

District of Summerland

Where the *Spirit of Summer* never ends



A Guide to Development in Sensitive Areas



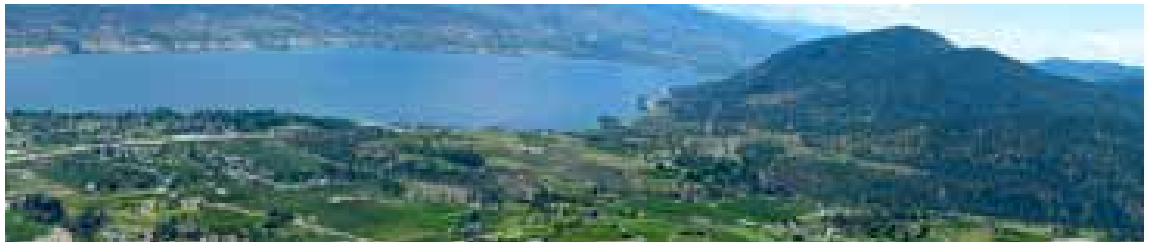


A Special Place

Summerland enjoys beautiful lake views and abundant natural areas. As our valley's population grows, we want to maintain these natural assets so that future generations enjoy the same quality of life that we do now. The south Okanagan enjoys high property values and studies show that lots adjacent to protected open spaces, parks and recreation trails have 15 – 30 % higher property and resale values. Our valley's natural and working landscapes are a very important asset, so by protecting them we are benefiting the community and ensuring the continuing value of real estate.

Protecting our Natural Assets

The District of Summerland is working to keep the natural environment protected. We have mapped and designated sensitive natural areas such as watercourses, grasslands, forests and wetlands, so you may be asked to complete an environmental assessment if your property occurs in one of these areas. Expenses and time associated with development approval can be reduced if you begin the planning process by considering environmental values.



“Protecting the environment can have lots of advantages”

Where to Start?

Protecting sensitive natural environments is the responsibility of all levels of government - federal, provincial and municipal or regional. Find out which regulations apply to you and understand the approvals you need before you begin work. This will save you time and money in the long run. These regulations apply not only to where you build, but also how you build. If you are working in a sensitive area you may be asked to monitor the impact of excavation and construction and mitigate damage that can occur. Keep in mind that you can reduce the cost of land clearing and post-construction landscaping by clearing a smaller portion of the property to be developed.

Think About It - *protecting the environment can have lots of advantages*

- faster planning approval
- reduced land clearing costs
- higher property values
- faster sales
- greater community buy-in and recognition
- protection of green space and wildlife
- a better development for everyone





Natural Areas within the District of Summerland



Summerland has a unique community character with its patchwork of orchards, vineyards, creeks, deep gullies and natural areas. It's up to all of us to achieve that special balance of natural and developed areas. Here's an introduction to some of the special habitats that are part of our municipality.

Grasslands - Grasslands are the most common natural landscape in the Okanagan, with bunchgrass and sagebrush as the dominant plants. Nationally, grasslands are one of Canada's most endangered landscapes. More than half of our province's species at risk live in grasslands. This habitat has been heavily impacted by human development, so large, intact areas are very valuable. Invasive weeds that compete for space with native grasses and degrade the value of grasslands for wildlife have had a terrible impact on grassland. To prevent weeds getting established, stockpile topsoil and minimizing site disturbance during development.



Stream & River Bank Habitat - Also called "riparian-areas", this habitat includes the water-loving plants and trees alongside lakes and rivers. Plants growing along streams and creeks provide shade to keep temperatures cool and are nursery grounds for fish like Kokanee. The roots of riverside plants keep the banks from eroding during floods and protect water quality by filtering surface water runoff. These ribbons of green habitat support a rich diversity of wildlife and are important wildlife corridors. If your property includes a riparian area, you will need to become familiar with the Riparian Areas Regulation, or RAR, that applies to your property when you begin planning for development.

"It's up to all of us to achieve that special balance of natural and developed areas"

Lakes & Rivers - Summerland has three major rivers flowing into Okanagan Lake: Eneas Creek, Prairie Creek and Trout Creek. To help keep our waterways clean it is important to control sediments and chemicals from entering storm water, including runoff from fertilizers and pesticides. Our lakes and rivers provide the majority of our drinking water so human health is related to the health of our lakes and watercourses. If you are planning work such as building a dock or bridge within a water body, you must have a permit to conduct "instream works" under the Province's Water Act.



Wetlands - Wetlands are areas like ponds, cattail marshes and seasonally-flooded fields. These areas are full of life in the summer with birds, amphibians, and insects. In our dry climate, wetlands have always been rare and are disappearing at an alarming rate with development and climate change. If you have wetlands on your property where you are planning a development, you will be asked to make special provisions to protect these sensitive areas.

Forests - Summerland has significant forested lands surrounding the more urban areas. Forests are critically important in stabilizing the soil along the steep valley walls of our valley, reducing erosion and sedimentation. They are also home to two thirds of Canada's plants and wildlife, including larger mammals. Last but not least, the woody debris under trees is home for a host of small reptiles, amphibians, mammals and insects. If you are planning work within a forested area, you may be required to protect and retain trees or conduct a wildlife tree survey.



Rugged Cliffs - The rocky slopes and cliff talus that form the shoulders of our local mountains are an important wildlife corridor used in all seasons of the year. Many animals need to pass back and forth between the hillsides and the surrounding grasslands. If you property is near this terrain, consider protecting a wildlife corridor that provides access between the hills and the lower habitat areas.



Local Bylaws that Apply to Development



The **Official Community Plan** contains many policies to guide Council decisions regarding conservation of natural areas and features. Check to see if your proposal respects the general intent of the Official Community Plan Objectives and Policies.

How do you know if there are natural features to protect on your property? - When you are applying to rezone, subdivide or otherwise alter land, Summerland staff will use municipal mapping to identify if your property contains known Environmentally Sensitive Areas. To access Summerland municipal mapping site, go to: http://www.summerland.ca/GIS/GIS_Mapping.aspx

Environmentally Sensitive Area Protection & Regulation

There are many plants, wildlife and ecosystems found in Summerland that are unique to this area. From the shores of Okanagan Lake to the steep rugged slopes of Giant's Head Park, the diversity in nature that we witness in Summerland is remarkable. In response to the increasing threats to, and rarity of, native plants, wildlife, and ecosystems, Summerland has undertaken a series of initiatives to protect and restore vital habitat.



“The diversity in nature that we witness in Summerland is remarkable”

Official Community Plan Bylaws

Watercourse Development Permit Area (WDPA) requires landowners to apply for a permit before subdividing, construction, or altering the land. This development permit area is specifically designed to comply with the provincial Riparian Areas Regulation, under the provincial Fish Protection Act. Development within a WDPA requires that a Riparian Area Assessment be conducted by a Qualified Environmental Professional and has environmental guidelines to protect water quality and riparian habitat within 30m of all watercourses that support fish or fish habitat.

Environmentally Sensitive Development Permit Area (ESDPA) requires landowners to apply for a permit before subdividing, construction, or altering the land. The purpose of this development permit is for protection, where possible, of sensitive ecosystems and rare and endangered plants, plant communities and wildlife. Development within an ESDPA requires an Environmental Assessment conducted by a registered professional biologist (RPBio) with experience working with local ecosystems, and may include other Qualified Environmental Professionals (QEPs).

Zoning Bylaw

Current minimum setback for buildings and structures from the natural boundary of a watercourse is 30 metres.





Earthworks Control Bylaw

Applies to earthworks greater than 300 cubic meters in any twelve month period or an area more than 1200 square meters. A permit is subject to standards including:

- quality of all drainage leaving the site must meet or exceed the quality of drainage that was leaving the site prior to the commencement of the earthwork;
- prevent anything associated with earthwork that may damage or cause an obstruction to a watercourse; and,
- any damage that is caused to a watercourse due to earthworks must be repaired.



Subdivision Bylaw

Requires all subdivision developments to have a Drainage, Sediment, and Erosion Control Plan that will be used during the subdivision or development of the parcel. The Plan must be prepared in accordance with the Ministry of Environment's Land and Development Guidelines for the protection of aquatic habitat and the Urban Runoff Control Guideline for British Columbia.

Developer must ensure that no silt, gravel or debris resulting from construction activity in the subdivision or development is allowed to discharge into existing drainage systems, natural drainage courses or watercourses.

Conservation Covenants

May be placed on part of a property to protect the designated area from future disturbance, as a result of a rezoning or subdivision application, or development permit. These covenants require the owner, and all future owners, to abide by the terms of the covenants to protect native vegetation and wildlife habitat.





“You must engage an environmental professional early in your planning”



For planning development within an Environmental or Watercourse Development Permit Area, you must engage an environmental professional early in your planning so that you can respond to their findings and incorporate their recommendations into your development design prior to the disturbance of the site.

Take time to talk to several consultants about their expertise, availability, fees, and experience with the ecosystems in your area and the type of assessment that you need. For an environmental assessment, a Registered Professional Biologists must always be part of the team of professionals hired because of their expertise with local ecosystems and wildlife species. A good development plan that meets environmental requirements will progress much more quickly through the approval process and save you money in the long run.



What is a Qualified Environmental Professional (QEP)? - A QEP is an applied scientist or technologist, acting alone or together with another QEP. A QEP must be a member in good standing of a BC professional organization. The applicable professionals include Biologists (RPBios), Geoscientists (PGeo), Foresters (RPF), Agrologists (PAg), Professional Engineer (PEng) and Applied Science Technologist and Technicians (AScT).

Working with a Qualified Environmental Professional will probably involve implementing mitigation measures for potential impacts from the planned development. Your QEP will likely use the sequence of mitigation options below to guide their assessment of the potential impacts that a proposed development will have.

Most Preferred



- **Avoid** developing in or near identified Environmentally Sensitive Areas (ESAs)
- **Locate** proposed development in pre-disturbed locations on the property
- **Design** development to include Alternative Development Standards or to avoid ESAs
- **Mitigate** to reduce potential impacts based on recommendations from the QEP
- **Compensate** as a final resort to achieve a no-net-loss of environmental values onsite

Least Preferred



Sustainable Development - Many municipalities are now assessing whether a development project contributes to community sustainability using the following guidelines as a measure.

How well does the proposed development:

- Fit within growth areas outlined in the Official Community Plan and the South Okanagan Regional Growth Strategy.
- Occur close to existing infrastructure without requiring costly expansion of roads, water, power, sewer, police and fire protection.
- Fit with surrounding agricultural areas and their necessary operations.
- Protect environmentally sensitive areas including streams, rivers and lakes.
- Conserve wildlife movement corridors between natural areas.
- Connect to existing parks, natural open spaces and pedestrian trails for enhanced recreational opportunities.
- Add to community amenities.

Plan Ahead

Sensitive, sustainable design begins with site planning. That is why qualified professionals should be hired at the beginning of your planning process, not the end. They can map out the natural features and find out whether any sensitive habitats are located on your property. Designing from a blank piece of paper is difficult. Designing from a map containing topography, natural features, existing structures, road networks and environmental values is much easier. This information allows professional designers to prepare efficient and supportable development plans.

Design Before You Build:

- Locate buildings and roadways to preserve important natural areas on the property.
- Maintain natural wildlife corridors between your property and those adjacent to you in the surrounding area.
- Design stormwater systems that protect fish and aquatic habitat and plan for sediment and erosion control during construction.
- Use permeable paving and landscape surfaces and protect natural water flow patterns that affect nearby watercourses and wetlands.
- Pre-plan your construction footprint to minimize landscape disturbance and retain natural areas. (This can also save re-landscaping costs.)
- Stockpile native topsoil to redistribute after construction is over.
- Schedule the most invasive construction activities (such as clearing and blasting) during “least risk to wildlife” work windows.
- Locate buildings or driveways away from steep slopes to avoid erosion and loss of rugged grasslands or rocky outcrops.

“Professionals should be hired at the beginning of your planning process, not the end”





After Construction

- Invasive weeds will colonize disturbed sites in only a few weeks. Make sure they are cleared away and disposed of appropriately.
- Design water efficient landscapes and irrigation systems using drought-tolerant and native plants.
- Restore environmentally sensitive areas that might have been impacted by construction and consider fencing off designated “non-disturbance” areas.

The Water Challenge

During the summer, homeowners use more than sixty percent of their domestic treated water for their lawns and gardens. With population increase, developers and homeowners are encouraged to adopt water saving standards - especially for irrigating lawns and landscaping. Planning new home landscapes using native and drought-tolerant plants (xeriscaping) and low-water use irrigation systems is a good idea that will save money in the long-run.

For advice on low-water landscaping consult <http://okanaganxeriscape.org>

“Natural vegetation provides wildlife habitat and helps stabilize the lake edge”



Lakeshore Properties

It is important for lakeside property owners to familiarize themselves with regulations regarding development and construction near lakes and other watercourses. Land below a lake’s high water level belongs to the Crown so; all dock structures require authorization by one or more government agencies, including permissions for changes in and about a stream.

http://www.env.gov.bc.ca/wsd/water_rights/licence_application/section9/index.html

http://www.al.gov.bc.ca/clad/tenure_programs/programs/privatemoorage/index.html

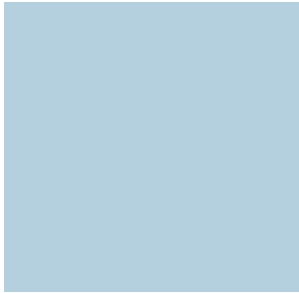
Retaining walls and groynes on Okanagan Lake have an impact on sedimentation and erosion of the surrounding shoreline whereas natural vegetation provides wildlife habitat and helps stabilize the lake edge. Replanting shorelines with small trees and vegetation is preferable to lawns which can contain herbicides and fertilizer.





Protecting Sensitive Ecosystems & Species During Development

Bighorn Mountain Estates, Okanagan Falls



“All the people that live here chose this area because they love nature”



The Environmental Assessment identified rare Antelope-brush grassland, property use by California Bighorn Sheep and other species at risk. The developers avoided the environmentally sensitive areas by clustering development into a disturbed portion of the property (an old gravel pit). Approximately 16 hectares of remaining land was donated to The Land Conservancy. The ‘gated-community’ design incorporates a cattle guard and snake proof barrier fencing to prevent conflicts between domestic pets and wildlife.

“All the people that live here chose this area because they love nature. I can watch up to fourteen sheep, including adults and young, run down the cliff from my porch. We looked all over the South Okanagan until we found this place which just felt right. We are close to an urban area yet we are semi-rural. It’s like being in a little piece of heaven.” ~ Resident

Summerland Waterfront Resort, Summerland

Developers of Summerland Waterfront Resort were not required, but voluntarily protected, restored and enhanced the natural wetland and riparian area along the property shoreline. This included retaining and enhancing one of the few natural wetlands along the shores of Okanagan Lake. They now have wildlife observation and walking pathway for guests.

“Guest are presently surprised and delighted by the wildlife viewing and natural ambiance that this natural wetland brings” – General Manager





Conservation Covenants

Conservation covenants are voluntary legal agreements registered under Section 219 of the Land Title Act. A covenant can cover all or just a portion of a property to permanently protect specified natural or cultural features. The covenant places restrictions on land use and applies in perpetuity to the property title.



“local governments have the ability to issue tax exemptions for riparian areas”



Tax Benefits

If the land protection is not required by the development permit, donations of land or conservation covenants can be treated as a charitable gift that is eligible for a tax receipt. The tax receipt can be used by individuals as a non-refundable tax credit or by corporations as a tax deduction. Placing a conservation covenant on a property may also result in a reduction in property taxes due to a lower assessed property value. In most provinces, a reduction in federal tax payable will also reduce provincial tax. Sometimes an outright donation of land to a local government or conservation organization can be simpler than a conservation covenant.

Under Environment Canada’s **Ecological Gifts Program**, the land must be certified as ecologically sensitive and appraised. Check out further information on Ecological Gifts at www.cws-scf.ec.gc.ca/ecogifts.

Both conservation covenants and the tax laws that apply are case specific and further legal advice should be sought.



Additional Resources

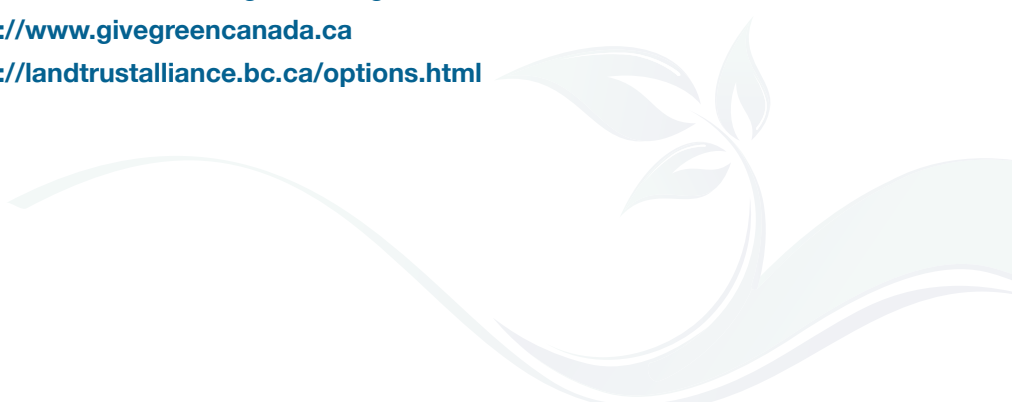
The following information and free publications will help you learn about natural habitats and development guidelines to consider before you begin a land development project.



“Guidelines to consider before you begin a land development project”



1. **Develop with Care: Environmental Guidelines for Urban and Rural Land Development in British Columbia**, published by BC Ministry of Environment.
<http://tinyurl.com/develop-with-care>
2. **Riparian Areas Regulations:** Protecting the features, functions and conditions that are vital to maintain stream health.
<http://tinyurl.com/riparian-areas>
3. **Stewardship Series Guides:** For the protection of aquatic habitat.
http://www.stewardshipcentre.bc.ca/cdirs/st_series/
4. **Wetland Ways: Interim Guidelines for Wetland Protection and Conservation in BC**, written for people who are planning some form of activity or development near wetlands, as well as those looking for guidance on ways to best maintain the high ecological values in these areas.
<http://tinyurl.com/wetlandways>
5. **Living By Water:** Working towards healthier human and wildlife habitat along the shorelines of Canada.
<http://livingbywater.ca/main.html>
6. **BC Ministry of Environment:** Information on habitats and wildlife.
<http://www.env.gov.bc.ca/wld/list.htm>
<http://www.env.gov.bc.ca/okanagan/esd/atlas/index.html>
7. **Information on conservation covenants and eco-gofts:**
<http://www.cws-scf.ec.gc.ca/ecogifts>
<http://www.givegreencanada.ca>
<http://landtrustalliance.bc.ca/options.html>



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