

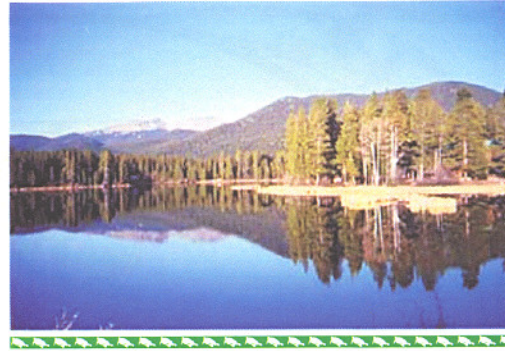


County of Wetaskiwin No.10

Managing Your Waterfront



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The waterfront is critical to the health of your lake. Understanding its intricate ecological role will clarify its need for conservation. This brochure's intention is to increase the awareness of pressing issues which will eventually impact lake vitality and then to suggest various practices that would improve the state of current waterfronts.

There are four components to the natural shore, with varying functions and needs. Maintaining the health of these zones as a collective unit will benefit both nature enthusiasts and those simply wanting to maintain or improve property values.

The littoral zone is the area from the water's edge to a depth where sunlight can no longer penetrate the lake bottom. An estimated 90% of lake species either live in or pass through this area, making it a crucial component to maintaining wildlife vitality. The best way to maintain its health is to interact with it as little as possible. For example, leave trees where they fall, as they provide desirable

habitat. Also, avoid bringing sand in to make a personal beach. When it erodes, it smothers spawning areas for fish which impacts their populations and others as it ripples through the food chain.



The shoreline is the place where land and water meet and is a major barricade against erosion. Removing vegetation allows silt and sediment to erode into the water, again damaging spawning

grounds. The usual solution is to install a rock or concrete breakwall. However, this converts a lively waterfront into a sterile environment. To maintain shore vitality, leave natural vegetation as is both on shore and in water. And most importantly, do not install a breakwall.

The riparian zone is the section of land closest to the shore, while the upland zone is higher up and typically forested, with roots helping to stabilize soil. Together, these two zones form a very effective contaminant barrier allowing approximately only 10% of runoff to actually make it to the lake. Without them, various pollutants such as seepage from septic tanks, fertilizers, and pesticides are carried into the lake during heavy rainfall events.

There are numerous things you can do as an owner of property to maintain these

naturally effective 'contaminant barriers'. First of all, minimize potential pollutants by avoiding fertilizers and pesticides, and upkeep the septic system with regular pump outs. Maintain as much native riparian and upland vegetation as possible and keep introduced gardens away from the lake. Choose permeable surfaces for landscaping purposes, such as gravel or woodchips, rather than concrete. And when building, replant disturbed areas as quickly as possible.

While maintaining a natural shore will help improve the quality of your waterfront, it is not the only requirement. Intensely manicured lawns are also a major barrier of which to overcome in order to improve the health of our lakes. Not only do lawns displace natural plants that protect the lake, they are also often maintained with large amounts of fertilizers. However, some lawns have less of an impact than others.



There are a number of basic guidelines to reduce the impact of your lawn. For example, allowing the grass to grow a minimum of 7 cm will help to conserve

soil moisture and grass clippings can be used to fertilize your sod rather than chemicals. An even better alternative would be to grow grass all summer and knock it down once a year to keep trees and shrubs out.

However, for many, doing away completely with your nicely manicured lawn all at once may be too drastic a move. Perhaps an intermediate step would be to establish a buffer zone between the lake and the lawn. The best way to go about this is to simply stop mowing the lawn. This will allow native species to colonize the area. Further, a transition zone between the buffer and the manicured property increases the functionality of the buffer and improves aesthetic appeal.

Shore-friendly docks are also an option. The top environmental choice is the floating dock as it causes the least disturbance to the lake bottom. This type of structure provides fish cover, but does not alter water currents. The safest building materials are untreated wood, such as cedar, fir, or hemlock. You can further reduce your dock's impact by choosing a site with little or no vegetation.

The importance of proper waterfront management can not be stressed enough. After all, it is the ecological services provided by this transitional zone that sustain lake vitality. As well, "working with nature is cheaper and easier than working against it," (Fisheries and Oceans Canada).



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