



A RESOURCE FOR KOOTENAY LAKE 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.

KOOTENAY LAKE HAS OVER 403 KM OF SHORELINE

and research from the 2011 Foreshore Inventory and Mapping shows that 37% is disturbed, with 63% remaining natural.

SHORELINE DEVELOPMENTS INCLUDE

738 docks, 1776 groynes, 114 boat launches, 709 retaining walls, 35 marinas and 107 marine rails.



THE KOOTENAY LAKE WATERSHED 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.



KOOTENAY LAKE HAS A DIVERSITY OF FISH SPECIES

Kokanee rely on sediment-free streambeds and lakeshores for spawning. Bull trout spawning migration requires access to higher elevation streams with cool, clean water.



KOOTENAY LAKE LIES WITHIN ktunaxa ʔamakʔis (TERRITORY)

Since time immemorial ktunaxa people, in particular yaqan nukiy, have been active stewards of the lake. The Sinixt, Secwepemc and Syilx people have also made use of the area.



ARCHAEOLOGICAL SITES ARE AN IMPORTANT

non-renewable resource that can be found around Kootenay Lake. It is against the law to disturb archaeological material without having approval from the Province's Archaeology Branch.



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. Keeping the lakeshore natural preserves fish and wildlife habitat.

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

Kootenay Lake plays a fundamental role in our communities and contributes to a healthy economy and tourism industry. Maintaining the health of the Lake and its shoreline ecosystems will ensure our local economies continues to thrive.





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

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 and animals are adapted to the unique moist and dry climactic zones that surround Kootenay Lake.

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.

RIPARIAN

• local government

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

- ✓ 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.

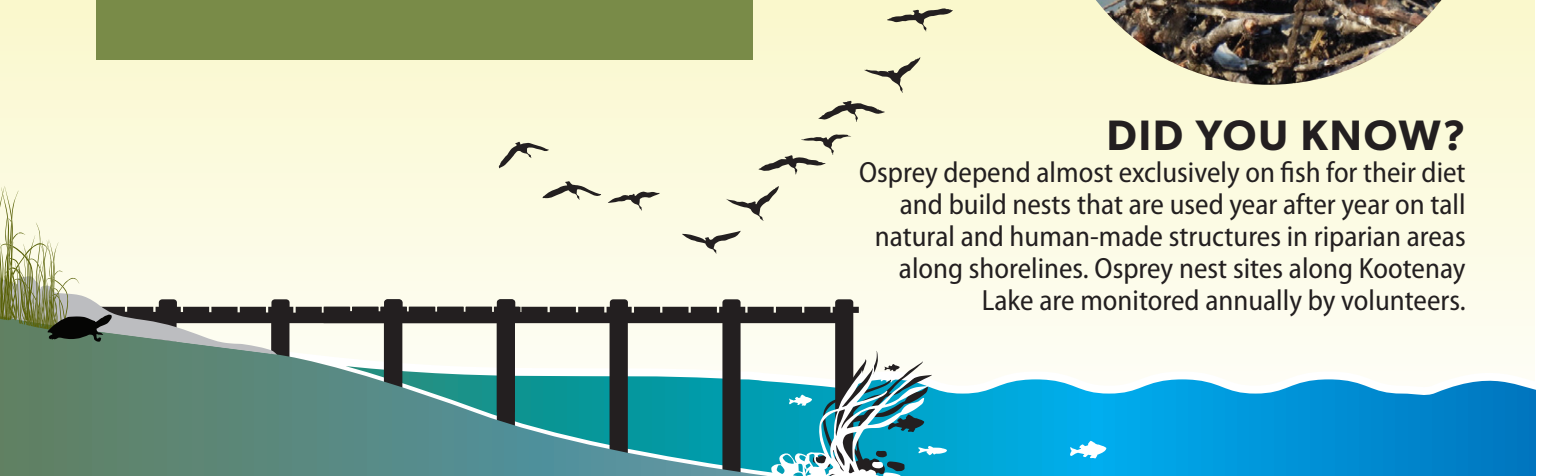
DID YOU KNOW?

Any land disturbance in or around Kootenay 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?

Osprey depend almost exclusively on fish for their diet and build nests that are used year after year on tall natural and human-made structures in riparian areas along shorelines. Osprey nest sites along Kootenay Lake are monitored annually by volunteers.



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.
- ✓ If you encounter archaeological material contact the Province's Archaeology Branch at 250.953.3334.



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

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
- interior Douglas fir
- trembling aspen
- western white pine

SHRUBS

- red osier dogwood
- tall Oregon grape
- snowberry
- common juniper

FLOWERS

- yarrow
- pearly everlasting
- Canada goldenrod
- fairybells



INTERIOR DOUGLAS FIR



TREMBLING ASPEN



FAIRYBELLS



YARROW



TALL OREGON GRAPE



SNOWBERRY

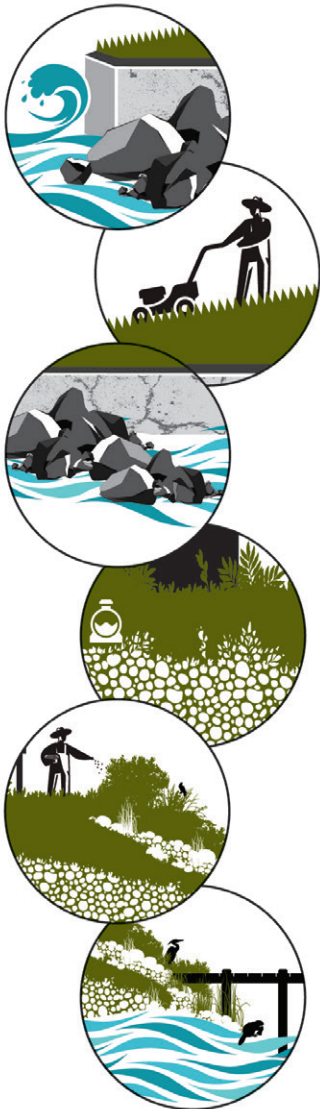
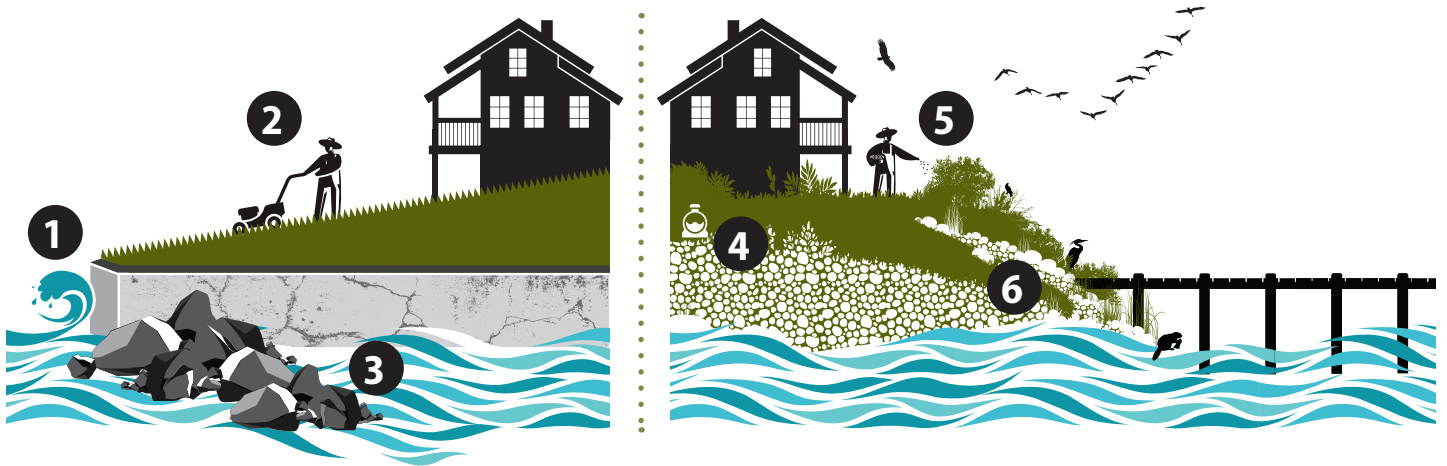
HELP STOP THE SPREAD OF INVASIVE PLANTS

- baby's breath
- common tansy
- knotweed
- Queen Anne's lace
- knapweed
- giant hogweed
- nodding thistle
- Scotch broom
- common burdock
- Himalayan blackberry
- purple loosestrife
- St. John's wort

WANT MORE PLANTING RECOMMENDATIONS?

See the Central Kootenay Invasive Species Society "Grow Me Instead" www.ckiss.ca

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

Planning to construct a dock, groom your beach, place a buoy, or remove an old structure near the water's edge? Undertaking any activities along the shoreline may require a permit from the provincial and/or federal governments. Call FrontCounter BC at 1.877.855.3222 to clarify prior to undertaking any shoreline activities.

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?
Access the Shoreline Guidance Document and Mapping: www.kootenaylakepartnership.com

Content adapted by:

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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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