



PARK RILL:
LANDOWNER GUIDE



**Okanagan Similkameen
Stewardship Society**

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Companion document to the Park Rill: Riparian and Aquatic Assessment

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INTRODUCTION

Okanagan Similkameen Stewardship (OSS) is a local grassroots organization, working cooperatively with local residents and organizations to promote voluntary stewardship, conservation and restoration of important habitats for wildlife on private lands and within communities of the Okanagan and Similkameen valleys. OSS has been working in the Park Rill neighbourhood since 1998.

The Okanagan Similkameen Stewardship Society assists communities and land stewards by:

1. Providing information about the conservation of important habitats and species at risk on your property.
2. Providing information and recognition of demonstration projects and outstanding stewards in our newsletter [here](#).
3. Supporting community stewardship initiatives or groups to improve habitat in local neighbourhoods.
4. Providing information on sustainable land management practices specific to your property.
5. Providing technical assistance with enhancement projects such as planting native vegetation along a stream, fencing livestock out of sensitive habitat, or revegetating an eroded grassland.
6. Providing advice from on stewardship and permanent conservation options and opportunity.

Stewardship is the voluntary conservation and care of habitat and wildlife by land stewards and community groups. This guide is full of examples of stewardship, and you might already be doing some of these things. Okanagan Similkameen Stewardship can help you and your community be stewards of your watershed through activities, voluntary short term agreements and connecting with organizations that can manage, own or hold covenants for properties. <https://www.osstewardship.ca/about>

This resource guide was developed for the community around lower Park Rill (West Arm of Okanagan River), but it contains resources that would be useful to many property owners and farmers that have land around wetlands stream, and sensitive habitats in the South Okanagan. The content is based on interests identified by local residents and opportunities identified through on the ground observations by OSS.

Look for this symbol  for opportunities and resources for community or regional volunteer activities. Many of these are citizen science options where you can collect simple information from your day to day observations.

Look for this symbol  for activities that you can do on your own property.

Contacts and links are constantly changing. If you can't find the resource at the link or number below, try doing a search for the name or ask for help at your local library or government agency.



GUIDANCE PLANS AND DOCUMENTS FOR YOUR AREA

SOUTH OKANAGAN WILDLIFE MANAGEMENT AREA

Much of the Crown land adjacent the Okanagan River and Park Rill Creek east of Highway 97 are in the South Okanagan Wildlife Management Area (SOWMA) "Block A". In an area of high development pressures, the SOWMA is extremely valuable as its habitats are used by many provincially and federally designated species at risk. The WMA retains examples of both red- and blue-listed ecological communities and is recreationally and culturally important. If you live in this section of Park Rill you may not own all the property up to the Creek. For more information, contact the Ecosystems Section of Ministry of Forests Lands and Natural Resource Operations in Penticton at 250-490-8200.

Residents have expressed interest in helping nature in this area. OSS can help community members with formalizing an agreement with the Province to contribute to the maintenance and enhancement of this natural area along Park Rill. For more information on the SOWMA check out:

<https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/wildlife/wildlife-habitats/conservation-lands/wma/wmas-list/south-okanagan>



SOWMA areas in your neighborhood shown in pink.

LOCAL GOVERNMENT

The Park Rill neighborhood is in the Regional District of Okanagan-Similkameen (RDOS). RDOS has many community and regional planning documents that guide community development and have information about what is permitted on your property.

Regional District Okanagan-Similkameen Oliver Rural Electoral Area 'C' Zoning Bylaw No. 2453, 2008

Zoning bylaws put the vision of the official community plan into legal zones and provide guidelines on what type of development, uses, densities and buildings are permitted in each zone.

<https://www.rdos.bc.ca/assets/bylaws/2453.pdf>

Regional Growth Strategy

The RGS aims to ensure that growth in the south Okanagan takes place in a sustainable manner. The South Okanagan RGS takes a "big picture" approach to planning which identifies and prioritizes goals across the region to meet common social, economic and environmental objectives.

<http://www.rdos.bc.ca/departments/development-services/regional-growth-strategy/what-we-do/>

Keeping Nature in our Future: A Biodiversity Conservation Strategy for the South Okanagan-Similkameen

This is "big-picture" landscape view of the region and a framework for considering conservation options that go beyond jurisdictional boundaries.

<https://www.rdos.bc.ca/development-services/planning/strategic-projects/biodiversity-conservation-strategy/>

Environmental Planning

This section of the web site provides information on how to develop land with environmental sensitivity.

<http://www.rdos.bc.ca/departments/development-services/planning/environmental-planning/>



RESOURCES AND ACTIONS

NATURAL ENHANCEMENT

Removing vegetation down to the water's edge can lead to erosion, decreased water quality, loss of homes for fish and wildlife, and spread of invasive species. Planting native vegetation buffers can help with all of these concerns. Buffers on the main Park Rill Creek and large oxbows should be 15 to 30m, and the smaller ditches and tributaries should have buffers of at least 2 to 10m for fish needs based on the Riparian Areas Regulation. However, buffers for wetlands and nests are suggested to be 30m to 200m. Before removing any vegetation that is close to the river or creek (ie within the buffer zones mentioned above) be sure of your property boundaries and make sure you aren't removing any vegetation from within the South Okanagan Wildlife Management Area.

Lawn and harvested fields are not effective for stabilizing river banks, natural vegetation has longer roots that help hold the soil and can also help reduce chemicals and fertilizers reaching the river. Having a variety of plant types (ie trees, shrubs, and grasses) and heights, provides homes and food for fish and wildlife. The shade from taller shrubs and trees helps to keep the water temperatures lower, reducing evaporation and providing better habitat for fish. With a good cover of natural vegetation, it is also much harder for invasive species and less desirable plants to move in. Natural wetlands, lakes and streams have messy edges with leaf litter, fallen logs and standing dead and dying trees providing cover and food for many rare species.

There are a variety of native plants that are beautiful, and provide habitat for wildlife. Most of the area around the river and oxbows are in one of two ecological communities:

Black Cottonwood –water birch, red listed ecological community. The plants that belong and grow best here are black cottonwood, water birch and Nootka rose. Other plants may include red-osier dogwood, common snowberry, star-flowered false Solomon's-seal, horsetail, common sweet-cicely and American vetch.

Waterbirch- roses, another red listed ecological community, has a dense cover of water birch, mountain alder, red-osier dogwood, and poison ivy. It also often has star-flowered false Solomon's seal and stinging nettle.

Other plants that are associated with these communities are black hawthorn, trembling aspen, white clematis and scouring rush. Some of these plants have thorns or irritate skin, however, that may be an advantage where you want to discourage access. These prickly plants also provide a safe spot for some animals to hide.

 OSS partners with landowners and communities who want to restore natural vegetation. We can often assist in cost-sharing of enhancement projects if landowners become Wildlife Habitat Stewards. For guidance on enhancing and maintaining habitat on your property see our stewardship information and resource section on our website. <https://www.osstewardship.ca/resources>

 Develop with Care 2014: Environmental Guidelines for Urban and Rural Land Development in British Columbia <https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/laws-policies-standards-guidance/best-management-practices/develop-with-care>

 Wetland Ways: Interim Guidelines for Wetland Protection and Conservation in British Columbia <https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-planning-strategies/wetlands-in-bc>

 Many of the native plants listed above can be purchased at local nurseries that specialize in native plants, such as the Sagebrush Nursery on Island Road. These plants they will also often bounce back on their own if they are fenced off and not mowed, as long as competing invasive plants aren't allowed to take over.

INVASIVE SPECIES MANAGEMENT

Not all plants and animals from other places are invasive. Invasive species those that are able to overwhelm native species, damaging habitat, disrupting food sources and introducing parasites and disease. There are a large number of invasive species in the Okanagan, but this guide will just cover a few more common for riparian areas.

Right in the Creek common invasive plants are **Purple Loosestrife** and **Yellow Flag Iris**. purple loosestrife looks like fireweed and it grows at the water's edge. Fortunately there are insects that feed on this plant and with their introduction the Purple Loosestrife has been reduced by about two thirds. Unfortunately yellow flag iris has moved in. This plant looks lovely, it is poisonous, and it forms dense mats that block out native vegetation and the animals that rely on them. This iris can compact soils, narrow channels, trap sediments and restrict water flow. Iris can be hard to remove and control. Because these plants are in the stream permits are required to remove them. The section of Park Rill east of Highway 97 is mostly in SOWMA and a collaborative approach will need to be taken.

Invasive trees can also be a problem. Tree of Heaven, Russian Olive and Siberian Elm are common in the area.

Tree of Heaven releases chemicals that prevent other plants from growing around them. They also have root suckers can grow up to 6 feet per year that can impact structures, pavement and sewers. Siberian Elms out-compete and shade out native vegetation. Russian Olive can dominate riparian community, out competing native species. While the Russian Olives can be an important winter food source for birds, they suppress shrubs that native birds use and have lower breeding bird diversity in comparison to native vegetation.

 For tips and potential help with removing invasive plants and stabilizing your shore contact OSSS.

 Don't know what to plant? Check out the "**grow me instead**" brochure and booklet with native and exotic plants that can be grown instead of invasive species. http://bcinvasives.ca/documents/GMI-Booklet_2013_WEB.pdf or http://bcinvasives.ca/documents/GMI-Snapshot-Legal_April2013.pdf

 Report-a-Weed by mobile app or online <http://www.reportaweedbc.ca/>

Want more information on invasive species? Check out the Okanagan and Similkameen Invasive Species Society at www.oasiss.ca or the Invasive Species Council of BC www.bcinvasives.ca

IAPP Map Display – to see what weeds are in your neighborhood
<https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/invasive-species/iapp>

Want more information on native plants? Try a local native plant nursery like Sagebrush Nursery, or the Native Plant Society of BC <http://www.npsbc.ca/index.html>



Credit Paula Rodriguez de la Vega

WILDLIFE

Wildlife includes animals that are rare, ones you see all the time and love, and those that are a bit more challenging to live with. Okanagan Similkameen Stewardship has resources to help you identify and enjoy all kinds of wildlife and their habitat through the learn more tab on the learn more tab on the OSS website

<https://www.osstewardship.ca/resources>

COMMON WILDLIFE

There are many plants, animals, birds and insects that we watch through different seasons year after year. They are part of the neighbourhood and make up part of the community. We all want to keep common species common and prevent them from becoming at risk; a tall order in the Okanagan with many habitats that have been lost. Some of the best ways to keep wildlife are to implement the stewardship options found throughout this guide. Resources can be found in the Helping Wildlife and Challenging Wildlife sections below.



Barn Swallow Credit Laure Neish

SPECIES OF CONCERN

Some plants and animals are facing challenges due to loss of habitat and persecution and have been identified as at risk either provincially or federally.

WILDLIFE ASSOCIATED WITH STREAMS AND WETLANDS

Great Basin Spadefoot *Spea intermontana* Threatened



Credit Jonquil Crosby

This toad-like amphibian has “cat eyes” and a “spade” under each hind foot, which it uses for burrowing. Its call sounds like a loud snore! In Canada, the species is only in the semi-arid and arid areas of southern interior British Columbia. Parts of this region are experiencing rapid loss and alteration of critical habitats for the spadefoot, including shallow, fish free wetlands and grasslands. The protected areas it inhabits are losing surrounding natural buffer habitats due to encroaching agricultural and housing developments.

See our info sheet here: http://issuu.com/okanaganstewardship/docs/spadefoot_handout

Blotched Tiger Salamander *Ambystoma tigrinum* Endangered



Credit David Cunnington

These are one of the largest land dwelling salamanders in the world. They live in shallow wetlands, grasslands and aspen groves in Southern British Columbia in areas that often overlap with populated and modified agricultural areas in the South Okanagan Valley. The species has suffered loss of available breeding habitat through wetland draining, contamination, and stocking with fish. Salamander habitats are fragmented by roads and urban and agricultural developments that continue to expand, resulting in disruption of migration routes, mortality through roadkill, and loss of upland habitat for terrestrial adults. Increased drought and lowering water tables, as well as introduced Bullfrogs, also threaten this species.

More info here: <http://a100.gov.bc.ca/pub/eirs/finishDownloadDocument.do?subdocumentId=8131>

Western Screech-Owl *Megascops kennicottii macfarlanei* Endangered



Credit Unknown

The western screech-owl is a small owl that is streaked grey or grey-brown. It has yellow eyes, and ear tufts. The voice is a series of hollow whistles on one pitch, separated at first then running into an accelerating "bouncing ball" series of low whistles. One of its biggest threats is loss of forests in valley bottomlands along the rivers, creeks and lakeshores, and the mature stands of black cottonwood, birch or trembling aspen.

Learn more about what you can do for them here:

 Build nest boxes https://drive.google.com/file/d/0B11TeUlp_JWQaHJVckZrSEstRU0/view

<https://drive.google.com/file/d/1zXUhoR6QmP6J3TgwusfTCVD-eV4kq-oD/view>

<http://www.env.gov.bc.ca/wld/documents/bmp/devwithcare/Fact-Sheet-12-screech-owl.pdf>

<https://www2.gov.bc.ca/assets/gov/environment/plants-animals-and-ecosystems/conservation-habitat-management/wildlife-conservation/wildlife-tree-committee/wt-guidance-05-2006.pdf>

Yellow-breasted Chat *Icteria virens auricollis* Endangered



Credit Tom Benson

These large, vocal warblers are only found in the Okanagan and Similkameen Valley bottoms in BC. They rely on tangled thickets of rose and willow found around our creeks, rivers and oxbows. Maintaining and restoring these habitats on private property and in the South Okanagan Wildlife Management Area is important to helping these beautiful birds.

See our info sheet here: https://drive.google.com/file/d/0B11TeUlp_JWQelluNU5hM1cxLWM/edit

Behr's Hairstreak *Satyrium behrii* Endangered



Credit Josie Symonds

This butterfly is only found in areas with antelope-brush as the larva feed on it. It has an orange-yellow upperside with a broad brown border. The underside has small dark spots bordered by white. Antelope-brush habitat has been lost to agriculture, residential and commercial development.

<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/recovery-strategies/beh-hairstreak-2016.html>

Great Basin Gophersnake *Pituophis catenifer deserticola* Threatened



Credit Lia Mckinnon

The Gopher Snake is sometimes called a Bull Snake, which is actually the name of its eastern cousin. Because it looks similar to the rattlesnake and has undergone persecution. This is the largest snake species to occur in the southern interior. When fully grown, it sometimes exceeds two metres in length. Gopher Snakes are constrictors, and are very strong. They spend time underground and have also been found climbing trees. Handling these snakes is not recommended. Bites from large Gopher Snakes will draw blood and are quite painful, but otherwise harmless.

https://drive.google.com/file/d/0B11TeUlp_JWQRHd2VEJEN19RMGs/edit

Western Rattlesnake *Crotalus oreganus* Threatened



Credit Wade Alcock

In many cases, people are not even aware that they have been near a rattlesnake, because the snake hasn't used its rattle. Rattlesnakes usually retreat from humans though they may strike to protect themselves. There is about an average of three bites a year mostly resulting from people harassing or handling the rattlesnake. Only two human fatalities from bites have been recorded in BC. Find more resources on rattlesnakes below under reptiles and challenging wildlife.

Snake Webinar Part 2 <https://www.osstewardship.ca/snakevideos>

https://drive.google.com/file/d/0B11TeUlp_JWQRHd2VEJEN19RMGs/edit

HELPING WILDLIFE

Common or at risk, there are stewardship steps that individuals and communities can take to learn about, record and help wildlife. Many of the projects involve recording wildlife so that your regular observations can be shared with and used by others to track species and trends. Other projects involve maintaining or enhancing habitat as identified in the natural enhancement section.

WILDLIFE HABITAT STEWARDS

A Wildlife Habitat Steward is a landowner who is stewarding natural areas on their property for plants and wildlife. Wildlife Habitat Stewards receive assistance with habitat enhancement projects such as native plant revegetation and invasive plant management as well as recognition through signage and media articles. 🏠

<https://www.osstewardship.ca/become-a-steward>

BIRDS



Birdwatching is extremely popular and therefore there is no limit to bird information and activities that can be used on your property and in your neighbour

Birding webinars <https://www.osstewardship.ca/birding101>

🏠 Guidelines for Raptor Conservation during Urban and Rural Land Development in British Columbia (2013)
Identification, protection, restoration and enhancement of habitats

http://www.env.gov.bc.ca/wld/documents/bmp/raptor_conservation_guidelines_2013.pdf

Bird Identification

Birdfinding in British Columbia 2013, by Richard and Russell Cannings, Donald Gunn (Illustrator)

Birds of Interior BC and the Rockies 2009, by Richard Cannings

Birds of British Columbia Paperback 2009 by Wayne Campbell

Cornell Lab of Ornithology <http://www.allaboutbirds.org/guide/search>

🏠🌐 **Bird Studies Canada**

Check out these programs below and find one that works for you!

<https://www.birdscanada.org/you-can-help/citizen-science/>

[eBird Canada](#)

Keep track of your bird sightings online and contribute to a continental database all at the same time.
Effort required per year: Flexible, Difficulty level: Beginner

ebird Hot Spots near you!

River Road, Hack's Pond, Okanagan River dykes, Okanagan River Trail North

[Great Backyard Bird Count](#)

This free, North America-wide event takes place over four days every February, and anyone can take part. Participants create a real-time snapshot of where birds are across the continent.
Effort required per year: Flexible, Difficulty level: Beginner

[The Great Canadian Birdathon](#)

The Birdathon challenge is to identify as many bird species as possible in a 24-hour period, anytime in May. Participants are sponsored, raising money for bird research and conservation.
Effort required per year: 10-50 hrs, Difficulty level: Beginner

[Project FeederWatch](#)

Participants count birds at their feeders over a 2-day period every week from November to March. Count for as long or short a period as you like. Effort required per year: 10-50 hrs, Difficulty level: Beginner

[Project NestWatch](#)

Anyone with a bird nesting in their yard or neighbourhood can help monitor nesting success. Participants check nesting progress and report observations online. Effort required per year: 1-10 hrs, Difficulty level: Beginner

Bird House Building

<http://nestwatch.org/learn/all-about-birdhouses/>

http://www.wild-bird-watching.com/Building_Bird_Houses.html

<http://www.hww.ca/en/issues-and-topics/nest-boxes-for-birds.html>

https://drive.google.com/file/d/0B11TeUlp_JWQaHJVckZrSEstRU0/view

Other Online Resources

Birding in British Columbia <http://www.birding.bc.ca/>

South Okanagan Naturalists <http://www.southokanagannature.com/>

 Southern Interior Bluebird Trail Society <http://www.bcbluebirds.org/>

All About Birds www.allaboutbirds.org

 Birding Apps <http://blog.nature.org/science/2013/05/27/boucher-bird-blog-apps-smart-birder/>

REPTILES

Snakes, lizards and turtles.

 The Reptiles of British Columbia www.bcreptiles.ca

 Creating Surrogate Habitat for Snakes https://drive.google.com/file/d/0B11TeUlp_JWQajdwN1NLZHhhVlk/edit

 Guidelines for Amphibian and Reptile Conservation during Urban and Rural Land Development in British Columbia

Identification, protection, restoration and enhancement of habitats

http://www.env.gov.bc.ca/wld/documents/bmp/HerptileBMP_complete.pdf

AMPHIBIANS

Frogs, toads, salamanders, spadefoot and newts.

  Amphibians in grasslands and deserts

Identification, protection, restoration and enhancement of habitats

<https://46fda134-ba92-4fe8-ad34>

[e721d1cf04a5.filesusr.com/ugd/8646c2_409a450a6be84ebbbb4b191eacb4b20d.pdf](https://46fda134-ba92-4fe8-ad34e721d1cf04a5.filesusr.com/ugd/8646c2_409a450a6be84ebbbb4b191eacb4b20d.pdf)

  BC Frogwatch Program

Identification, recordings of calls and other resources

<http://www.env.gov.bc.ca/wld/frogwatch/>

 Guidelines for Amphibian and Reptile Conservation during Urban and Rural Land Development in British Columbia

Identification, protection, restoration and enhancement of habitats

http://www.env.gov.bc.ca/wld/documents/bmp/HerptileBMP_complete.pdf

BATS

Some types of bats in the Okanagan are doing well but others are not. Bats can be beneficial, they consume mosquitoes and agricultural pests.

  All about bats

<https://www.osstewardship.ca/allaboutbats>

  British Columbia Community Bat Program

This site has basic information about bats and it has management and stewardship options for you on your property or for citizen science.

<https://www.bcbats.ca/> Okanagan@bcbats.ca 1-855-922-2287 ext 13

 Bat Conservation International – including bat box plans

<http://www.batcon.org/>

WILDLIFE TREES

  Wildlife Tree Stewardship

Our goal is the protection of Wildlife Trees - trees that provide habitat for nesting birds and other animals. We facilitate the transfer of nest and tree information, collected by Volunteer Tree Stewards, and make it available for land-use planning by both the Public and by Government.

<https://www.cmnbc.ca/atlasgallery/wildlife-tree-stewardship/> or email lisa@wildlifetree.ca

WILDLIFE REPORTING

One of the main ways you can report on wildlife is through the provincial Incidental Observations of Wildlife web site http://www.env.gov.bc.ca/wildlife/wsi/incidental_obs.htm

CHALLENGING WILDLIFE

Sometimes nature can be a bit hard to manage in rural and agricultural areas. Fortunately, there are many resources out there and different organizations can help with different issues.

Living with Wildlife in BC

Wildlife management guides on conflict reduction, black bears, coyotes, wolves, rodents, snakes, European Starlings and ungulates.

<https://www.osstewardship.ca/resources>

<http://www.rdos.bc.ca/departments/public-works/wildsafe-bc-bear-aware/>

WildSafeBC

Human-wildlife conflict reduction through education, innovation and cooperation. Species include black bears, cougars, coyotes, deer, moose, racoons, rattlesnakes and skunks.

<https://wildsafebc.com/>

Bear Smart Community Program

A voluntary, preventative conservation program that encourages communities and individuals to work together.

<https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/wildlife/human-wildlife-conflict/staying-safe-around-wildlife/bears/bear-smart>

BCSPCA Urban Wildlife Neighbours

Pets and wildlife, squirrels, skunks, racoons, coyotes, bears, geese and ducks, crows, urban deer.

<https://spca.bc.ca/ways-to-help/take-action/urban-wildlife/>

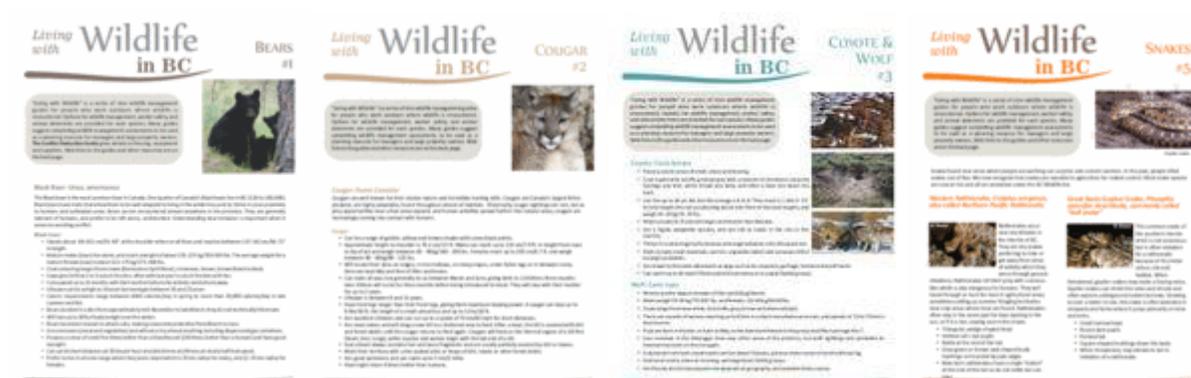
 Snake Barrier Fencing https://drive.google.com/file/d/0B11TeUlp_JWQakpMTEJNU0pCX1k/edit

 Snake-proof your House and Yard https://drive.google.com/file/d/0B11TeUlp_JWQnzFWdUw0b0VaVWM/edit

Conservation Officer Service - Reporting Human Wildlife Conflicts

Dial Toll Free 1-877-952-7277 (RAPP) to report wildlife-human interactions where public safety is at risk.

http://www.env.gov.bc.ca/cos/info/wildlife_human_interaction/index.html



AGRICULTURE

WATER

The Okanagan Basin Water Board, Agriculture Canada and BC Ministry of Agriculture have all been involved studies on water use for agriculture in the valley, and they have found that agriculture uses about 55% of the water in the valley. The RDOS is also working on Phase 1 of a Regional Drought and Flood Risk Management and Mitigation Plan. With the large proportion of land allocated to agriculture in Park Rill, water availability and use is a concern for residents and the resources below focus on water use in agriculture.

Canadian Drought Watch

Timely information on weather and climate relevant to the agricultural sector

<https://www.agr.gc.ca/eng/agriculture-and-climate/drought-watch/canadian-drought-monitor/?id=1463575104513>

Okanagan Water Supply and Demand Project – Agriculture

Okanagan specific information on agricultural water use and availability now and in the future

<http://www.obwb.ca/wsd/water-usage/agricultural-water-use>

http://www.agf.gov.bc.ca/resmgmt/publist/500Series/500300-3_Agric_Water_Demand_Model-Okanagan_Report.pdf

Agriculture Water in BC

 Links to resources on water management, emergency planning and financial programs

<https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/agricultural-land-and-environment>

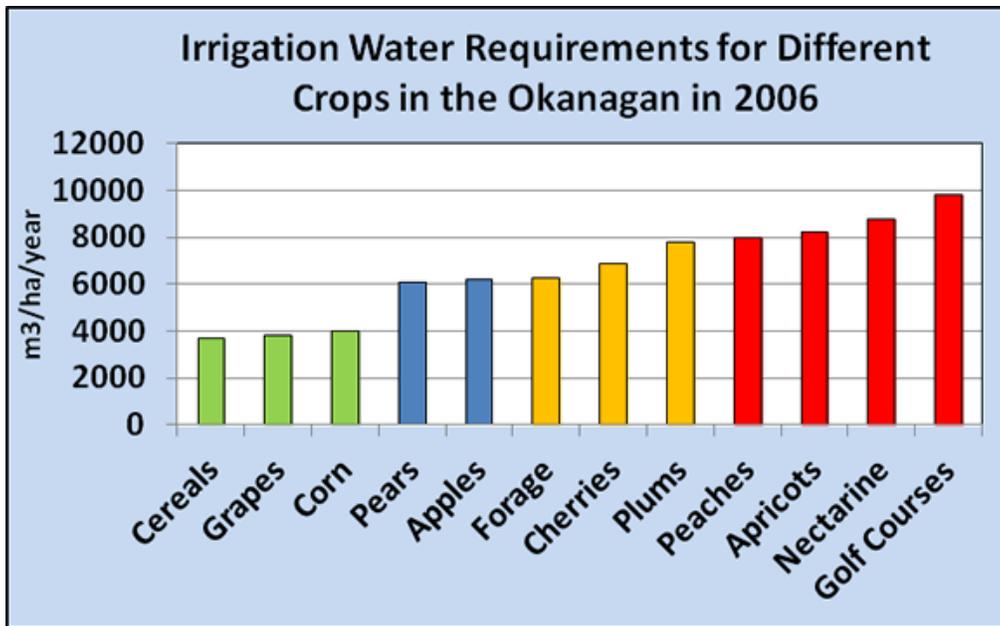
<https://www.irrigationbc.com/irrigation/products>

Agricultural Irrigation Scheduling Calculator

 The calculator uses real-time daily Evapotranspiration (ET) rates determined from climate stations that are linked to www.farmwest.com. Calculators are for a variety of types of irrigation.

<http://ag-calc.irrigationbc.com/#>

Depending on the crop and method of watering, the usage can vary. See these tables below from <http://ubclfs-wmc.landfood.ubc.ca/webapp/VWM/course/canada-6/british-columbia-31/>



For Electoral Area C the fruit crops with the largest areas of production are grapes, apples, sweet cherries and peaches. As you can see from the table above, peaches use the most water per Ha/year of these crops. If you have a crop that uses a lot of water, look at opportunities for efficiency with methods and timing of watering.

Water requirements for livestock are also very high. Beef cattle are the highest users, then dairy cows and lowest are poultry. Forage is in the middle range for crop water use. See livestock related resources below.

AGRICULTURAL SETBACKS FROM WATER

When planning a new house barn or even just a new field use these guides to help determine how far away you should be building, from the creek, wetlands or river.

Agricultural Building Setbacks from Watercourses in Farming Areas

https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/agricultural-land-and-environment/strengthening-farming/local-government-bylaw-standards/riparian-setbacks/823400-1_agricultural_building_setbacks.pdf

Regional District Okanagan-Similkameen Oliver Rural Electoral Area 'C' Zoning Bylaw No. 2453, 2008
Section 7.22 Setbacks for Buildings, Structures and Areas for Farm uses

<https://www.rdos.bc.ca/assets/bylaws/2453.pdf>

WATER INTAKES

 Many people along Park Rill have surface water licences. There are many resources to help guide you on installation, design and maintenance to keep things working smoothly while keeping the fish that depend on the creek safe.

BC Best Management Practices for Installation and Maintenance of Water Line intakes

http://www.env.gov.bc.ca/okanagan/documents/BMPIntakes_WorkingDraft.pdf

Simple Guide on Freshwater Intake Screening

<https://www.regionaldistrict.com/media/20299/Why%20screen%20intakes.pdf>

Department of Fisheries and Oceans Freshwater Intake End-of-Pipe Fish Screen Guideline

<http://www.dfo-mpo.gc.ca/Library/223669.pdf>

WATERING LIVESTOCK

 There isn't a lot of livestock farming in the lower watershed, but there are many resources for helping to get water to livestock while maintaining water quality.

Watering Livestock Directly From Watercourses

https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/agricultural-land-and-environment/water/livestock-watering/590302-1_direct_access.pdf

Livestock, Drinking Water and Fish FRISP: Farmland-Riparian Interface Stewardship Program BC Cattlemen's Association http://www.csr.bc.ca/sites/default/files/brochures/BCCA_brochure.pdf

Managing Pastures for Water Quality: Strategies for Seasonal Livestock Use

<http://clean-water.uwex.edu/pubs/pdf/pastures-strategies.pdf>

AGRICULTURE AND THE ENVIRONMENT

AGRICULTURE AND THE ENVIRONMENT INITIATIVE

 Provides funding assistance for projects aimed at improving environmental sustainability in agriculture. Topics addressed may for example be related to soil, air or water quality, water conservation, pesticide reduction or biodiversity. Wildlife impact mitigation projects may involve innovative ways of reducing wildlife impacts in an environmentally responsible way. Generally projects will be submitted by farm associations or agriculturally oriented organizations with support from the agricultural community.

<https://www.bcac.bc.ca/ardcorp/program/agriculture-environment-initiatives>

For information on the program Contact: (604) 854-4483, info@bcac.ca

ENVIRONMENTAL FARM PLAN PROGRAM

 Farmers who have an Environmental Farm Plan are serious about learning how to reduce agriculture's impact on the environment. Farming sustainably is good for everyone and it can also be profitable. Many Environmental Farm Plan participants enjoy increased efficiency, profitability and new customers as a result of increased environmental sustainability. Resources include guides on biodiversity, drainage, irrigation, nutrient management, riparian management. Call 1-866-522-3447

<https://www.bcac.bc.ca/ardcorp/program/environmental-farm-plan-program>

http://www.al.gov.bc.ca/resmgmt/EnviroFarmPlanning/Documents_and_Reports.htm

BC SUSTAINABLE WINE PROGRAM

 This program aims to foster grape and wine production and winery hospitality services that enhance environmental quality and the resource base on which the industry depends, is economically viable, and improves quality of life for growers, producers, and society as a whole.

<http://www.bcwgc.org/bc-sustainable-winegrowing-program>

SALMON-SAFE BC

 An eco-certification program that encourages farmers to use agricultural practices that protect Pacific salmon habitat and water quality. Farms are evaluated by independent, professional certifiers.

<https://www.psf.ca/salmon-safe-bc>

<http://salmonsafe.org/certification/farms/>

WILDLIFE HABITAT STEWARDS

 A Wildlife Habitat Steward is a landowner who is stewarding natural areas on their property for plants and wildlife. Wildlife Habitat Stewards receive assistance with habitat enhancement projects such as native plant revegetation and invasive plant management as well as recognition through signage and media articles.

<https://www.osstewardship.ca/become-a-steward>

 Check out our farming with wildlife page

<https://www.osstewardship.ca/agriculture>

SOIL MANAGEMENT

Understanding soils can help you choose appropriate crops and keep your soils healthy while reducing the need for fertilizers and pesticides.

Soil Management Handbook for the Okanagan and Similkameen Valleys, Resource Management Branch, Province of British Columbia, B.C. Ministry of Agriculture, Fisheries and Food

https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/agricultural-land-and-environment/soil-nutrients/610000-6_soil_mgmt_handbook_okanagan.pdf

Okanagan Agricultural Soil Study

https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/agricultural-land-and-environment/environmental-farm-planning/okanagan_soil_study_report_2007.pdf?bcgovtm=buffer

Environmental Farm Plan Soils Guide

https://www.bcac.bc.ca/sites/bcac.localhost/files/Ardcorp_Program_Documents/EFP/EFP%20Reference%20Guide%20Chapter%208.pdf

Washington State University Tree Fruit Research and Extension Center: Soil Management

<http://www.tfrec.wsu.edu/pages/organic/Soils>

AGRICULTURAL AREA PLAN – AREA C

This plan looks at the goals for agriculture in the region. Rural Oliver and the Town of Oliver pursue economic prosperity through the enhancement and promotion of its agricultural assets. This vision is grounded in the reality that the area has distinct rural and agricultural amenities that are capable of attracting, nurturing and supporting desired agri-tourism enterprise.

<https://www.rdos.bc.ca/development-services/planning/strategic-projects/agricultural-area-plan-area-c/>

GARBAGE, POLLUTION, YARD AND AGRICULTURAL WASTE

Garbage, pollution and yard waste can all have impacts on riparian areas and water. However there are many options for helping to reduce waste on and off your property.

COMMUNITY CLEANUPS

 For community events there are opportunities to tie your cleanup to national or regional events. These initiatives have resources to help you organize a cleanup. You can help by becoming a coordinator or working with a team to arrange a cleanup. The local government can also help and sometimes waive disposal fees or provide resources. Okanagan Similkameen Stewardship can help you organize a community clean up.

Great Canadian Shoreline Cleanup <https://www.shorelinecleanup.ca/>

BC Rivers Day http://orc.bc.ca/pro_bc_riversday.htm

RDOS <http://www.rdos.bc.ca/departments/public-works/solid-waste/illegal-dumping/> or call 1-866-566-3867

WASTE MANAGEMENT

The Regional District of Okanagan Similkameen handles waste in the rural areas. They have resources on composting, agricultural waste and regular waste. Proper disposal of waste protects soils, water and air quality.

Oliver Land Fill

<http://www.rdos.bc.ca/departments/public-works/solid-waste/landfills/oliver/>

ORGANIC WASTE

Some fees are waived for the proper disposal of organic waste. There are also programs for chipping wood and sometime fruit tree wood can be sold for restaurant use. Invasive plants need to be disposed of carefully to prevent further spread. Contact the local land fill or OASISS.

 Disposal of organic waste in natural areas such as along waterways can cause problems. The waste can prevent natural vegetation from growing, attract unwanted wildlife and the breakdown of the waste can also change the balance of nutrients in adjacent areas and can reduce oxygen levels in the water. Please keep your waste away from waterways and out of natural areas.

Agricultural Waste Disposal Options <http://www.rdos.bc.ca/departments/public-works/air-quality/what-we-do/>

BC Agricultural Composting Handbook <https://www2.gov.bc.ca/gov/content/environment/waste-management/industrial-waste/agriculture/regulation-requirements/agricultural-composting>

HAZARDOUS OR UNIDENTIFIABLE WASTE

To handle your agricultural wastes there are a variety of options for disposal – some are free! 

Unwanted Agricultural Pesticides https://www2.gov.bc.ca/assets/gov/environment/pesticides-and-pest-management/pesticide-use/guidelines/safe_disposal_unwanted_pesticides.pdf

Obsolete Pesticide and Livestock Medication <https://cleanfarms.ca/materials/unwanted-pesticides-animal-meds/>

Clean Farms – non-organic Waste <http://www.cleanfarms.ca/> and Growers Supply

If you have a concern about potential pollution issues check out the contacts below:

Hazardous Waste Information <http://www.hazwastebc.com/>

Conservation Officer Service: Report All Poachers and Polluters (RAPP)

Dial Toll Free 1-877-952-7277 (RAPP) or <http://www.env.gov.bc.ca/cos/rapp/form.htm>

Dangerous Goods Spill - Emergency Management BC (EMBC) 1-800-663-3456 (24 hour)



OTHER CONTACTS

Some of the issues and concerns of local residents relate to activities that are not lead by stewardship, although there may be ways to have community involvement and feedback on these activities. We have provided contacts below for further information.

OKANAGAN RIVER DYKE MAINTENANCE

Okanagan Flood Control Right of Way is owned by the Ministry of Environment. To report concerns about the river, flooding, tree falls, illegal camping, etc., call 250-490-8200.

ROAD AND HIGHWAYS

Ministry of Transportation and Infrastructure – Penticton – 250-409-8200

Maintenance - Area 8 - South Okanagan - Argo Road Maintenance (South Okanagan) Inc 1-800-663-7623

🌐 Adopt a Highway <https://www2.gov.bc.ca/gov/content/transportation/transportation-environment/adopt-a-highway>

Invasive Plant Management

<https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/invasive-species/management>

REPORTING VIOLATIONS

Natural Resource Violations 1-844-676-8477 or <https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/natural-resource-law-enforcement/report-natural-resource-violations>

Conservation Officer Service: Report All Poachers and Polluters (RAPP)
1-877-952-7277 (RAPP) or <http://www.env.gov.bc.ca/cos/rapp/form.htm>

Untidy and Unsightly Premises: RDOS Bylaw Enforcement Coordinator Roza Aylwin 250-490-4130

<http://www.rdos.bc.ca/departments/development-services/bylaw-enforcement/>

WATER MANAGEMENT

Many agencies and organisations play a role in water management and leadership in the Okanagan. Park Rill is a particularly complex watershed as flow can be intermittent and the watershed dynamics are not well understood. Water quality and quantity are both concerns in the area that are not easy to address.

Okanagan Basin Water Board: The Okanagan Basin Water Board (OBWB) was instituted in 1970 as a collaboration of the three Okanagan regional districts to provide leadership on water issues spanning the valley. www.obwb.ca

The Ministry of Forests, Lands and Natural Resource Operations (FLNRO) Water Management and Stewardship is responsible for water licensing, water utility regulation, groundwater protection, source water protection, flood safety, and drought management. Contact Okanagan Region staff in Penticton at 250-490-8200.

FISH, WILDLIFE AND ECOSYSTEMS MANAGEMENT

Provincial fish, wildlife and ecosystems staff are all located at the Ministry of Forests, Lands and Natural Resource Operations in Penticton and can be reached by calling 250-490-8200. Provincial Government Okanagan Region Environmental Stewardship has information at <http://www.env.gov.bc.ca/okanagan/esd/index.html>

OKANAGAN RIVER RESTORATION INITIATIVE

This multiphase project has resulted in the meandering of Okanagan River up and downstream of where Park Rill River enters the river. This has provided instream habitat for sockeye salmon and rainbow trout as well as streamside and wetland habitat for yellow breasted chat, great basin spadefoot toads and western screech owls. Contact Lee McFadyen mariposaorgf@hotmail.com or Okanagan Nation Alliance at 250-707-0095.

ELECTED REPRESENTATIVES

Member of the Legislative Assembly (BC Government):

Linda Larson Phone 250-498-5122 or Toll Free 1-855-498-5122 Linda.Larson.MLA@leg.bc.ca

Member of Parliament (Canada):

Richard Cannings Phone 250-770-4480 richard.cannings@parl.gc.ca

Area "C" Director (RDOS):

Rick Knodel Phone 250-460-1319 , <https://www.rdos.bc.ca/helpful-links/contact-us/?EntryID=124>



Credit Unknown