A scenic view of a lake with a forested shoreline and a blue sky with clouds. The text 'A RESOURCE FOR OKANAGAN LAKESHORE LIVING' is overlaid on the top left of the image.

# A RESOURCE FOR OKANAGAN LAKESHORE LIVING

**PROTECT YOUR PROPERTY FROM FLOODING  
AND WAVE EROSION, SAFEGUARD  
DRINKING WATER, AND PROTECT NATURAL  
AREAS FOR FUTURE GENERATIONS**

# KNOW YOUR LAKESHORE



## A HEALTHY AND NATURAL SHORELINE

keeps the water safe and clean for people and animals.

## PLANTS ALONG THE SHORELINE

can protect property damage from flooding, high waters and waves.

**41%**

## OKANAGAN LAKE HAS 290 KM OF SHORELINE

and research from the 2016 Foreshore Inventory and Mapping update shows that the majority is developed, with only 41% remaining natural.



## INCREASED SHORELINE DEVELOPMENT

from 2009 to 2016, has added **165** retaining walls, **164** docks, and **9** new marinas around the lake.



## THE OKANAGAN VALLEY IS BIOLOGICALLY UNIQUE

with some of the greatest concentrations of species and ecosystems in Canada. Many are found nowhere else in the country and in some cases the world.



## OKANAGAN LAKE HAS TWO DISTINCT TYPES OF KOKANEE SALMON

that rely on sediment-free streambeds and lakeshores for spawning habitat.



## THE SYILX/OKANAGAN FIRST NATION TERRITORY

extends from North of Revelstoke into Washington state. Learn more about the Syilx/Okanagan Nation and read about their Water Declaration here: [www.syilx.org/about-us/syilx-nation/water-declaration/](http://www.syilx.org/about-us/syilx-nation/water-declaration/)



# KEEPING THE LAKESHORE NATURAL IS IMPORTANT



## PROTECT YOUR PROPERTY FROM FLOODING

Deep-rooted trees and shrubs absorb water and wave energy, reducing shoreline erosion. This helps protect your property from flooding.

## SAFEGUARD YOUR DRINKING WATER

Native plants, trees, rocks, and soil help filter rain and stormwater runoff by trapping sediment and contaminants which protect water quality.



## CARE FOR KOKANEE AND WILDLIFE

Fish spawn along the shoreline, and eagles and osprey rely on them for food. All wildlife need a healthy and safe place to survive and thrive.

## CHAMPION LAKESHORE LIVING

A healthy lake allows everyone to enjoy recreational activities on and around the lake. Help sustain the lake for your community, your health, and your well-being. Become a guardian of the lake by protecting and enhancing the shoreline for visitors, residents, and future generations.

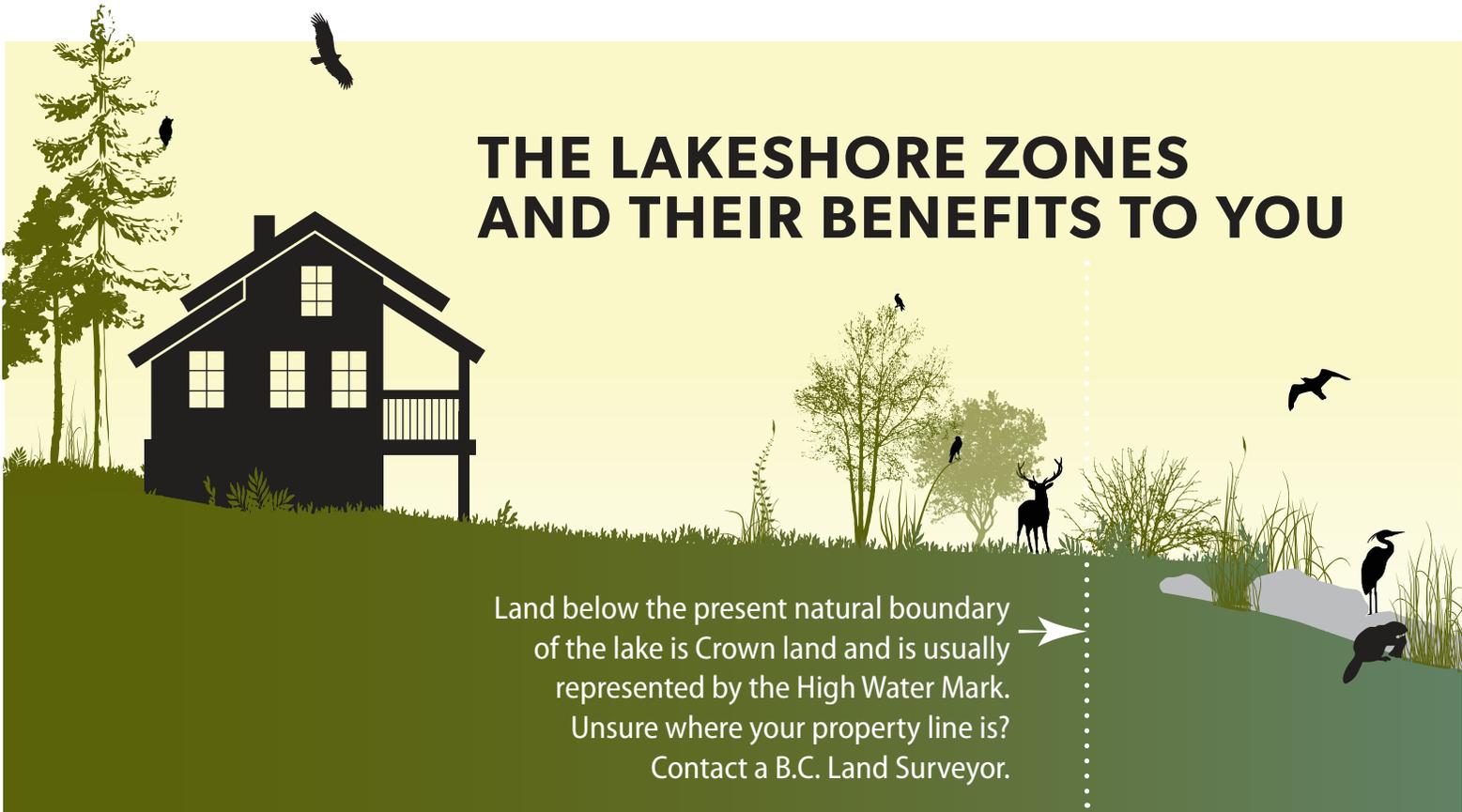


## EMPOWER ECONOMIC GROWTH AND TOURISM

People from around the world come to work and play on Okanagan Lake. Keeping our shorelines natural can enhance property value, and protect the Okanagan's beautiful vistas for everyone's enjoyment and benefit.



# THE LAKESHORE ZONES AND THEIR BENEFITS TO YOU



Land below the present natural boundary of the lake is Crown land and is usually represented by the High Water Mark. Unsure where your property line is? Contact a B.C. Land Surveyor.

## UPLAND

• local government

## RIPARIAN

• local government

**Upland areas are the drier, terrestrial areas above the riparian buffer zone.**

**How healthy upland areas benefit you:**

- Trees and shrubs reduce erosion, improve air and water quality, and help bring soil moisture to the surface for smaller plants.
- Trees help homeowners save money on energy costs by providing shade in the hot summer months, and protecting against cold wind in winter.
- Native plants are already adapted to the hot Okanagan climate, and require less water.

**Riparian areas are the transition between land and water.**

**How healthy riparian areas benefit you:**

- Riparian areas improve water quality by filtering runoff and preventing sediments and contaminants from entering the lake.
- Deep rooted trees and shrubs protect lakeshore areas against wind and wave action. Plants provide 19 to 120 times more protection than large rock (rip-rap).
- Riparian and forested areas act as enormous sponges and can soak up as much as 45 cm of rain. This helps mitigate flood damage.

### BEST PRACTICES

- ✓ Minimize disturbance by leaving as much natural vegetation as possible.
- ✓ Avoid trimming vegetation along shoreline properties. If you want to reduce fuels near your home, consider alternate practices such as cutting lower limbs.
- ✓ Avoid using chemicals for landscaping (fertilizers, pesticides, and herbicides).
- ✓ Ensure your septic system is regularly maintained.

### BEST PRACTICES

- ✓ Allow native vegetation to grow and establish a natural buffer around the lake.
- ✓ Manage invasive plants.
- ✓ Avoid development and turf lawns in riparian zones.
- ✓ Use natural rock and gravel instead of retaining walls and paved surfaces.
- ✓ Design a single, unpaved access to the shoreline. Riparian areas offer connectivity to upland habitats for wildlife.

**\*THIS IS A GUIDE ONLY AND IS NOT INTENDED TO REPLACE OR SUBSTITUTE GOVERNMENT REGULATIONS OR LEGISLATION.**

## DID YOU KNOW?

Any land disturbance in or around Okanagan Lake is subject to permit(s) and approvals. This may include authorizations from multiple agencies prior to proceeding with any proposed development.



## DID YOU KNOW?

Western screech owls need older trees in riparian areas to nest, such as aspen, and cottonwood. Removing old growth trees or snags in riparian areas alters this critical habitat.

## LAKESHORE

• provincial government

## AQUATIC

• provincial and federal governments

Lakeshore areas are the sandy shorelines and the lake beds below the present natural boundary.

### How healthy lakeshore areas benefit you:

- Aquatic plants form a flexible barrier along the waterfront that dampens the impact from wave action, reducing erosion.
- Undisturbed lakeshores provide safe spawning grounds for salmon and improve lake circulation.
- Natural shorelines provide aesthetic value by framing a more natural view from your home, and offer wildlife viewing opportunities.

Aquatic areas include the water and all living things within it.

### How healthy aquatic areas benefit you:

- Water supports life. The lake provides drinking water, water for our crops and supports our recreational activities.
- Water helps regulate climate because it can absorb vast amounts of heat energy.
- Sunlight penetrates only a short distance in aquatic areas. Clear water in shallow areas promotes the highest diversity of native plants and animals.

## BEST PRACTICES

- ✓ Leave logs and leaves untouched, as these provide food and habitat for fish and wildlife.
- ✓ Limit disturbance to the shoreline and lakebed by foot and boat traffic. Never grade, or move soils around the lakeshore.
- ✓ Keep pollutants and chemically treated wood products away from the lakeshore.
- ✓ Do not add fill, sand, or gravel to the natural shoreline.

## BEST PRACTICES

- ✓ Minimize boat wakes near the shore to avoid erosion and damage to fish habitat.
- ✓ Return to shore with everything you brought out with you.
- ✓ Invasive zebra and quagga mussels are a huge threat to your investment and enjoyment of your property. If you use any type of watercraft (e.g. boat, paddleboard) or water recreation equipment (e.g. fishing gear, water toys), make sure to Clean, Drain, Dry all gear. Learn more at [www.DontMoveAMussel.ca](http://www.DontMoveAMussel.ca).



# RIPARIAN AREA PLANTING GUIDE

Lakeshore residents can support healthy ecosystems and increase water quality by expanding or enhancing natural buffer zones. Native plants require little additional watering and maintenance after they have been established (usually 2-5 years).

## DID YOU KNOW?

A natural buffer of 30-50 metres is the minimum width recommended to protect waterways from pollution and sediment. A much wider buffer is needed to protect plants and wildlife from human disturbance.

## RECOMMENDED NATIVE PLANTS

### TREES

- black cottonwood
- ponderosa pine
- trembling aspen
- Douglas fir

### SHRUBS

- red osier dogwood
- tall Oregon grape
- snowberry
- Douglas maple

### FLOWERS

- yarrow
- blanketflower
- showy aster
- showy milkweed



BLANKETFLOWER



SHOWY MILKWEED



DOUGLAS FIR



YARROW



TALL OREGON GRAPE



SNOWBERRY

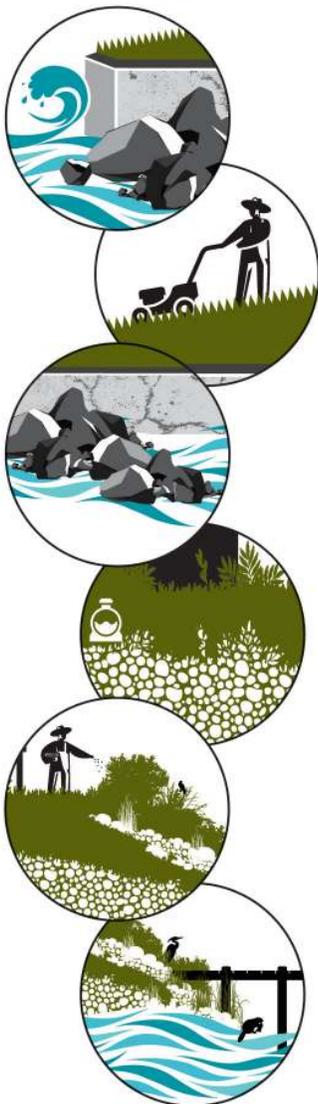
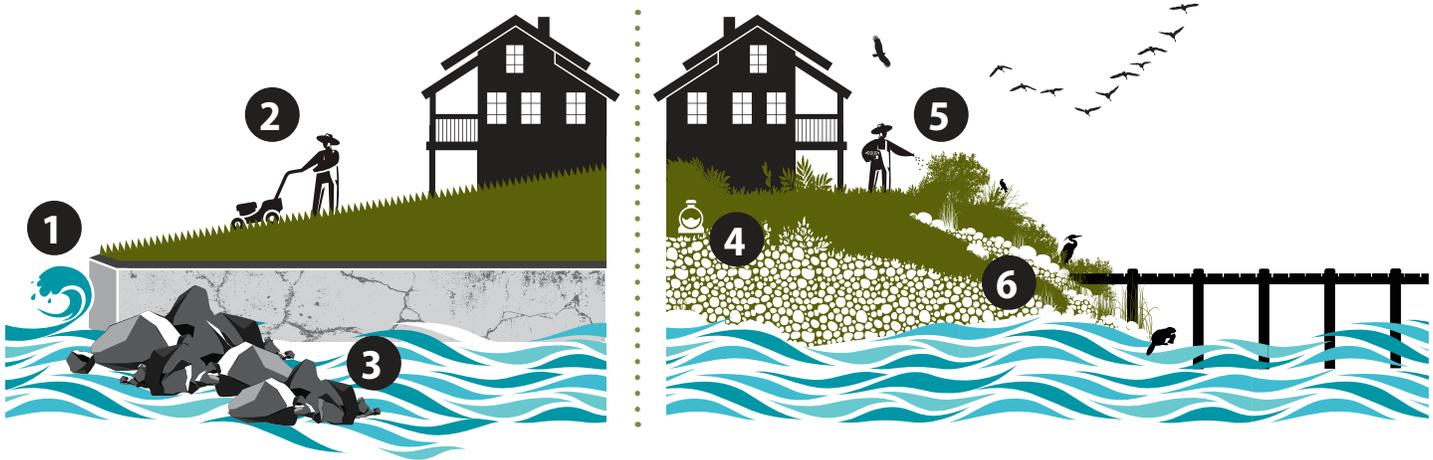
## HELP STOP THE SPREAD OF INVASIVE PLANTS

- Siberian elm
- purple loosestrife
- oxeye daisy
- houndstongue
- Russian olive
- burdock
- white and yellow sweet clover
- cheatgrass
- tree of heaven
- yellow-flag iris
- knapweed

## WANT MORE PLANTING RECOMMENDATIONS?

Search for native plants in the Okanagan Xeriscape Association plant database.

# WITH A FEW SIMPLE STEPS WE CAN ALL PROTECT OUR WATER



## 1 HARD SURFACES = BIG CONSEQUENCES

Retaining walls (rock, wood or concrete) increase erosion in adjacent areas. Walls break down over time and are expensive to maintain. Soften your shoreline by replacing hard surfacing with native rocks, gravel and plants to decrease erosion.

## 2 FILTER INSTEAD OF FERTILIZE

Manicured lawns allow water and pollutants to move quickly into the lake. Fertilizer causes excessive weed and algae growth. Planting and retaining native vegetation naturally filters storm water and protects water quality from pollution.

## 3 PROTECTING THE SHORE

Clearing rocks on the beach and creating rock piles into the water is known as a 'groyne'. Groynes force young fish to swim into deeper water where they are in greater risk of being preyed upon. It is prohibited to dump sand, gravel, or fill on the shoreline. Deposits can destroy spawning sites and habitat for fish.

## 4 MAINTAIN YOUR SEPTIC SYSTEM

A properly designed septic system can keep your water safe for drinking and swimming. Need an inspection or maintenance? Contact Interior Health Authority.

## 5 USE THE POWER OF PLANTS TO COMBAT EROSION

Frame your view with trees, and retain as many native plants as possible. Deep plant roots are great for holding soil together and stabilizing the shoreline. Trees and plants also provide food and shade for fish.

## 6 A DOCK DILEMMA

Docks are easily damaged with high water levels and can cause harm to fish and fish habitat. Construct a pile-supported dock following provincial regulations or consider sharing a dock with your neighbour. Want to learn more? Contact FrontCounter BC.

# PLANNING TO DEVELOP NEAR THE SHORE?

**DEPENDING ON YOUR JURISDICTION CONTACT  
YOUR LOCAL OR YOUR FIRST NATIONS GOVERNMENT  
PRIOR TO DEVELOPMENT TO INQUIRE ABOUT  
REGULATIONS AND SUPPORT TOOLS**

Development activities that require approvals from various agencies include, but are not limited to:

- Removing trees, altering plants, or disturbing soils.
- Constructing buildings, structures, roads, trails, or docks.
- Repairing or constructing retaining walls, break walls, or rock walls.
- Installing flood protection works or drainage systems.

Planning to construct a dock, boat ramp, boat lift, deck, or access trail? Contact FrontCounter BC at 1.877.855.3222 for information on accessing Crown land.

## DID YOU KNOW?

The area below the present natural boundary of the lake is Crown land, and is available for casual public use. This area should not be blocked by retaining walls, fences, or other development.



**WANT TO LEARN MORE?**  
Visit the complete online resource for lakeshore living at:  
[WWW.OKCP.CA](http://WWW.OKCP.CA)



Report All Polluters and Poachers  
(RAPP) 1.877.952.7277  
Or download the BC Wildlife Federation Conservation App on your phone. This tool gives everyone the ability to protect our natural resources for future generations.



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Stuart Madden