

# Riparian areas — where water meets land

Riparian Areas protect water quality. Fish, birds, mammals, reptiles, amphibians and insects depend on riparian areas and so do humans.

## What is a Riparian Area?

The word riparian comes from the Latin word "ripa" meaning bank or shore.

Riparian areas are the fringe of vegetation found between forests and wetlands, lakes, rivers and streams. They are often referred to as shoreline areas and can be characterized by lush vegetation including combinations of trees, shrubs, cattails, sedges and grasses.

Riparian areas are highly valuable ecosystems. They connect water with land and act as natural filters of both surface water and groundwater. As well, riparian areas buffer against flooding and erosion.

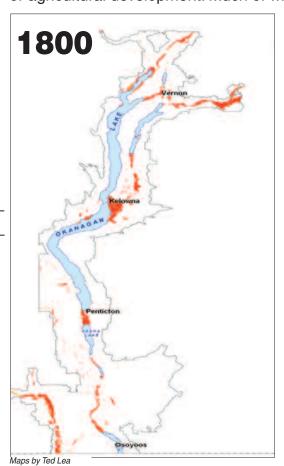
Characteristic vegetation of the Okanagan and Similkameen riparian areas include the black cottonwood, wild rose thickets, red-osier dogwood, western

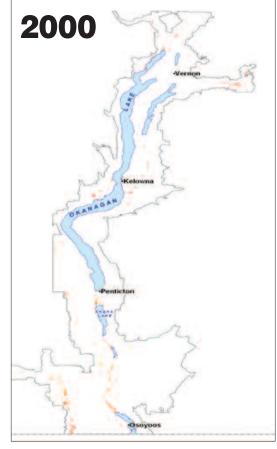


92% of the Water **Birch- Red Osier Dogwood Ecosystem** (Riparian Area) in the South Okanagan Similkameen has been lost

## Where did it go?

Most of the riparian habitat in the valley bottoms has been lost to urban, rural or agricultural development. Much of what is left is fragmented or degraded.







**Cottonwood Riparian Area Locatee Land Conservation Area, Penticton** 

#### Riparian areas are critical to the health of our environment.

They help to keep water clean by trapping sediment and pollutants.

#### **Canada faces constant threats to water quality.**

Despite considerable efforts to curb pollution, water quality is still a major concern for Canadians. Many municipalities have been forced to issue boilwater orders. Agricultural run-off has contaminated drinking water supplies, as in the case of Walkerton, Ontario, and industries discharge hundreds of different substances into rivers and lakes daily. In 2001, more than 2,600 industrial facilities reported chemical discharges to water bodies.

#### What will happen to the water in the valley?

Over the past 30 years, the population of British Columbia's Okanagan-Similkameen river basin has more than doubled – the fastest growth rate among the 23 major river basins in Canada. However, this scenic region in the British Columbia interior also has one of Canada's lowest renewable supplies of fresh water.

Quality and safety of drinking water is one of the top environmental concerns of Okanagan Similkameen residents. More than 77% are concerned about water resources when asked. (Synovate, 2004).

Natural ecosystems provide ecological services that would normally have to be developed and managed by human infrastructure.

When riparian areas are degraded, it affects the economy in the following ways:

Increased water treatment and storage costs Increased costs for drudging sediment from waterways Increased costs for floodplain protection

# The Cottonwood: An important riparian tree

The black cottonwood is a majestic tree that belongs to the poplar family. It is a deciduous tree with a straight trunk that can grow up to 40 meters tall. Cottonwoods get their name from the large number of seeds they produce, which are covered with white, fluffy hairs. In the summer, it looks like snow falling from the trees. Their root structure provides stability along shorelines and they are home to many species of birds and mammals.

Historically, cottonwood forests were found throughout the floodplains of the Okanagan and Similkameen River systems.

Now only narrow remnants remain due to river channelization, dykes and other flood control structures and urban, rural and agricultural development.

> Visit Ecommunity Place to see a beautiful stand of cottonwood trees. Contact the En'owkin Center at (250) 493-7181.

# Some of the Okanagan Similkameen species at risk who depend on the health of our riparian areas are:



Christine Bishop photo There are less than fifty pairs of Yellow-breasted Chats that nest in the Okanagan Similkameen due to destruction of Water birch and rose thicket riparian habitat.

Conservation status: Endangered



Chinook Salmon were an important food for Syilx First Nations but dam construction and river channelization have decimated their numbers.

Conservation status: Threatened



Western Screech-Owls nest in cottonwood snags and hunt in riparian areas.

Protect wildlife trees for the benefit of these and other cavity nesting birds

Conservation status: Endangered.

# What you can do

- Protect stream health and productivity when considering residential, commercial or industrial activities proposed within 30m of a stream or lake. Landowners must consult with the **BC** Riparian Areas Regulation and may require the assessment of a qualified professional in order to implement any changes. Your local government can provide you with information on applicable by-laws.
- Leave riparian areas in a natural state on your property.
- **Consider enhancing riparian areas** as a community project.
- **Consult your local stewardship or** conservation groups for more information.





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