



GREEN BOATING GUIDE

LAKE WINDERMERE



lake windermere
ambassadors
healthy water for healthy communities

This guide was made possible thanks to financial support from:



COLUMBIA VALLEY
COMMUNITY FOUNDATION



Have a question about your watershed?
Contact the Lake Windermere Ambassadors:

Phone: (250) 341-6898

Email: info@lakeambassadors.ca

Web: www.lakeambassadors.ca



HOW TO USE THIS GUIDE:

Hello! Thanks for picking up a copy of this Green Boating Guide for Lake Windermere! We hope you'll find these resources very helpful while you get out to enjoy our beautiful lake and wetlands.

Take a look at each page in this guide to learn which tips and tricks you can adopt while boating that will help keep the ecosystem healthy, safe, and fun for all boaters.

Understanding how to minimize your impact while boating benefits not only you, but all other users of the lake -- including the people, birds, fish, and wildlife who call this place home.

Lake Windermere sees thousands of boaters each year, and all of this impact adds up. Do your part to be a responsible boater and help keep this lake pristine so your kids and grandkids can continue to enjoy this lake for years to come.

By following the tips and suggestions in this guide, you can help minimize your environmental impact on our waterways -- and you're likely to save money, time, and have more fun by doing so!



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BEFORE YOU HEAD OUT:

Inspect your boat!

Invasive plants and animals can travel in or on your boat, oars, gear, and/or boat trailer.

Never launch your boat in a new water-way without first checking for signs of plants, mud, algae, or aquatic life.

If you notice plant matter on your boat, remove it and dispose of it in a plastic bag inside a garbage bin (not in a compost, and never dump it in the lake or on the shoreline!)

Finish by washing your boat thoroughly with hot water and a 10% bleach solution.

Remember to **Clean, Drain, and Dry** all your boating gear before and after moving from one waterway to another!



STOP AQUATIC HITCHHIKERS!
Be A Good Steward. Clean, Drain, Dry.

DON'T MOVE A MUSSEL



U.S. National Park Service



Washington State Lake Protection Ass'n

Check your gear

All motorised and non-motorised watercraft in BC must have this set of basic safety items on board:

- 1) One lifejacket for each passenger,
- 2) One buoyant heaving line (a rescue throw-rope that floats),
- 3) A watertight flashlight & whistle, and either of:
 - a. a set of oars or a paddle.
 - b. anchor and a bail bucket.
 - c. a manual water (bilge) pump.



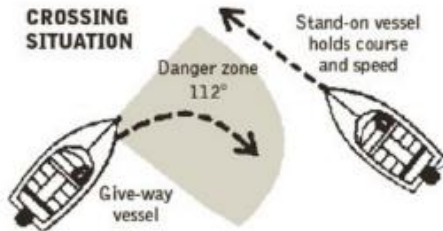
Additionally, if your boat has an inboard engine, a fixed fuel tank of any size, and/or cooking, heating, or refrigeration appliances, you must carry a **5-BC fire extinguisher**.

Know before you go

Impaired boating carries the same legal weight as impaired driving in BC. *All boat drivers and their passengers are prohibited from consuming alcohol while on a boat, unless it is equipped with a toilet, permanent sleeping & cooking facilities, and is docked.* You can report unsafe boating or impairment to the Invermere RCMP by calling: **250-342-9292**

Leave a trip plan and bring a cell phone with emergency contact numbers pre-programmed. Don't forget to protect your electronics with a sturdy zip-loc bag or waterproof case!

OPERATING & MAINTAINING YOUR BOAT



Do you know who has right-of-way?

- Larger, motorized vessels must always yield to smaller non-motorized boats (like paddleboards, kayaks, and sailboats).
- The general rule of thumb is to stick to the right-hand side, just like driving – however, there are no lanes on the water!
- Learn the rules as they apply to your boat, especially when it comes to crossing, turning, or overtaking other watercraft.

Check out www.boatsmartexam.com/ca/ to learn more.

Understanding Speed & Wake

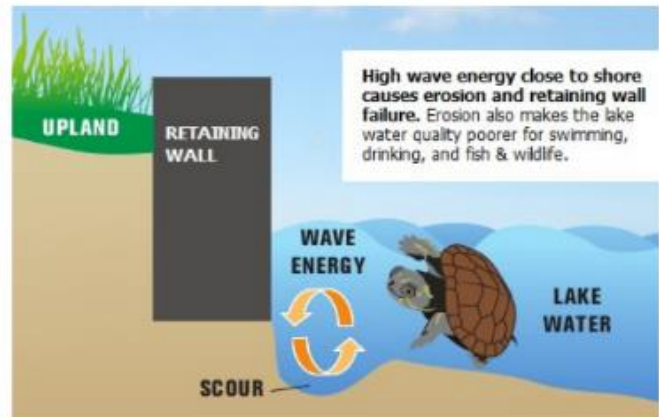
Boat drivers are always responsible for the effects of their wake!

Boats produce different types of wakes depending on boat size and speed.

Here's how you can minimize the impact of your boat wake:

Travel perpendicular (non-parallel) to shore whenever possible.

- Give paddlers a very wide berth.
- **Keep speeds below 10km/hr within 30m (100 ft) of shore.**



Adapted from Michigan Sea Grant

Keeping it clean

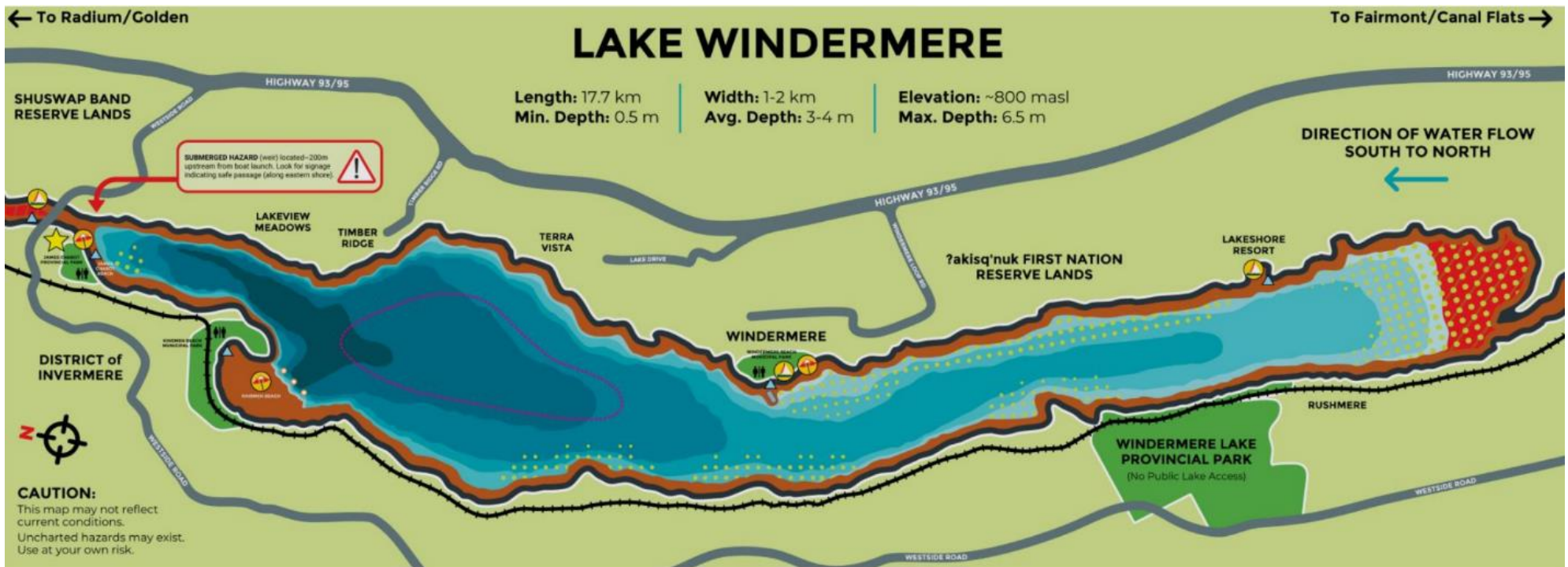
Secure all your garbage and recycling so it doesn't fly out of your boat.

Choose natural-based cleaners, such as vinegar and baking soda, to clean your boat rather than harsh detergents or abrasive chemicals. Even "biodegradable" products often contain harmful ingredients. **Make sure you always do your cleaning on land, not on the water.**

Choose hard anti-fouling or "non-fouling" paints. Only use a soft brush or cloth to clean your hull when in the water, to help prevent the release of toxic paint into the environment.

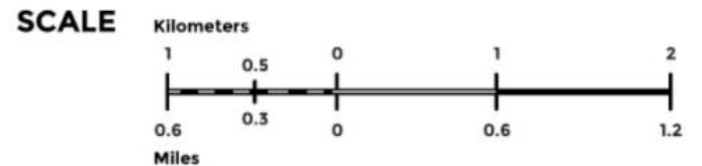
Storage and upkeep

- **Know your basic boat maintenance:** check your oil, conditions of lines and hoses, corroded or loose electrical connections, air and Make sure if you change out any coolants or oils that they are safely disposed of and not allowed to drip into the lake water.
- **Check your dock or buoy regularly to make sure it isn't in disrepair** or at risk of losing pieces of styrofoam or other plastic pieces
- **And don't forget to pull it all out of the water before it freezes in the winter** – frozen docks and buoys are more likely to break apart, which is a loss of money and effort, and also really pollutes the lake!



LEGEND

- You are here (Public Boat Launch)
- Public Washrooms
- Other motorized boat access (public marina, resort, etc.)
- Non-motorized boat access, parking available (canoes, kayaks, etc.)
- Slow/No Wake Buoys
- Railway Line
- Preferred area for waterskiing and tow sports
- Public Swim Area
No motorized boats in public swim area (indicated by buoys).
Caution: Private swim areas are not marked on this map.
NO LIFEGUARDS ON DUTY IN PUBLIC SWIM AREAS.
- Slow/No Wake Zone
Effective within a 30m (100 ft) width parallel to shore at all times.
Reduce Speed to prevent shoreline erosion and disturbance.
- Provincial and Municipal Parks
- Columbia Wetlands Wildlife Management Area
No motorized boats permitted in wetlands and side channels.
20 horsepower restriction in main river channel.
- Emergent vegetation at low water
Avoid shallow, vegetated areas when boating at high speeds.
Aquatic plants choke boat propellers and spread by fragmentation.



LOCATION

Situated just downstream of Columbia Lake and the headwaters of the Columbia River, Lake Windermere is nestled between the Rocky Mountains to the east and the Purcell mountain range to the west. From here, the river flows northwest towards Golden, BC before making a near 90-degree bend at Kinbasket Lake and beginning its long journey south to the United States via Castlegar, BC. The Columbia River empties into the Pacific Ocean at Astoria, Oregon — 2,000 km (1,243 mi) from its source and headwaters here in the Columbia Valley.

ECOLOGY

Lake Windermere provides important feeding, nesting, and breeding habitat to several species of waterfowl, migratory birds, & native fish. If not careful, human traffic on the water can disturb amphibians, birds, and their nests during spring mating and breeding season. Please avoid causing wake disturbance or venturing too close to highly vegetated areas where floating nests may be present. Please also abide by posted Slow / No Wake zones around the shorelines to help reduce erosion that can cause poor water quality for swimming, drinking, and fishing.

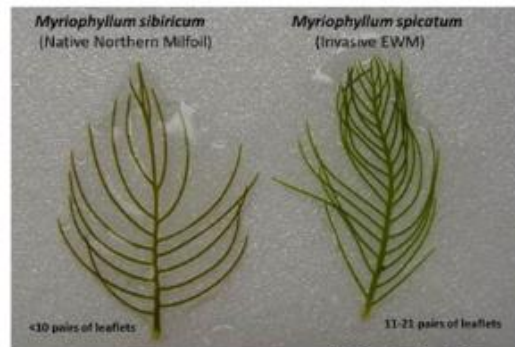
INVASIVE SPECIES IDENTIFICATION

The following species pose a threat to the integrity of our lake ecosystem.

If you see any of these species in or near the lake, please report it! Download and use the East Kootenay Invasive Species Council's "**Report-a-Weed**" app, or contact the Lake Windermere Ambassadors at www.lakeambassadors.ca or info@lakeambassadors.ca

Milfoil

- ✓ **Native Milfoil (non-invasive)**
 - Less than 10 leaflet pairs (usually 5-10)
 - Leaves stay rigid out of water
 - Beneficial to the lake; provides shade, food, habitat, and oxygen to the ecosystem
- ✗ **Eurasian Milfoil (Invasive)**
 - More than 12 leaflet pairs (usually 12-21)
 - Leaves are limp when out of water



US Geological Survey

Mussels

- ✓ **Native Mussels (non-invasive)**
 - Usually 10-14 cm long
 - Dark brown shell, common near beaches



Xerces Society

- ✗ **Zebra or Quagga Mussels (Invasive)**
 - Usually only 1-5 cm long
 - Characteristic "zebra" stripe on shell



US Forest Service

Whirling disease

- ✗ **Whirling disease is a disease of salmonid fish that has spread within Alberta and Montana.** It is caused by a microscopic parasite that feeds on the head and spine cartilage of young fish, causing:
 - A deformed head and spine, with a bent and/or blackened tail and body
 - Swimming in a circular / whirling pattern



Canadian Food Inspection Agency

Contaminated boats, boating equipment, trailers, fishing gear, bilge water, soil and mud can all be sources of invasive species. The best defence against invasives is to: **CLEAN** (soak in 2% bleach solution or pressure wash with hot tap water), **DRAIN** (expose to air), and **DRY** (soak up all excess water) all your gear every time you move between waterways.

For more, check out www.ekisc.ca

CLEANING UP SPILLS

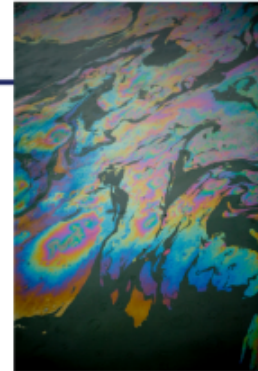
Pollutants from your boat - like oil, gasoline, or cleaning chemicals - can negatively impact the aquatic environment.

You are responsible for any environmental damage caused by your spill, so taking precautions to prevent spills will be beneficial for you and for the boating environment!

Oil Spills

Over a very short period of time, oil can spread into a very thin layer across the surface of water until it forms a sheen. Rapid response is the best way to ensure oil doesn't travel too quickly and disperse far away from the original spill site.

Use an oil-specific absorbent pad to soak up oil without absorbing lake water. If a spill is too big to deal with on your own, phone the nearest commercial marina to request support, then notify the 24-hour Spill Response line (**1-800-663-3456**).



Getty Images

Engine oil tends to accumulate in bilges. If not careful, this oily bilge water can be discharged. Help prevent this from happening by:

- Regularly tune your engine and make sure there are no leaking seals, gaskets or hoses.
- Connect a bilge water filter to your vessel's bilge pump, to help remove oil, fuel, and other petroleum hydrocarbons from the water.
- Make use of marinas that offer bilge pump-out service. This prolongs the life of your boat!

Never use detergent or dish soap to make an oil spill disappear! Using soap does not get rid of the spill; it simply breaks it down into smaller droplets, making the spill harder to clean and more toxic to aquatic life.

Fuel Spills

Gas or diesel may be spilled while fueling, either as backslash out the fuel intake or as overflow out the vent fitting.

These spills harm aquatic life, waste money, and can result in stains on the hull and damage to your boat. Follow these tips when fueling to help prevent spills:

- Only fill tanks to 90% capacity to avoid spillage.
- Fill portable tanks on land and away from open water bodies.
- Use an oil-absorbent pad to catch nozzle drips, and slow down at the start & end of fuelling.



BoatUS Foundation

Blackwater/Sewage and Other Spills

- Section 13 of the Province of BC's *Environmental Management Act* prohibits the discharge of both black and greywater from any vessel into any water.
- Whenever possible, use facilities on shore to avoid releasing soaps or chemicals into the lake.
- Avoid power washing your boat with detergents or cleaning chemicals, especially near water.

PROTECTING SENSITIVE AREAS

Waterbird nesting sites are most vulnerable to disturbance in the spring and early summer, from April through mid-July.

Lake Windermere and the Columbia Wetlands provide extremely important habitat and nesting grounds for birds and other wildlife. Nests hidden in near-shore vegetation can be crushed underfoot or disturbed and flooded by boat wakes. Certain species of wildlife will abandon their nests if there is too much human activity or presence in an area.

Waterbirds and wildlife are very important for our waterways! They help ensure our waters remain clean, healthy, and biodiverse. This means that disturbing or impacting the successful nesting and reproduction of wildlife will negatively affect your ability to boat on and enjoy these waters!



Tim McCabe (USFWS)

Please avoid startling nesting birds and their young by keeping your canoes, kayaks, & paddleboards only in the main river channel of the wetlands, and only bring your boat to shore if you can see that it is an area previously used or disturbed by humans.

You can report observed violations of Fisheries, Wildlife or Environmental Protection laws to BC Conservation Officers at **1-877-952-7277**.

- Avoid wetlands in spring & fall
- **Decrease speed and noise** near shore while in your boat
- **Watch your wake**, especially near vegetated areas
- Learn to identify key bird, fish and wildlife species, and report unusual or rare sightings to the LWA!

GET INVOLVED!

Are you interested in helping monitor boating activity on Lake Windermere? Curious about how boating impacts our lake and watershed? Do you want to help improve boating access and facilities around the lake, all while ensuring better ecosystem protection?

Reach out to us! We are always looking for passionate volunteers who would like to help improve the health and public accessibility of Lake Windermere. Contact us at:

info@lakeambassadors.ca

RESOURCES

Invermere RCMP ----- **1-250-342-9292**

To report unsafe boating behaviour, intoxication, etc.

Conservation Officer Service ----- **1-877-952-7277**

To report fisheries or wildlife violations, injured wildlife, etc.

24-Hour Spill Response Line ----- **1-800-663-3456**

To report oil or fuel spills of significant quantities

Pete's Marina (Invermere) ----- **1-250-342-9626**

Shadybrook Marina (Windermere) ----- **1-250-342-8799**

Lakeshore Resort (Akisqnuk) ----- **1-250-342-6352**

To inquire about small spill responses, fuel fill-ups, and emergency landings or repairs on-shore

District of Invermere bylaw ----- **1-250-342-1707**

To report noise violations or littering

Lake Windermere Ambassadors ----- **1-250-341-6898**

To report sightings of rare or invasive species, water quality or water quantity concerns, or volunteer to join our team

boatsmartexam.com/ca

To obtain your Pleasure Craft Operators' License (valid for life)