



LAKE STEWARDSHIP PRINCIPLES

THOMPSON-NICOLA REGIONAL DISTRICT



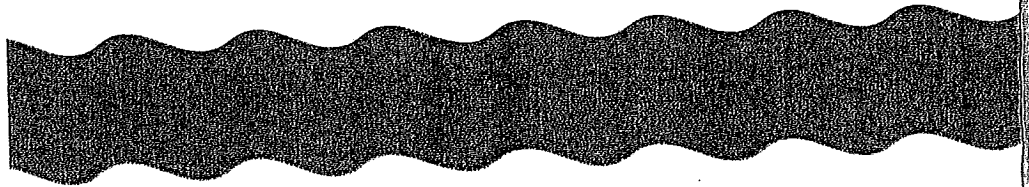
WORKING TOGETHER TO PROTECT OUR LAKES

YEAR-ROUND LIVING

Do you live at the lake 365 days per year? Living in your haven year-round is a treat, but it's also an adjustment from urban living. A simple stewardship principle is conserving water. This does not mean doing without, rather just reducing the water we use.

REDUCING WATER
USE WILL ENSURE
A WELL-
FUNCTIONING
SEPTIC SYSTEM

FREQUENT
PUMPING OF YOUR
SEPTIC SYSTEM
PROTECTS WATER
QUALITY

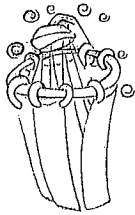


Some ways you can conserve water are:



- Keep a pitcher of boiled water in the fridge ready to drink.

- Clean produce in a bowl or sink filled with water as opposed to leaving the tap running.



- Install a low flow shower head.

- Partially fill the sink with water when you wash or shave.



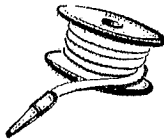
- Use short bursts of water when brushing teeth.

- Fix leaky faucets right away and install an aerator to the faucet to reduce sink's water usage by 25%.

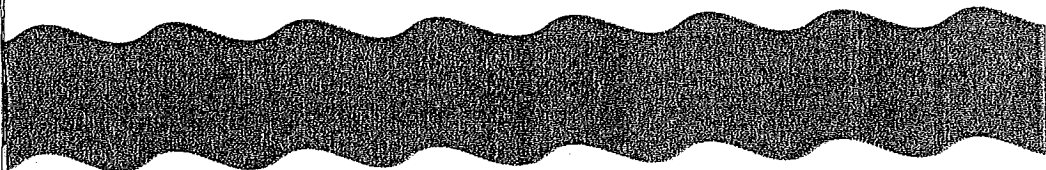
- Install water conservation fixtures.



- Check your toilet for leaks: Put a few drops of food colouring in the tank; if it seeps into your toilet bowl, the rubber flapper may need to be replaced. Or... consider using an outhouse or composting toilet if approved by your local health authority.



- Sweep the driveway and sidewalk rather than washing it with a hose. This prevents sediment, salt, and petroleum products from washing into storm water (site run-off) or drainage ditches. Water outside as little as possible to encourage deep growth and prevent runoff.



DAILY LIVING

It is amazing what can add up to impact the environment. Regular activities such as household cleaning can be harmful. This section provides tips and alternatives for day-to-day activities that can be potentially harmful.

Some ways you can preserve the environment are:



- Use non-phosphate automatic dishwasher detergents or detergents that have lower amounts of phosphates such as Palmolive Gel, Cascade Complete Liquid or Gel, and Sunlight Gel.



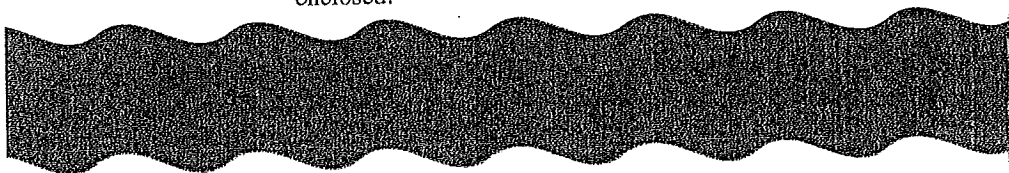
- Dilute cleaning agents with water in a spray bottle or use a smaller amount on a wet cloth.
- Safe, alternative cleaning products are baking soda, vinegar, pure liquid soap, vegetable oil, a green scrub, stiff brush, or steel wool.



- Remove any human made garbage. Things like styrofoam, plastic bags, glass, cans, and cardboard material can harm wildlife and their habitat and interfere with recreation.



- Keep food securely stored and away from wildlife! Feeding wildlife, especially bears, can eventually lead to their death. Although you may not be intentionally feeding them, they can become dependant on your garbage, compost, bird feeders or food left unattended. When they become a threat to human life, they must often be put down. Animal-proof garbage cans and keep disposal containers enclosed.



Recipes for Alternative Cleaners:

GLASS CLEANER
MIX 4 TBSP OF VINEGAR OR 1 TBSP OF LEMON JUICE WITH 1 LITRE OF WARM WATER IN A SPRAY BOTTLE

DEODORIZERS
SPRINKLE BAKING SODA ON CARPETS AND FURNITURE THEN VACUUM

USE A DIFFUSER TO BURN ESSENTIAL OR SYNTHETIC OILS OR MIX A FEW DROPS OF THE OILS WITH WATER IN A SPRAY BOTTLE (OILS SUCH AS LEMONGRASS, LAVENDER, CEDARWOOD OR PEPPERMINT NOT ONLY SMELL GOOD, BUT CAN ALSO KEEP THE ANTS OUT)

BOIL OILS OR NATURAL SPICES (CINNAMON, CARDAMOM) ON THE STOVE. THE AROMA WILL FILL THE HOUSE LIKE FRESHLY BAKED APPLE PIE!

ALL PURPOSE CLEANER
MIX $\frac{1}{2}$ CUP OF PURE LIQUID SOAP WITH 4 LITRES OF HOT WATER

DISSOLVE 4 TBSP OF BAKING SODA IN 4 CUPS OF HOT WATER

SPRINKLE DRY BAKING SODA ON A WET, STIFF SCRUB SPONGE

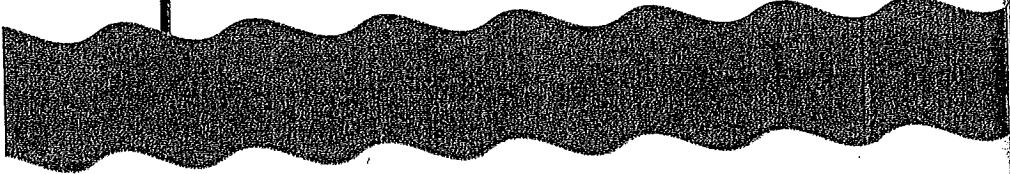
DRAIN CLEANER
POUR $\frac{1}{2}$ CUP OF BAKING SODA DOWN THE DRAIN THEN FOLLOW WITH $\frac{1}{2}$ CUP OF VINEGAR. LET STAND FOR 15 MINUTES THEN FLUSH WITH HOT WATER

OVEN CLEANER
PLACE A PAN OF WATER IN THE OVEN AND TURN ON TO A LOW TEMPERATURE. LEAVE THE WATER FOR A FEW HOURS. MAKE A PASTE WITH EQUAL PORTIONS OF BAKING SODA TO WATER AND SCRUB INSIDE OF THE OVEN. BAKED-ON GREASE SLIDES OFF WITH THE HUMIDITY

LET MOTHER NATURE MAINTAIN THE SHORELINE

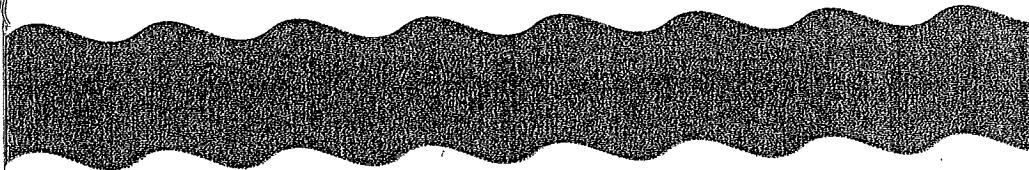
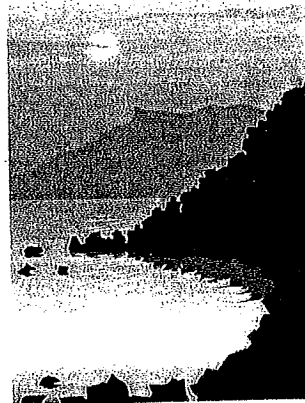
Undoubtedly, landscaping and gardening is one of the most relaxing and rewarding pastimes. But did you know it can also be quite disturbing for the natural shoreline? The best thing for a natural shoreline is to leave as much of it alone as possible.

MAXIMIZE SCENIC VALUES BY:

- CONSERVING NATURAL FEATURES SUCH AS THE SHORELINE, WETLANDS, TREES, NATIVE VEGETATION, AND ROCK OUTCROPS.
 - PRUNING OR LIMBING TREES AND SHRUBS RATHER THAN REMOVING THEM.
 - ORIENTING BUILDINGS TO REDUCE VISUAL IMPACT FROM THE LAKE.
 - FOCUSING ALTERATIONS SUCH AS A PATH OR DOCK IN ONE AREA TO LEAVE AS MUCH LAND AS POSSIBLE IN A NATURAL STATE.
 - WORKING TOGETHER WITH YOUR NEIGHBOURS TO SHARE DOCKING FACILITIES AND WATERFRONT ACCESS AREAS.
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Some ways you can maintain the shoreline are:

- Enhance the shoreline buffer strip instead of extending a manicured turf lawn to the shore. This prevents erosion, filters pollutants and improves aquatic and wildlife habitat.
- Mark the buffer strip with ribbon or stakes as a boundary to stop the lawnmower. Let your buffer's width increase a little more each year. Ideally, a buffer strip should be at least 30 meters (100 feet). Let new plants flourish!
- Use caution when selecting common landscaping plants which may be aggressive or invasive in a waterfront environment depending on the climate in your region.
- Be careful not to disturb the area below the high water mark, including vegetation growing in the foreshore. Plants which grow in the water play a very important role in aquatic habitat and filtration.
- Buyer Beware: Be sure to obtain all relevant documents and materials (including a Certificate of Title and confirmation of property boundaries) and consult with the Local Government before purchasing lake-shore property. You may discover other federal and provincial land resource use requirements in addition to those of the Local Government.



RESPECT YOUR SURROUNDINGS

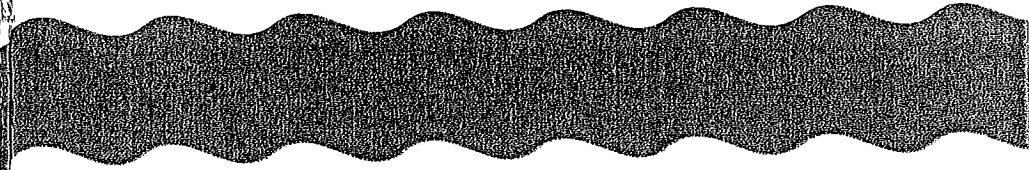
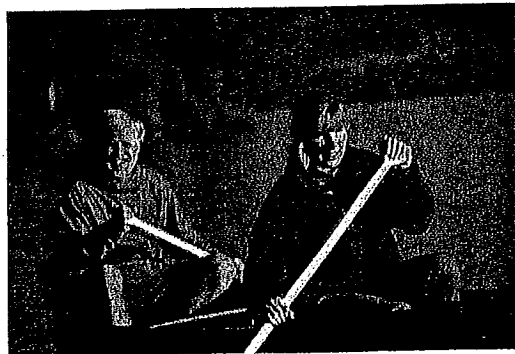
One of the perks of lakeshore properties are the recreational amenities. If we are not careful, however, we can impact the environment, including the habitat and lifestyle of plants and animals.



CO-EXIST WITH OTHER YEAR-ROUND LAND USES WHICH MAY BE LOCATED NEARBY SUCH AS AGRICULTURE, FORESTRY AND RECREATION. MAKE SURE YOU ARE COMPATIBLE WITH THEM BY USING BUFFER STRIPS, FENCING, SCREENING, AND SETBACKS. ACKNOWLEDGEMENT AND ADAPTATION TO THESE ACTIVE RESOURCE USES WILL HELP IMPROVE YOUR LAKESHORE EXPERIENCE.

Respecting your surroundings means:

- Locate your septic system as far from the water as possible even if you have to pump effluent uphill.
- Be aware of heritage sites and archaeological resources. Cultural and historic sites may exist or may be found in the vicinity of a lake and hold special value for First Nations and other groups. Protection and respect for these resources must be exercised.
- Acknowledge the riparian area as a wildlife movement corridor, as sensitive habitat and as protection for adjacent fish habitat.
- Retain dead and dying trees in or along the water to help protect the shoreline or stream bank from erosion.
- Share the lake by incorporating a public trail near the lake's edge, while considering the impact on the riparian area.
- Prepare for wildfire by fire smarting your property and familiarizing yourself with evacuation routes in case of an emergency.



FORMING A RESIDENTS ASSOCIATION

WHY FORM A LAKESHORE RESIDENTS ASSOCIATION?

There are many reasons why Lakeshore residents group together to form an Association. These include:

- To protect, monitor, and enhance all aspects of the lake and the surrounding area from damage to its ecological balance, through education, co-ordination, and co-operation.
- To increase quality of life on the lake, and provide representation to government bodies.
- Greater community spirit, including annual recreational events.
- Monitor and increase bylaw and stewardship compliance.
- Affiliation with the BC Lake Stewardship Society or other organizations having an interest in environmental management.

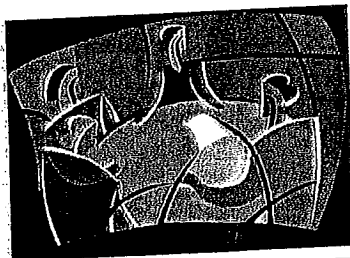
WHERE DO YOU BEGIN?

Take a stand and spread the word! Call a few neighbours, and discuss the idea of a residents association.

Some questions to ask are:

- Who would be eligible – seasonal or year-round residents, or temporary users?
- How many people will form the group?

Trying to maintain balanced representation can be challenging.



Establish the association.

Identify each other's interests and potential roles for the association and its members – 'What do we each want or need to get out of the association?'

Identify what group members or external agencies can offer.

'What are we bringing to this group or project?' It will be useful to consider what your group can offer to contributing agencies.

How do you want to operate?

Discuss things such as how decisions will be made, how to communicate between yourselves, and externally (i.e. media), protocols to be observed by all members, etc.

Discuss group structure.

Duties in a more formal group structure may include a chair, a spokesperson, a secretary, and a treasurer. Discuss records management.

Create a mandate through a vision, mission, goals, and objectives.

Contact the BC Lakeshore Stewardship Society for more information on membership and sponsorship.

MAINTAINING THE MOMENTUM

Once your Association has been established, keeping up the motivation and enthusiasm of the group is important.

Signs of an effective group include:

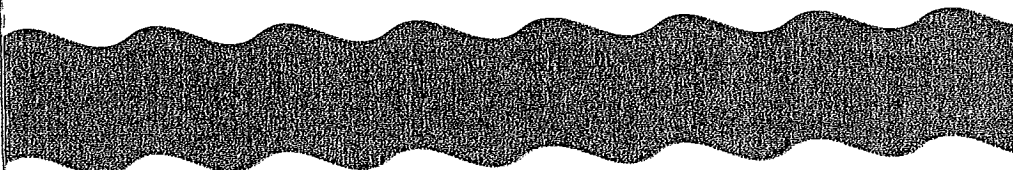
- Regular, two-way communication
- Inclusive processes for planning and decision-making
- Shared workload / participation of all members is encouraged
- Dealing with conflict when it arises
- Checking progress regularly

Signs of an ineffective group include:

- Inconsistent communication between members
- Burnt out members
- Tasks are not delegated
- Conflicts are avoided or not dealt with
- Membership is declining

Successful groups or associations may take a while to form.

GOOD LUCK!



Contacts

Following is a list of local government and relevant resource contacts in case of an emergency or for further information:

Thompson-Nicola Regional District (TNRD)	1-877-377-8673 www.tnrd.bc.ca
Ministry of Agriculture and Lands	1-800-663-7867 www.gov.bc.ca/agf/
Boating Safety Infoline	1-800-267-6687
Ministry of Environment (MOE)	1-800-663-3456 www.gov.bc.ca/env/
Provincial Emergency Program	1-800-663-3456 www.pep.bc.ca/
Department of Fisheries and Oceans (DFO)	1-800-667-3355 www.dfo-mpo.gc.ca
BC Lake Stewardship Society	250-225-2537 www.bclss.org
Federation of BC Naturalists	604-737-5037 www.naturalists.bc.ca
Recycling Council of BC (Hotline)	1-800-667-4321 www.rcbc.bc.ca
BC Wildlife Federation	604-533-2293 www.bcwf.bc.ca
Interior Health Authority	250 851-7374 www.interiorhealth.ca
BC Conservation Officer Service	1-800-663-9453 www.gov.bc.ca/env/
North American Lake Management Society	www.nalms.org/
Wildfire (Ministry of Forests)	1-800-663-5555

Further Reading

The following resources were used in compiling this manual:

TNRD Lakeshore Development Guidelines

On the Living Edge: Your Handbook for Waterfront Living

BC Lake Stewardship Society

BC Lake and Stewardship Monitoring Program Stream Stewardship: A Guide for Planners and Developers

Additional Lakeshore Stewardship Resources:

Canada's Stewardship Agenda: Naturally Connecting Canadians

Riparian Area Regulations (MOE)

A Users Guide to Working in and Around Water (MOE)

The Dock Primer / The Shore Primer (DFO)

Homeowners Firesmart Manual

Watershed Stewardship for Agriculture

Community GreenWays: Linking Communities to Country, and People to Nature

Home Tips for Clean Streams

Developing Fish Habitat Signage: A Guide for Community Groups and Concerned Citizens