or enhancement of any specified natural feature or area;
 - d. dedication of natural water courses to the Crown;
 - e. works to preserve, protect, or enhance a natural watercourse or other specified environmental feature; and,
 - f. protection measures to be taken to preserve, protect, restore or enhance fish habitat or riparian areas, control drainage, or control erosion or protect the banks of watercourses.
- 14.5.9 A development permit may impose terms and conditions respecting the:
 - a. sequence and timing of construction including but not limited to timelines for completion of the works identified in the permit;
 - co-ordination of geotechnical recommendations by a Qualified Environmental Professional or Professional Engineer licensed in Province of British Columbia;

- c. minor modification of a SPEA as generally described in the Riparian Area Regulation Implementation Guidebook where no impacts to fish habitat occur and as recommended in an Assessment Report by a Qualified Environmental Professional.
- 14.5.10 A development permit may vary or supplement a bylaw under Division 7 or 11 of the Local Government Act provided that the variance or supplement is in accordance with the objectives and guidelines of Development Permit Area 5-E.

Measures to Protect the Streamside Protection and Enhancement Area

- 14.5.11 Land shall be developed strictly in accordance with the development permit issued.
- 14.5.12 No building or structure of any kind should be located, no vegetation should be disturbed, and no soils should be removed or deposited within a Streamside Protection and Enhancement Area except in accordance with the development permit and Assessment Report.
- 12.5.13 The SPEA boundary should be clearly flagged, staked or otherwise marked during all development phases to avoid encroachment into the Streamside Protection and Enhancement Area.

Geotechnical Hazards

14.5.14 Where a proposed development requires geotechnical evaluation pursuant to a geotechnical hazard development permit area or Section 25 of the <u>Community Charter</u>, the riparian assessment should be coordinated with the geotechnical evaluation in order to provide a comprehensive development permit application.

Permit Security

- 14.5.15 The Regional District may require the applicant to provide security in the form of cash or an unconditional, irrevocable and automatically renewing letter of credit in cased where:
 - security for the performance of conditions respecting landscaping is necessary;
 - the Regional District considers that damage to the natural environment could result as a consequence of a contravention of a condition in a development permit;
 - c. the Regional District considers that unsafe conditions could result as a consequence of a contravention of a condition in a development permit; or,
 - d. the permit holder is required to retain, restore or replace native vegetation.

- 14.5.16 The amount of the security should be sufficient to cover the cost of any work that may be undertaken by the Regional District to correct deficient landscaping conditions, an unsafe condition, and damage to the natural environment that could reasonably be expected to result from the contravention of the permit.
- 14.5.17 A Letter of Undertaking signed and sealed by a Qualified Environmental Professional may be accepted in lieu of security where:
 - the nature of required works, such as landscaping, are minor and the risk of damage to the natural environment is low;
 - b. the Letter of Undertaking is signed and sealed by a Qualified Environmental Professional; and,
 - c. the Qualified Environmental Professional will undertake the works and provide to the Regional District a post-construction certification and inspection report as outlined in Section 14.5.18.

Post-Construction Certification and Inspection

- 14.5.18 Upon completion of the works authorized by a development permit and for certainty upon expiry of any timeline for completion of works established as a term or condition of a development permit the holder of the permit must submit to the Regional District and the Ministry of Environment post-construction certification from a QEP which:
 - a. certifies that the development has been carried out in accordance with the Assessment Report and that terms and conditions set out in the assessment report and the development permit have been properly implemented; or,
 - b. identifies and documents all instances of non-compliance with the assessment report and the development permit and any measures necessary to correct deficiencies, including any works that should be undertaken by the Regional District as contemplated by Section 14.5.16.
- 14.5.19 The requirement for post-construction certification and inspection may be waived by a condition in a development permit.

<u>Offence</u>

14.5.12 Failure to:

- a. obtain a development permit where one is duly required; or,
- b. develop land strictly in accordance with a development permit issued;

are offences under the <u>Local Government Act</u> and are contrary to the bylaws, regulations or policies of the Regional District. Upon summary conviction, penalties for offences may be up to the maximum set out in the <u>Local Government Act</u>.

14.5.21 Employees, officers and agents of the Regional District may enter, at all reasonable times, a property to inspect and determine whether the requirements of Development Permit Area 5-E and the terms and conditions of a development are being met.

Definitions

14.5.22 In DPA 5-E, the following terms have the meanings described below:

"Assessment Methods" means the assessment methods set out in the Schedule to the Riparian Areas Regulation.

"Assessment Report" means a report certified by a Qualified Environmental Professional and prepared in accordance with the <u>Riparian Areas Regulation</u>
Assessment Methods and the guidelines of Development Permit Area 6-E to assess the potential impact of a proposed development in a riparian assessment area.

"development" includes the alteration of land, the disturbance of soil or vegetation, and construction of or addition to buildings and structures.

"high water mark" means the visible high water mark of a stream where the presence and action of the water are so common and usual, and so long continued in all ordinary years, as to mark on the soil of the bed of the stream a character distinct from that of its banks, in vegetation, as well as in the nature of the soil itself, and includes the active floodplain.

"Qualified Environmental Professional" and "QEP" mean a qualified environmental professional as defined in the Riparian Areas Regulation.

"ravine" means a narrow valley with an average grade on either side greater than 3:1 measured between the high water mark of the watercourse contained in the valley and the top of the valley bank, being the point nearest the watercourse beyond which the average grade is less than 3:1 over a horizontal distance of at least 15 metres measured perpendicularly to the watercourse;

"Riparian Assessment Area" means

- for a stream, the 30 metre strip on both sides of the stream, measured from the high water mark;
- b. for a ravine less than 60 metres wide, a strip on both sides of the stream measured from the high water mark to a point that is 30 metres beyond the top of the ravine bank; and,
- c. for a ravine 60 metres wide or greater, a strip on both sides of the stream measured from the high water mark to a point that is 10 metres beyond the top of the ravine bank.

"Riparian Areas Regulation" means B.C. Reg. 376/2004 and amendments thereto.

"Streamside Protection and Enhancement Area" and "SPEA" mean an area:

- 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 in accordance with the <u>Riparian Areas</u>
 <u>Regulation</u> on the basis of an Assessment Report provided by a Qualified Environmental Professional.

"stream" 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 or brook; or,
- c. a ditch, spring or wetland that is connected by surface flow to something referred to in paragraph (a) or (b).

14.6 Lindell Beach Development Permit Area 6-E

Category of Designation

"Lindell Beach Development Permit Area No 6-E" is designated pursuant to Section 919.1(1)(a) of the <u>Local Government Act</u> for the protection of the natural environment, its ecosystems and biological diversity.

Area of Application

Development Permit Area 6-E encompasses the lands identified on *Schedule 7 – Lindell Beach Development Permit Area 6-E*.

<u>Justification</u>

The resort community of Lindell Beach is located adjacent to Cultus Lake and on the Frosst Creek alluvial fan. The foreshore of Cultus Lake and Frosst Creek provide critical habitat for aquatic species, most importantly the endangered Cultus Lake Sockeye salmon. Research conducted by the Cultus Sockeye Recovery Team (2004) and Fisheries and Oceans Canada (2003), determined that spawning and incubation areas along Lindell Beach's lakeshore are critical to the survival and recovery of Cultus sockeye. The quality and quantity of groundwater and run-off into the lake are particularly critical. The quality of Cultus Lake is also essential to recreational use of the lake and the related economic activity it brings to the Region.

The Lindell Beach community is comprised of about 150 residential parcels. Lot sizes range from 200 square metres (2,153 sq. ft.) to 900 square metres (9,687 sq. ft.). These lot sizes are equivalent to those often found in fully serviced urban areas. However, the Lindell Beach community is not served by a community sanitary sewer or stormwater systems. Waste water and stormwater are disposed of on-site. The combination of small, relatively dense parcels and on-site services creates the potential for contamination and degradation of ground water and run-off flowing into Cultus Lake.

This risk is heightened by the shift from small cabins to the construction of larger houses. When Lindell Beach was established with on-site sewage and stormwater services in the 1940's, relatively small cabins were typically built on individual lots. In more recent years, small cabins are being replaced with larger homes but sewage and stormwater are still managed onsite. More intensive development of small parcels may potentially impede the function of onsite sewage disposal and stormwater management systems and thereby increase potential for ground water contamination and increased run-off which would negatively impact Cultus Lake.

Objectives

The objective of Development Permit Area 6-E is to protect the quality and quantity of groundwater and run-off by ensuring that provision is made for adequate on-site sewage disposal and stormwater management. This DPA will limit the area of land covered by impervious surfaces to minimize stormwater runoff; and, ensure adequate space for on-site sewage disposal, include location for back-up septic field, is maintained on residential parcels.

In this way, the potential for groundwater contamination and decline in lake health will be reduced and critical habitat and aquatic species will be protected.

Activities Requiring a Permit

14.6.1 A development permit must be obtained prior to the construction of a new building or structure or an addition to an existing building or structure.

Exemptions

- 14.6.2 Notwithstanding Section 14.6.1, a development permit is not required for:
 - a. construction of buildings or structures where it is demonstrated through the submission of an scaled site plan showing all impervious areas, buildings, structures and services from which total impervious area can be accurately calculated - that existing and proposed impervious areas will not exceed 20% of the total parcel area and it is shown that site development plans allow adequate land area and facilities within the parcel for:
 - i. a sewage disposal system with primary and backup disposal fields;
 - ii. off-street parking; and,
 - iii. stormwater management.
 - b. construction of buildings or structures on parcels served by an approved community sanitary sewer system;
 - c. construction of, or addition to, a single storey detached residential accessory building or structure which is not intended to be used for any "residential occupancy" and which results in a total floor area not exceeding 20 square metres (215 square feet);
 - d. signs;
 - c. local and regional park facilities; or,
 - d. public infrastructure and public utilities.

Guidelines

- 14.6.3. Impervious area means the total combined area of a parcel in which water is prevented from infiltrating into the ground, and includes the footprint of all buildings and roofed structures; eave overhangs exceeding 0.6 metres; surfaces paved with concrete, asphalt, or other impervious materials; and, heavily compacted soils.
- 14.6.4. Except on parcels served by an approved community sanitary sewer system, total impervious area should not exceed 20% of the parcel area. Where site development is proposed that would result in total impervious area exceeding 20% of the parcel area, a development permit may be issued provided that:

- a. a report from a qualified professional engineer is submitted which certifies that on-site sewage and stormwater services will function adequately and will not result in contamination of the groundwater or increased surface run off; and,
- b. adequate off-street parking is demonstrated.
- 14.6.5. Impervious area may be minimized through the use of:
 - a. pervious parking surfaces, such as eco-pavers; and
 - b. uncovered, drip through decks
- 14.6.6. Drip through decks sited over the sewage disposal fields area may be permitted provided construction:
 - a. is unattached, open sided and uncovered;
 - b. allows for long-term sewage system function and operation; and,
 - c. certification from a qualified professional with expertise in sewage disposal systems is provided that ensures that the sewage disposal system will continue to function correctly.
- 14.6.8 Stormwater should normally be disposed of on-site and through soak away pits or similar systems.
- 14.6.9 On-site sewage disposal should provide adequate space for a backup field and primary field certified by a qualified professional to address sewage disposal over the long term.
- 14.6.10 On-site sewage disposal, water supply and drainage systems may be prohibited in areas of unstable soil or areas where water is subject to degradation except as otherwise recommended in engineering studies.
- 14.6.11 Buildings and structures shall not be sited in areas of unstable soil or flooding hazard, except as otherwise recommended in a site-specific engineering study, nor in areas where they may contribute to water degradation.
- 14.6.12 Development must not interfere with the operation of disposal systems, stormwater management or off-street parking.
- 14.6.13 A development permit may require, pursuant to section 919.1 (a) and 920 (7) (a), that an area of land remain free of development.
- 14.6.14 Where the proposed development requires a geotechnical hazard assessment pursuant to Development Permit Area 1-E, and riparian areas Development Permit Area 5-E; the site-specific studies shall be coordinated in order to provide a comprehensive development permit application.

Permit Security

- 14.6.15 The Regional District may require the applicant to provide security in the form of cash or an unconditional, irrevocable and automatically renewing letter of credit in cases where:
 - security for the performance of conditions respecting landscaping is necessary;
 - the Regional District considers that damage to the natural environment could result as a consequence of a contravention of a condition in a development permit;
 - c. the Regional District considers that unsafe conditions could result as a consequence of a contravention of a condition in a development permit; and,
 - d. the permit holder is required to retain, restore or replace native vegetation.
- 14.6.16 The amount of the security shall be sufficient to cover the cost of any work that may be undertaken by the Regional District to address unsatisfied permit conditions; or, to correct deficient landscaping conditions, an unsafe condition, or damage to the natural environment; that could reasonably be expected to result from the contravention of the permit.

Offence

14.6.17 Failure to:

- a. obtain a development permit where one is duly required; or,
- b. develop land strictly in accordance with a development permit issued;

are offences under the <u>Local Government Act</u> and are contrary to the bylaws, regulations or policies of the Regional District. Upon summary conviction, penalties for offences may be up to the maximum amount set out in the Local Government Act.

14.6.18 Employees, officers and agents of the Regional District may enter, at all reasonable times, a property to inspect and determine whether the requirements of Development Permit Area 6-E and the terms and conditions of a development permit are being met.

14.7 Cultus Lake South Ground & Lake Water Quality Development Permit Area 7-E

Category of Designation

"Cultus Lake Wastewater Development Permit Area No 7-E" is designated pursuant to Section 919.1(1)(a) of the <u>Local Government Act</u> for the protection of the natural environment, its ecosystems and biological diversity.

Area of Application

Development Permit Area 7-E encompasses the lands identified on Schedule 8 – Cultus Lake South Ground and Lake Water Quality Development Permit Area 7-E.

Justification

Cultus Lake South is a growing resort community with a mix of resort residential developments including holiday homes, campgrounds and park model units. Demand for recreation-oriented housing in close proximity to recreation resources and urban populations is high, and will bring subsequent development pressures. As a result, growth is expected to continue in the coming years. As growth occurs, protecting the health of Cultus Lake is essential for sustaining aquatic species, clean water, and recreational and scenic values that draw visitors and residents to the area.

Over twenty species, including the endangered Cultus Lake Sockeye, are reported to occur in Cultus Lake.⁵⁷ With depressed spawning numbers, and hatchery supplementation underway, habitat quality becomes very important to the persistence of the endangered Cultus Lake Sockeye. ⁵⁸ While many variables affect the survival of the Cultus Lake Sockeye, research has identified a pattern of degraded water quality and an increased proportion of nitrogen and phosphorus concentrations in the lake over time.⁵⁹ Science suggests that sewage effluent is an important source of increased nutrient loads to Cultus Lake.⁶⁰

Objectives

The Regional District is taking an active role to avoid negative impacts to Cultus Lake from the discharge of wastewater by new development. The 2012 *Cultus Lake South Sewerage Planning Study* by Urban Systems Ltd provides a summary of local conditions and sewerage options in Cultus Lake South. Study findings indicate that nitrogen, nitrate and phosphorus loads to groundwater and Cultus Lake can be reduced with high quality wastewater treatment; otherwise these nutrients will migrate to the aquifer and lake. Accordingly, the guidelines of this

⁵⁷ Schubert, N.D., Beacham, T. D., Cass, A.J., Cone, T.E., Fanos, B.P., Foy, M., Gable, J.H., Grout, J.A., Hume, J.M.B., Johnson, M., Morton, K.F., Shortreed, K.S., and Staley, M.J. 2002. Status of Cultus Lake sockeye salmon (Oncorhynchus nerka). Pacific Science Advice Review Committee Paper.

⁵⁸ Cultus Sockeye Recovery Team (CSRT). 2009. National conservation strategy for Cultus Lake sockeye salmon (*Oncorhynchus nerka*). Canadian Technical Report of Fisheries and Aquatic Sciences 2846. 58 pp.

⁵⁹ Shortreed, K. 2007. Limnology of Cultus Lake, British Columbia. Canadian Technical Report of Fisheries and Aquatic Sciences 2753. 92 pp.

⁶⁰ Selbie, D.T., Department of Fisheries and Oceans Canada. Unpublished.

development permit area implement a Class "A" wastewater treatment standard for new development in Cultus Lake South.⁶¹

New comprehensive resort developments, or significant expansion or redevelopment to an existing resort in Cultus Lake South, will increase the resident and visitor population and contribute new wastewater discharge to a sensitive ground and lake water area.

The objective of Development Permit Area 7-E is to protect ground and surface waters, particularly Cultus Lake, from excessive nutrient loads from sewage disposal in Cultus Lake South by ensuring that new resort development is supported by Class "A" wastewater treatment⁶² and professional certification of the long term viability of sewage treatment systems.

Activities requiring a permit

- 14.7.1 A development permit must be obtained prior to:
 - a. the subdivision of land; and,
 - b. resort, residential and commercial development including:
 - the alteration of land;
 - ii. construction of an assembly building or campground holiday park;
 - iii. construction of or addition to a building or structure;
 - iv. construction of a sewerage system;

Exemptions

- 14.7.2 Notwithstanding Section 14.7.1, a development permit is not required for:
 - a. replacement, reconstruction, addition or renovation to an existing dwelling unit, holiday home, park model unit and accessory buildings or structures; or,
 - b. construction of building and structures with a connection to an existing Class "A" wastewater treatment system; 63 or,
 - c. residential construction on an existing lot; or,
 - d. placement of a recreational vehicle or park model unit on an existing site within a campground or holiday park; or,
 - e. subdivision to facilitate a lot consolidation or a boundary adjustment, provided no additional parcels are created; or,
 - f. building and structures that do not include plumbing or where no wastewater is generated (i.e. gazebo's, sheds, communication or radio towers, signs); or,
 - g. construction of, or addition to, a single storey detached residential accessory building or structure which is not intended to be used for any "residential occupancy" and which has a total floor area not exceeding 20 square metres (215 square feet); or,

⁶¹ Municipal Wastewater Regulation, 2012, and amendments thereto

⁶² Municipal Wastewater Regulation, 2012, and amendments thereto

⁶³ Municipal Wastewater Regulation, 2012, and amendments thereto

h. development in accordance with a registered covenant or approved development permit that pertains to Class "A" wastewater treatment where said development will connect to a Class "A" wastewater treatment system.⁶⁴

Guidelines

In order to achieve the objectives of Development Permit Area 7-E, the following guidelines shall apply to the issuance of development permits:

- 14.7.3 Any development that involves the generation of wastewater (sewage) is required to connect to a wastewater treatment and disposal system that meets the Class "A" standard as defined in the *Municipal Wastewater Regulation*.
- 14.7.4 Any new wastewater treatment or disposal system must meet the Class "A" standard as defined in the *Municipal Wastewater Regulation*.
- 14.7.5 An engineering report prepared by qualified professional may be required to:
 - ensure development does not contribute to water degradation of the Columbia Valley aquifer and Cultus Lake;
 - b. evaluate the phosphorus retention capacity of the soils at proposed ground disposal sites; and
 - c. demonstrate attenuation or reduction measures for nitrogen, nitrate and phosphorus in the proposed wastewater treatment process.
- 14.7.6 Wastewater systems and accessory buildings shall not be located in areas of flooding hazard except in accordance with the recommended in an engineering report.
- 14.7.7 Where more than one Development Permit Area applies, all technical reports and recommendations by qualified professionals shall be coordinated to ensure that there will be no conflicts between on-site services.

Permit Security

- 14.7.8 The Regional District may require the applicant to provide security in the form of cash or an unconditional, irrevocable and automatically renewing letter of credit in cases where:
 - a. security for the performance of conditions respecting landscaping is necessary;
 - the Regional District considers that damage to the natural environment could result as a consequence of a contravention of a condition in a development permit;
 - c. the Regional District considers that unsafe conditions could result as a consequence of a contravention of a condition in a development permit; and,

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⁶⁴ Municipal Wastewater Regulation, 2012

- d. the permit holder is required to retain, restore or replace native vegetation.
- 14.7.9 The amount of security shall be sufficient to cover the cost of any work that may be undertaken by the Regional District to address unsatisfied permit conditions; or, to correct deficient landscaping conditions, an unsafe condition, or damage to the natural environment; that could reasonably be expected to result from the contravention of the permit.

<u>Offence</u>

14.7.10 Failure to:

- a. obtain a development permit where one is duly required; or,
- b. develop land strictly in accordance with a development permit issued;

are offences under the <u>Local Government Act</u> and are contrary to the bylaws, regulations or policies of the Regional District. Upon summary conviction, penalties for offences may be up to the maximum amount set out in the Local Government Act.

14.7.11 Employees, officers and agents of the Regional District may enter, at all reasonable times, a property to inspect and determine whether the requirements of Development Permit Area 7-E and the terms and conditions of a development permit are being met.

15.0 Temporary Use Permits

Sections 920.2 and 921 of the <u>Local Government Act</u> allow for the issuance of Temporary Use Permits in areas designated within an Official Community Plan. A Temporary Use Permit may allow a use not permitted by a zoning bylaw. In general, a Temporary Use Permit may be issued for a period of up to three (3) years and renewed, at the discretion of the Regional Board, only once. The Regional Board may impose special conditions under which the temporary use may be carried on, allow and regulate the construction of buildings or structures related to the temporary use, and require a security to guarantee the performance of the terms of use of the Temporary Use Permit. The security may be in the form of cash or a letter of credit, the amount of which is to be determined by the Regional Board. A major purpose of collecting the security is to ensure that the land is returned to the condition prior to issuance of the permit when the permit has expired. The Regional Board may utilize the security in the event that the conditions of the permit are not met.

Section 921 of the <u>Local Government Act</u> and *FVRD Development Procedures Bylaw s*pecify the process by which a temporary use permit may be issued. Public notification and input is a central part of the process. Notification of the Regional Board's consideration of a permit application must be mailed out to owners and occupiers of property within a specified distance of the subject land and placed in a local newspaper. As well, the Board will normally require the holding of a public information meeting to present the application to the community and hear the concerns of residents.

It is the policy of the Regional Board that:

- 15.1.1 The Official Community Plan area, as shown on *Schedule 1 Boundary of Plan Area*, is designated for the issuance of Temporary Use Permits.
- 15.1.2 A Temporary Use Permit may be issued for the following:
 - special events which are of limited duration and which will not preclude or compromise future permitted uses on the proposed site of the temporary use;
 - short-term industrial activity such as portable sawmills, heavy equipment storage, log home building operations and construction yards related to specific industrial projects of limited duration;
 - c. a temporary sand and gravel extraction where a permit has been issued pursuant to FVRD Soil Deposit and Removal Bylaw.
 - d. uses which comply with the designation policies but where appropriate zoning does not presently allow for such uses;
 - e. transitional uses, or uses where uncertainty exists respecting appropriateness or viability of the use, and where it is premature to decide upon rezoning and long-term land use rights.
- 15.1.3 The Regional Board will normally require the holding of a public information meeting prior to the issuance of a Temporary Use Permit.

15.1.4 As a condition of issuing a Temporary Use Permit, the Regional Board will normally require a security in an amount adequate to facilitate completion of permit conditions and the return of the land to its pre-existing state.

16.0 Greenhouse Gas Emissions

This section has been reserved for future policy regarding greenhouse gas emissions.

17.0 Interpretation

Unless otherwise stated in this Plan, the following terms have the meaning defined below. Terms not defined in this section carry the same meaning as in Provincial statues and the bylaws of the Fraser Valley Regional District.

ACCESS means the way, or means of connection, between lands adjacent to a public roadway and the public roadway; which connection provides access to and from the private lands. Access may also mean the access permitted and specified in a Highways Access Permit issued by the Ministry of Transportation & Infrastructure; see also **PUBLIC ACCESS**.

ACCESSORY BOARDING USE means a use accessory to a residential use and contained within the principal residence where no more than two (2) sleeping rooms, which do not contain cooking facilities, are rented for the accommodation of no more than four (4) persons.

ACCESORY FARM EMPLOYEE DWELLING means a building on a farm under the BC Assessment Act, used as a home or residence by a full time employee of the farm and his or her family members provided the use meets the requirements of the <u>Agricultural Land Commission Act</u>, the <u>Agricultural Land Reserve Use</u>, <u>Subdivision and Procedure Regulation</u> and the orders of the Agricultural Land Commission.

ACCESSORY RESIDENTIAL USE means a use accessory to a commercial use, mobile home park, a tourist accommodation use, or an industrial use, where the building or buildings include one dwelling unit for the accommodation of the owner, operator or manager.

ADVISORY PLANNING COMMISSION means a commission established under Section 898 of the <u>Local Government Act</u>, responsible for advising the Regional Board on planning concerns of the local community referred to it by the Board.

AGGREGATE EXTRACTION USE means a use involving the extraction and removal of aggregate materials from a lot and the subsequent reclamation and revegetation of the site. It includes sufficient breaking to allow the material to be transported from the site, but does not include processing of aggregates.

AGRI-TOURISM means a tourist activity, service or facility accessory to an agricultural activity and is classified as a farm use under the BC Assessment Act; may include: tours, farm retail sales, food and beverage service provided the use meet ALC regulations.

ALLUVIAL FAN means the alluvial deposit of a stream where it issues from a steep mountain valley or gorge upon a plain or at the junction of a tributary stream with the main stream.

ANCILLARY or ACCESSORY USE means a use auxiliary or subordinate to the principal use permitted in the land use designation.

APPROVAL means approval in writing.

APPROVED COMMUNITY SANITARY SEWER SYSTEM means a system for the collection, treatment, and disposal of domestic sewage, which has a design capacity of at least 22,700 litres per day and which is approved under the Municipal Sewage Regulation of the Environmental Management Act, and which is owned, operated and maintained by either:

- the Fraser Valley Regional District;
- a corporation established for the purpose of owning, operating and maintaining the sewer system; or
- a strata corporation pursuant to the <u>Strata Property Act</u>.

APPROVED COMMUNITY WATER SYSTEM means a system of waterworks which is approved under the Drinking Water Protection Act and its associated regulations, and which is owned, operated and maintained by either:

- an improvement district pursuant to the Local Government Act;
- a water utility pursuant to the <u>Water Utility Act</u>;
- the Fraser Valley Regional District; or
- a strata corporation pursuant to the <u>Strata Property Act</u> with a minimum of five strata lots served by the water system.

ARTISAN-CRAFT WORKSHOP USE means an activity of a gainful nature which is carried on by an artisan who practices, cultivates or instructs in craftsmanship and/or arts; includes artists' and potters' studios, workshops for the assembly and manual repair of specialized equipment by skilled artisans, musicians, horologists and the like, antique furniture and painting, restoration and repair, glass blowing, wood or stone carving, and all other similar activities; specifically excludes automobile, trailer and bicycle workshops, yards for trade and landscape contractors, boat building, service establishments for small appliances, office and amusement machinery and audio-visual equipment, food processing, personal service establishments, gunsmithing, locksmithing and similar pursuits, taxidermy, tanneries and pet breeding or care facilities, laboratories and professional offices, audio-visual production services and all other related occupations and businesses.

ASSEMBLY USE means a use of land that provides open space, buildings, or structures for private gatherings and assembly of people; which may be centered around education, religious gathering and worship or fraternal organization; and may include retreats, camps, private educational centre, meeting hall, and associated temporary lodging, boarding and accommodation use; in addition to associated residential use.

ASSOCIATED RESIDENTIAL LIMITED USE means a variety of uses associated with, but clearly ancillary or accessory to, a residential use; excludes overnight accommodation uses.

ASSOCIATED RESORT USE means a variety of uses associated with, but clearly ancillary or accessory to a resort use; may include common amenities such as clubhouse, pool,

recreational facilities, meeting room and other such similar use, exclusively by strata owners or resort users.

ASSOCIATED RURAL RESIDENTIAL USES means a variety of uses associated with, but clearly ancillary or accessory to, a rural residential use; includes bed and breakfast operations, boarding use, home occupations, cottage industries, artisan craft workshop, and small scale enterprise; unless prohibited by the zoning bylaw or, where land is located within the Agricultural Land Reserve, unless prohibited by under the <u>Agricultural Land Reserve Use</u>, <u>Subdivision and Procedure Regulation</u>.

BED AND BREAKFAST means a use accessory to a residential use and contained within the principal residence in which no more than three (3) sleeping rooms without cooking facilities, are used for the temporary accommodation of the traveling public, and in which breakfast but no other meal may be served to the registered guests.

BUFFER means any device arranged and maintained to screen or separate adjoining land uses or properties, and includes any combination of setbacks, existing vegetation, ditches, roads, landscaping, berming and fencing.

BUILDING BYLAW means any building bylaw applicable to Electoral Areas E and H of the Fraser Valley Regional District enacted pursuant to the <u>Local Government Act</u>.

COMMERCIAL CAMPGROUND USE means a commercial use of land for the purpose of providing two or more recreational camping spaces for recreational trailers, or motor homes, together with all supporting, common leisure and service facilities for the exclusive use of, and temporary occupancy for part of the year only, holiday-makers; may include: a recreational camping club incorporated under the <u>Society Act</u>; but does not include a social club, shared interest developments, strata developments, natural campgrounds, holiday park, mobile home park, motel, campground or camp licensed under the <u>Community Care Facility Act</u>.

COMMERCIAL USE means a use providing for the retail sale, repair and servicing of household, non-household, personal and non-personal goods, or for providing services to people.

CONSERVATION USE means the preservation or protection of natural resources and assets in their natural state, including the habitat of birds, fish and other wildlife. For lands within the Provincial Agricultural Land Reserve and designated CONSERVATION USE in this Plan, Conservation Use includes:

- biodiversity conservation, passible recreation, heritage, wildlife and scenery viewing purposes, as long as the area occupied by any associated buildings and structures does not exceed 100m² for each parcel;
- use of open land park established by a local government; and,
- ecological reserve, park, protected area, wildlife management area and recreation area;

in accordance with Section 3 of the <u>Agricultural Land Reserve Use</u>, <u>Subdivision and Procedure Regulation</u>.

CONTIGUOUS, when applied to two areas of development, means that they abut or touch each other.

COTTAGE INDUSTRY USE means an activity of a gainful nature which is not an offensive trade and which occupies a building accessory to residential and agriculture land uses, which includes ancillary retail and office facilities and which does not employ or involve more than three operators or employees, the principal of whom shall be resident on the parcel. Cottage industry use includes custom stone, textile, wood and metal working facilities, wholesale bakeries, plants processing and packing food grown or raised on the parcel, cottage wineries, locksmiths, gunsmiths, tinsmiths, print shops, audio visual and photographic studios, small appliances and office machinery repair, non-motorized bicycle repair shops.

DEBRIS FLOOD means a channelized slope hazard involving uncontrolled water flow which can result in water damage to unprotected buildings, erosion, deposition of gravel and timber debris and silting damage.

DEBRIS FLOW means a channelized slope hazard generally involving considerable amounts of sediments and debris, including trees and boulders, with small amounts of water, and is relatively confined to areas at the mouth of gullies, normally near the apex of the alluvial fans.

DESIGNATION means the land use designations set out in Section 5 of this Plan.

DEVELOPMENT APPLICATION means an application pursuant to an enacted provision of a Responsible Authority which affects the development of any land within the area covered by this plan.

ENVIRONMENTAL IMPACT ASSESSMENT means a field-based technical assessment conducted, prepared and supported by a **qualified professional** including but not limited to a professional biologist, in accordance with the Ministry of Environment recommended methodologies and best practices, which assessment provides:

- an inventory of fish and wildlife species and their habitats; threatened, rare and endangered species and their habitats; and, other sensitive ecosystems in the proposed development area, and in adjacent habitats or ecosystems which may be impacted by the proposed development area; and,
- recommendations for the avoidance then mitigation of impacts associated with a proposed development area.

FARM USE means a use providing for the growing, rearing, producing and harvesting of agricultural products and includes the processing on an individual farm of the products harvested, reared or produced on that farm only; and, retail sale of agricultural products which are produced on the same parcel or on other parcels within the area that form and are managed

as part of the same farm operation. For lands within the Provincial Agricultural Land Reserve and designated AGRICULTURAL in this Plan, farm use also includes activities designated as farm use pursuant to the <u>Agricultural Land Reserve Act</u> and Section 2 of the <u>Agricultural Land Reserve Use</u>, <u>Subdivision and Procedure Regulation</u>.

FLOODPLAIN means an area of land, whether flood-proofed or not, which is susceptible to flooding by a watercourse, lake, ocean or other body of water.

FLOODPROOFING means the alteration of land or structures and contents to minimize flood damage by raising the elevation of the land above the maximum elevation of the local flood level as determined by *Fraser Valley Regional District Floodplain Management Bylaw 0681, 2005*, or by the construction of buildings and structures to withstand the effects of flooding and flood waters, with all habitable floors located at elevations above the flood construction level as determined by *Fraser Valley Regional District Floodplain Management Bylaw 0681, 2005*.

FORESTRY USE means the cutting and preliminary grading of forest products for shipment; includes temporary or portable sawmills or shake mills processing materials cut in the local area.

GEOTECHNICAL STUDY means a study prepared by a qualified professional engineer with training and experience in geotechnical engineering and licensed in the Province of British Columbia which interprets the physical conditions of surface or subsurface features in a study area with respect to stability, potential seismic disturbance, interrelated chemical activity, and size and volume analysis; specifically addresses the possible effects of physical alterations or deformations of the land related to proposed building or other projects; and may establish standards for siting and construction of proposed buildings or the nature and location of proposed uses. Geotechnical studies meet the requirements outlined in *Assistance to Developers and Building Permit Applicants Undertaking Geotechnical Studies* and the applicable guidelines of the Association of Professional Engineers and Geoscientists of British Columbia. ⁶⁵

HOLIDAY PARK means any lot or parcel operated and maintained for the sole purpose of providing two or more recreational camping sites or lots, park model sites or lots, or holiday home sites or lots, together with all common leisure, services and supporting facilities for the exclusive use of and occupancy for part of the year only by holiday-makers who are the owners or lessees of the said sites or lots; may include bare land strata lots under the Strata Property Act of the Province of British Columbia, or a cooperative ownership recreational club incorporated under the Society Act of the Province of British Columbia, or a three (3) year or longer lease agreement approved by the Responsible Authority, but does not include a social club, mobile home park, motel, commercial campground, natural campground or a camp licensed under the Community Care Facilities Act of the Province of British Columbia.

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⁶⁵ Fraser Valley Regional District. *Assistance to Developers and Building Permit Applicants Undertaking Geotechnical Studies*. Or as updated from time to time.

HOME OCCUPATION USE means a use accessory to a single family residential use where the householder carries on an occupation, craft or profession within the residential dwelling unit.

IMPERVIOUS AREA means the total area of impervious surface expressed as a percentage of the total area of the parcel of land. Impervious surfaces are those which water cannot penetrate such as buildings, paved roads, and driveways.

INDUSTRIAL USE means the use of land, buildings and structures for the manufacturing, processing, fabricating, repair, packaging or assembly of goods; warehousing or bulk storage of goods; and related accessory uses.

LOCAL COMMERCIAL USE means a commercial use intended to serve the day-to-day needs of the local population residing in the vicinity of the local commercial use; includes general stores, convenience stores, small personal service establishments and artisan-craft workshop uses.

LOCAL COMMERCIAL MIXED USE means a ground oriented local commercial use and residential use undertaken in one building or structure up to two storeys in height; the residential of one unit or more, will be located above or behind the local commercial use; the area used by local commercial and residential uses will be approximately a 50/50 split.

LOCAL INSTITUTIONAL means an institutional use, which provides services for primarily local residents including civic, educational, fire halls, community and cultural centres, and other similar uses, and is established by local government, provincial or federal government, parks board or library board.

LOW DENSITY COMMERCIAL RECREATION means low-impact recreation uses in a natural setting and involving wilderness appreciation and related activities carried out on a seasonal or temporary basis; includes ranches, lodges, recreation camps, natural campgrounds, and private recreational, institutional or cultural facilities; excludes commercial campgrounds and holiday parks.

MAJOR INSTITUTIONAL means a large scale use of land by a governmental or administrative body, including Department of National Defense lands, correctional facilities and other government lands, catering to a regional, provincial or national populations.

MARINA means the use of land, buildings, structures, accessory uses incidental to a marina use, and the surface of water for providing docking, berths, and facilitates for launching and storage of pleasure boats on water or land.

MAXIMUM DENSITY means the maximum number of parcels achievable by subdivision from a parent parcel for the purposes of establishing a resort residential development.

MAXIMUM SITE COVERAGE means the proportion of a parcel of land which is used for buildings, structures, driveways, patios, swimming pools and other development covering the surface of land.

MOBILE HOME PARK means a residential use of a lot on which two or more mobile homes are located.

MULTI-FAMILY RESORT RESIDENTIAL USE means a resort residential use consisting of two (2) or more attached dwelling units occupied as residences or seasonal residences for one family per dwelling unit, together with accessory common and private amenity facilities which may include a clubhouse and other private recreational and social amenities.

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 or the lake, river, stream or other body of water, a character distinct from that of the banks thereof in respect to vegetation, as well as in respect to the nature of the soil itself.

NATURAL CAMPGROUND USE means a use of land for camp sites on an overnight rental basis, which involves no buildings, structures or service connections; excludes commercial campgrounds and holiday parks, sites owned or leased under the Strata Property Act, and camps licensed under the Community Care Facility Act of the Province of British Columbia. Natural Campground Use located within the Agricultural Land Reserve is permitted under the Agricultural Land Reserve Use, Subdivision and Procedure Regulation under certain conditions as agri-tourism use on land that is classified as farm under the Assessment Act. The regulations of the Agricultural Land Commission should be consulted to determine limitations and conditions for locations within the Agricultural Land Reserve.

NATURAL GROUND means the level of the surface of the ground which occurs or occurred naturally and before any excavation or construction.

OFFICIAL COMMUNITY PLAN means a plan prepared and adopted by a Regional Board by bylaw pursuant to the <u>Local Government Act</u> which applies to all or parts of an electoral area of a Regional District. It forms the basis for preparing development bylaws in an electoral area.

ON-SITE SERVICES means the provision of an individual water supply and on-site sewage disposal in accordance with the standards of the Responsible Authorities pursuant to the requirements of the <u>Public Health Act</u>, the <u>Environmental Management Act</u>, and bylaws of the Fraser Valley Regional District.

PARK and **PARK RESERVE** means open space dedicated to the preservation of the natural environment and recreation use, including camping and a range of facilities associated with park activities.

PLAN AMENDMENT means a bylaw amending a schedule of this Plan prepared and adopted pursuant to the <u>Local Government Act</u>.

PUBLIC ACCESS means the unrestricted right of the general public to cross lands without the need for any approvals or specified permits.

QUALIFIED PROFESSIONAL means an applied scientist or technologist specializing in a relevant applied science or technology including, but not limited to, agrology, forestry, biology, engineering, geomorphology, geology, hydrology, hydrogeology or landscape architecture, and, who is registered in British Columbia with their appropriate professional organization and acting under that association's Code of Ethics is subject to disciplinary action by that association; and, who, through demonstrated suitable education, experience, accreditation and knowledge relevant to the particular matter, may be reasonably relied on to provide advice within their area of expertise.

RECREATION USE means public park, conservation area, recreation area and ancillary uses as permitted by the Responsible Authorities; excludes commercial recreation uses.

RESIDENTIAL USE means the use of land for residences, providing for the accommodation and home life of a person or persons at a maximum density of one unit or more in accordance with provisions set out in this plan.

RESIDENTIAL OCCUPANCY means a "residential occupancy" as set out and defined in the <u>British Columbia Building Code</u>.

RESORT RESIDENTIAL USE means a resort residential use consisting of one (1) or more dwelling units occupied as a residence or seasonal residence for one family per dwelling unit, together with accessory common and private amenity facilities which may include a clubhouse and other private recreational and social amenities.

RESOURCE EXTRACTION means the pulling out or drawing out of primary forest, mineral and other natural resources and includes mining, the extraction of aggregate materials, forestry, fishing and associated local transportation uses.

RESOURCE INDUSTRIAL USE means a use related to the extraction, primary processing, and transport of products from primary natural resource materials; includes log booming, sawmills, and gravel sorting and screening plants and similar related industries.

RESPONSIBLE AUTHORITY means a governmental and/or administrative body, operating in part or in total within the region, which is charged with or capable of enacting government provisions affecting the development of land or the construction of public works within the region; includes a member municipality, a Regional District, the Province of British Columbia, the Government of Canada, and their agencies.

SINGLE FAMILY DWELLING means a structure providing for a single family residential use for person or persons, includes accessory residential uses as well as mobile and modular homes where permitted in the zoning bylaw.

SINGLE FAMILY RESIDENTIAL USE means the use of a building or part thereof as a single family dwelling with a maximum density of one single family dwelling unit per parcel.

SMALL SCALE ENTERPRISE means an artisan craft workshop, hobby greenhouse, or cottage industry which is accessory use in a rural or limited use designation, unless prohibited by a zoning bylaw.

SPECIAL EVENT means the use of land for temporary commercial or industrial use including fairs or concerts, live performances, campsites, assembly use, recreation use, emergency operations and other event-related land uses.

TEMPORARY USE means a commercial or industrial use for which a Temporary Use Permit pursuant to Section 921 of the <u>Local Government Act</u> is issued.

USEABLE LAND means, for the purpose of computing the number of sites, strata lots or dwelling units permitted in a resort development, all of the lot area which can be used for camping, holiday homes, resort residential uses and associated activities; it shall exclude the site for a residence of the owner, manager or employee, land with a slope greater than 25%, land lacking adequate natural drainage of surface water, sensitive habitat and lakes, ponds, and watercourses;

WATERCOURSE means any natural depression with well-defined banks and a bed zero point six (0.6) metres or more below the surrounding land serving to give direction to a current of water at least six (6) months of the year or having a drainage area of two (2) square kilometres or more upstream of the point of consideration.

WETLAND means land that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal conditions that supports, 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, that may not contain surface water, and that may not be connected to a stream.

