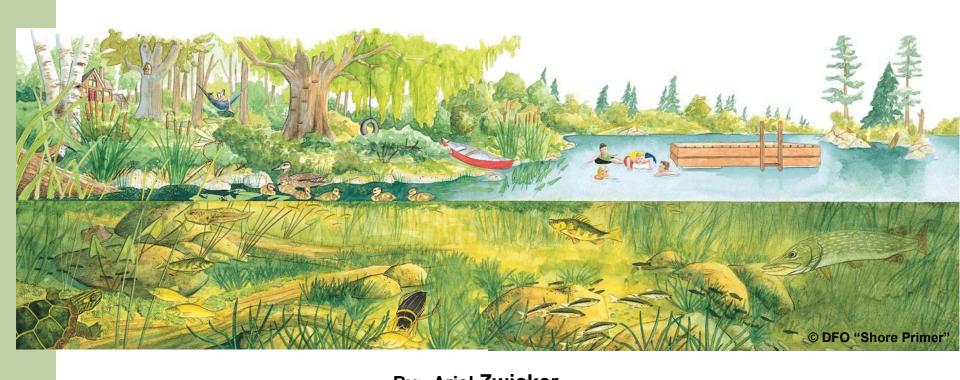


Shoreline Values & Work Permits



By: Ariel Zwicker

Lands & Waters Technical Specialist

May 2, 2015.



Why Are Shore Lands Important?

- Shore lands often referred to as "the Ribbon of Life" because 90% that is where all lake and river life is born, raised and fed.
- Littoral zone is the most productive area.
- Interchange between land and water and supports a complex web of life.
- Diverse plant community supports a high invertebrate production.
- Fish and invertebrates support birds and mammals.
- Habitat connectivity.
 - Travel Corridors
 - Feeding Areas
 - Basking Areas
 - Breeding Habitat
 - Nursery Habitat

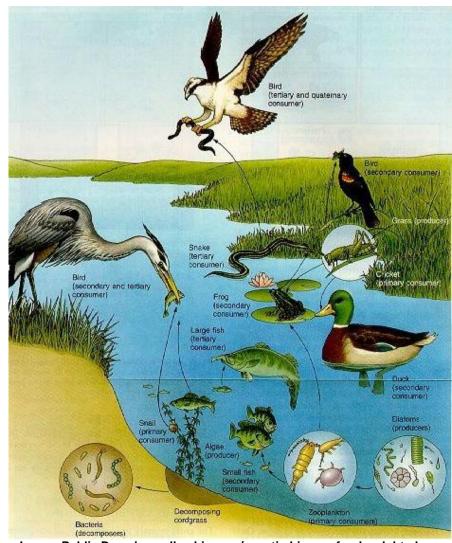
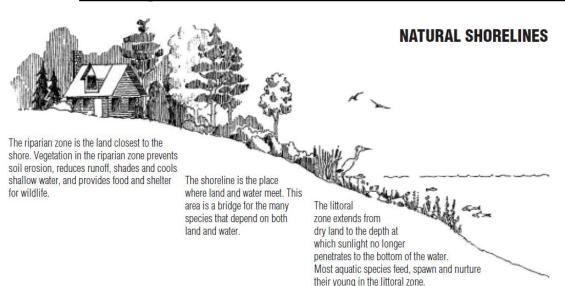
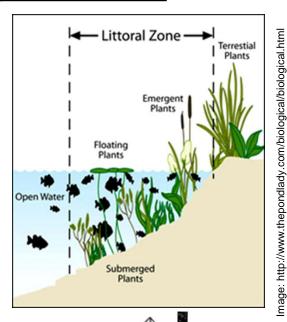


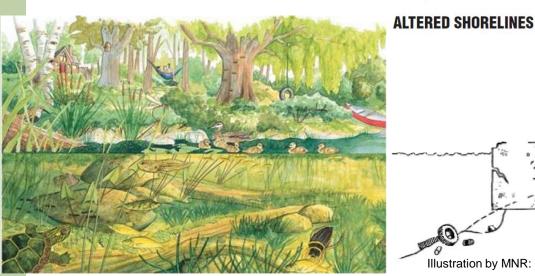
Image: Public Domain - galleryhip.com/aquatic-biomes-food-web.html



Why Are Shore Lands Important?







Retaining walls destroy
littoral zones. Waves deflected off retaining walls stir up toxic sediments and destroy vegetation.

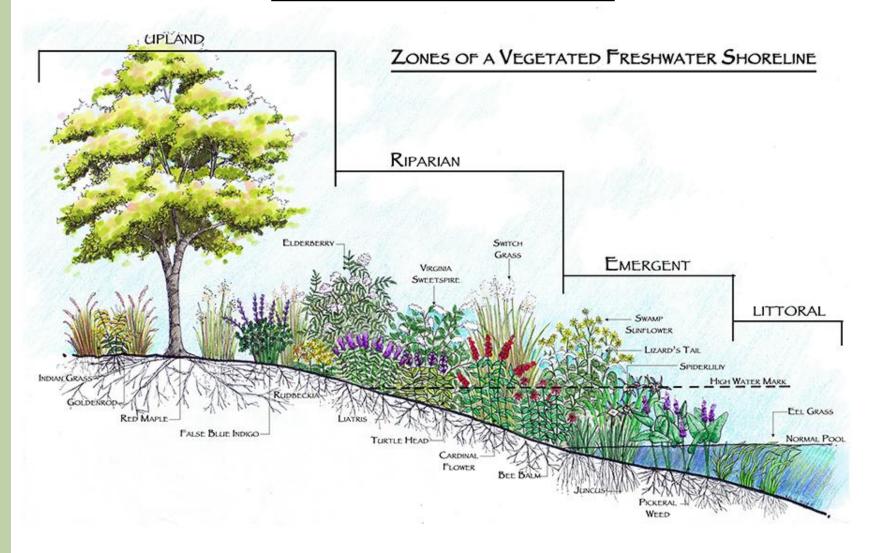
The destruction of natural shorelines removes the protective travel corridor that many species rely on in their journeys between land and water.

Planting lawns and nonnative species destroys wildlife habitat and contributes to soil erosion and reduction of water quality.

Illustration by MNR: http://www.lrconline.com/Extension_Notes_English/pdf/shrlns.pdf



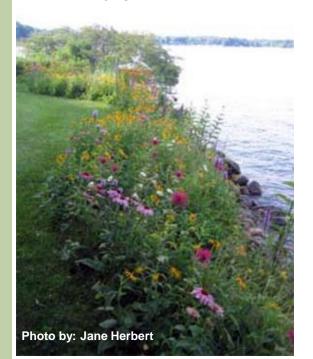
Beautiful Buffers





Maintain your view, have a buffer too!

- Aster
- · Black eyed susan
- Bee Balm
- Swamp rose
- · Blue flag iris
- Cardinal flower
- Joe Pye Weed
- Cone flower
- Red Osier Dog wood
- Willows



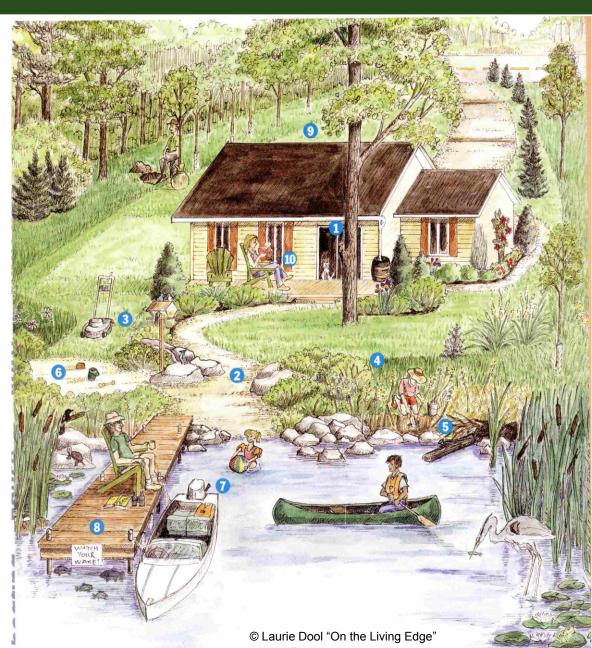
Low growing herbaceous flowers and shrubs can be used to establish a buffer in areas to maintain views.





Best Practices

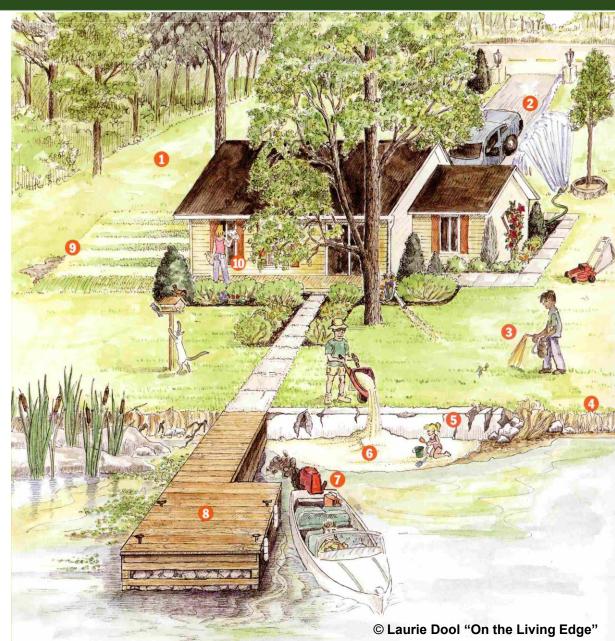
- 1. Prune Trees: don't remove them.
- 2. Replace solid surfaces with porous materials to absorb run off.
- 3. Leave grass 3 inches high so grass doesn't dry out.
- 4. Leave a vegetation buffer along the shoreline. Plant native trees/shrubs to reduce run off/erosion.
- 5. Don't "armour" your shoreline, use natural materials and vegetation for erosion control.
- 6. Create dry land beach above the HWM.
- Use an electric motor, or 4 stroke motor that exceeds EPA guidelines.
- Docking: use steel piles, or floating to minimize impact to fish habitat.
- Properly maintain your septic system.
- 10. Use biodegradable and natural cleaning products without phosphates of harsh chemicals.





Poor Practice

- Cleared lot, no buffer of vegetation.
- Solid surfaces accelerate erosion, allow pollutants and silt to transport into lake.
- Chemical fertilizers and pesticides runoff and degrade water quality.
- 4. Lawn to the waters edge is susceptible to erosion, slumping and does not filter runoff.
- 5. Hardened shorelines deflect erosion downstream, eliminates natural filtering and degrades habitat.
- 6. Artificial beaches: Sand washes away & deposits elsewhere, clogs water lines, may create navigation hazards, and destroy fish habitat.
- 7. 2 stroke engines dumps 25-40% of fuel into water and air.
- 8. Cribs occupy habitat and alter currents.
- 9. Malfunctioning septic seeps phosphorous and bacteria into waterways.
- 10. Household chemicals impact water quality.





MNRF Work Permits

- Public Lands Act (PLA)
 - Shore land work
 - Roads & buildings on Crown
- Lakes and Rivers Improvement Act (LRIA)
 - Dams
 - Channelization's, diversions
 - Bridges & some culverts.
- Provincial Parks & Conservation Reserves Act (PPCRA)
 - Works within Parks
 - Works within Conservation Reserves

Other Agency Legislation:

- Fisheries Act
 - Department of Fisheries & Oceans (DFO)
- Species at Risk Act (SARA)
 - DFO for aquatic Species
- Navigation Protection Act
 - Transport Canada
- Planning Act
 - Municipalities
- Canadian Constitution
 - Reaffirming Aboriginal & Treaty Rights
- Ontario Heritage Act
 - Ministry of Culture & Heritage



When Do I Need A Permit? Public Lands Act

Applies to:

Crown Land and

Crown or Private Shore Lands



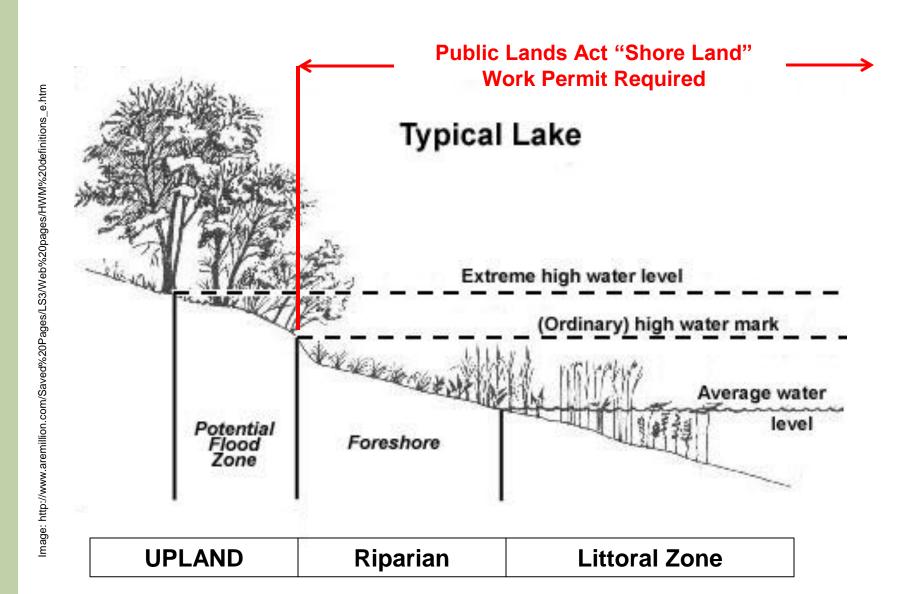
Public Lands Act Ontario Regulation 239/13

- No Person Shall:
 - a) Construct a building (on Crown land)
 - b) Construct a trail, water crossing or road (on Crown land)
 - c) Dredge shore lands
 - d) Fill shore lands
 - e) Remove invasive/native aquatic vegetation by mechanical means or by hand from shore lands
 - f) Construct or place a combination of structures occupying more than 15 square metres (160 sq/ft)

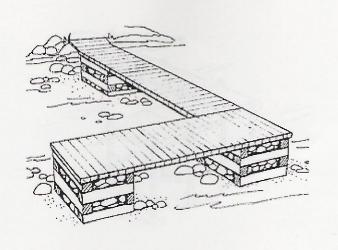
Unless acting under the authority of the terms and conditions of a work permit or instrument granted under the act authorizing the activity.

"Shore lands" are defined as lands covered or seasonally inundated by the water of a lake, river, stream or pond and may include private, municipal or Crown lands.









Does This Dock Need a Permit?

2 Cribs each measuring 8ft x 8ft1 New Crib Proposed 8ft x 8ft

Yes

TOTAL Combined Area = 192 square feet (18.7m²)

Minimum Standards:

Cribs must be a minimum of 6 feet off shore

Cribs must be spaced a minimum of 6ft apart from all cribs.

Crib to decking ratio shall not exceed 50%

Crib rock must be clean and obtained from above the HWM.

No Pressure treated wood in water

Check with local municipalities for setback from side lot lines.

Must follow MNRF timing window for installation.



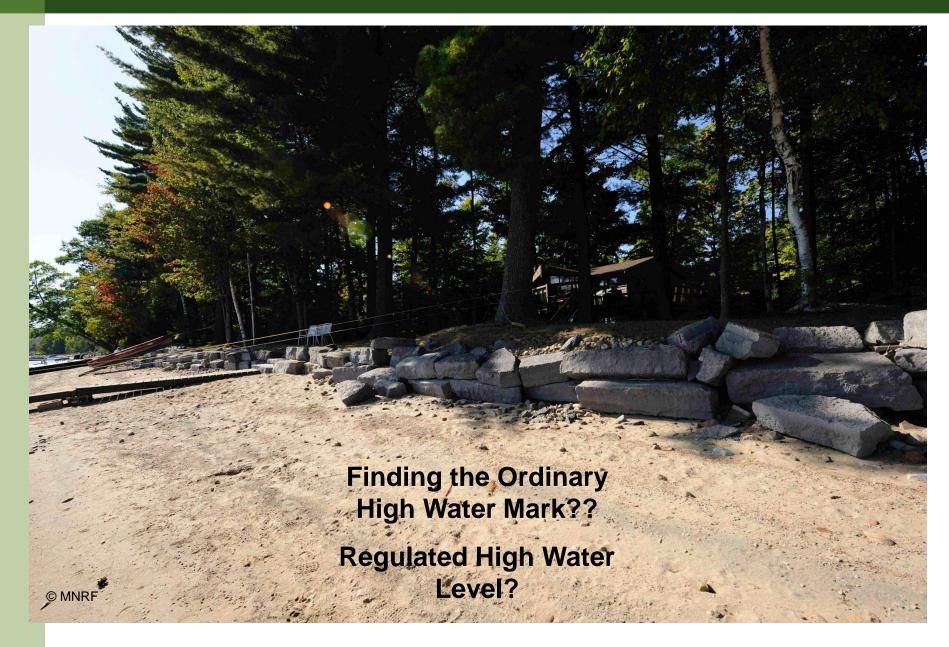
Filling Shore Lands



Filling shore lands is only approved when shoreline stabilization Is required in eroding areas.

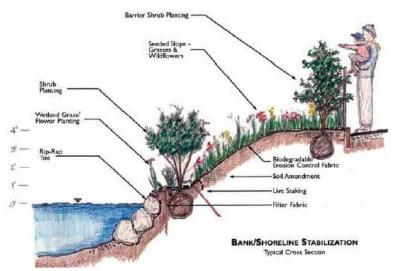
Filling to "reclaim" land or to create recreation areas is NOT approved.

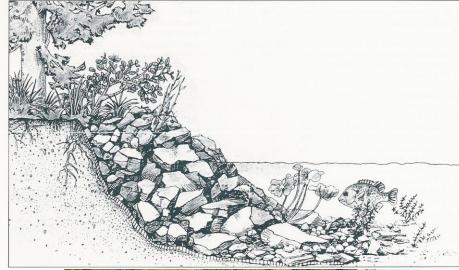






Let's Keep It Nature Friendly!!



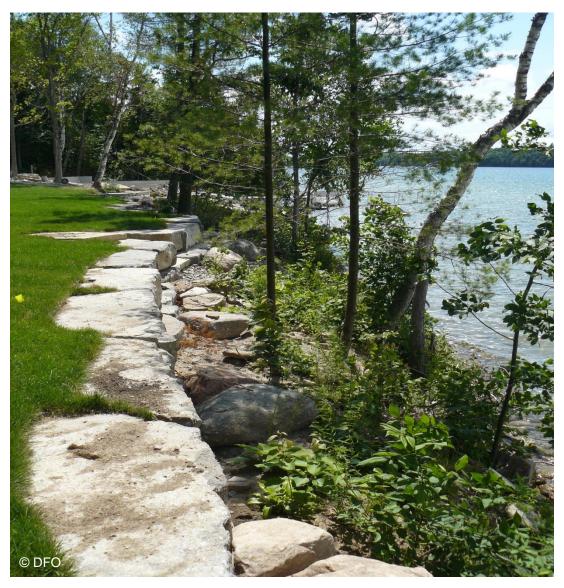


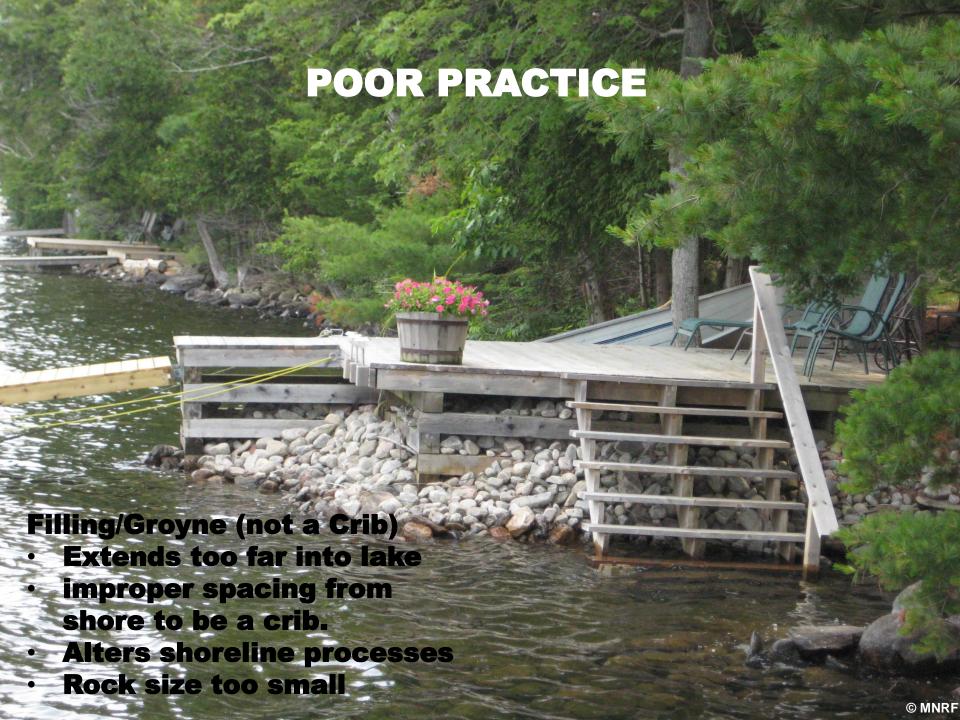






Excellent Shore Protection





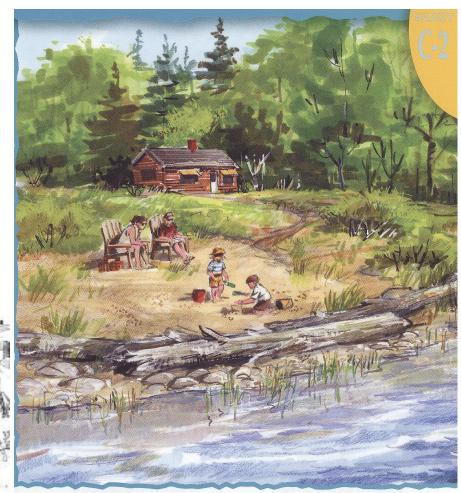


What if my Client Wants a Beach?

A Work Permit is Required "Filling Shore Lands"

Best Management Practices: Upland beaches, located entirely above the high water mark, with a buffer to prevent runoff into the lake.





© DFO "Fact Sheet C-2"



Roads, Trails & Water Crossings

- If proposed road crosses private or municipal property, must have written permission from land owner or municipality.
- Review of Roads usually requires:
 - Environmental Impact Study
 - Mitigation (eco passages)
 - Alternative routes
 - Timing restrictions
 - Public Consultation
 - Water Crossings
 - Engineering to confirm it passes flows Q25.

- Roads not approved if:
 - There is all ready a road to the property.
 - If policy says No New Roads (CLUPA, CR's, Enhanced Management Areas).
- If approved Must sign MOU
 - Liability of road and crossings,
 - Inspection requirements
 - Maintenance requirements
 - Requirement to keep open to public



When Do I Need a Permit? Lakes & Rivers Improvement Act

Applies to Crown Land and Private Land



Legislative Framework

Lakes & Rivers Improvement Act (LRIA)

Two Phase Approval Process:

1. Location Approval:

Subject to ecological review.

2. Engineering Approval:

After location approval has been issued, the plans & specification drawings must be stamped by the clients engineer and submitted for final approval by MNRF engineering branch.

| LRIA APPROVAL REQUIREMENTS | | | | | |
|--|----------------|-----------|---------|--|--|
| | | | | | |
| Project Type | Land Ownership | | | | |
| BRIDGES | Crown | Municipal | Private | | |
| | | | | | |
| Drainage Area < 5 square kilometres | R | NR | NR | | |
| Drainage Area > 5 square kilometres | R | NR | R . | | |
| | | | | | |
| CULVERTS | | | | | |
| COLVERIS | | | | | |
| Length < 20 metres & drainage area <5 sq. km. | R | NR | NR | | |
| Length < 20 metres & drainage area >5 sq. km. | R | NR | R | | |
| Length > 20 metres | R | R | R | | |
| | | | | | |
| OTHER | | | | | |
| Dams, Channelizations, Diversions, By-Pass | | | | | |
| Ponds, In-Stream Ponds. | R | R | R | | |
| 1 olds, m-oticali i olds. | K | X | K | | |
| Agricultural Drains (maintenance & new | | | | | |
| installations). | NR | NR | NR | | |
| | | | | | |
| Trenching for Heat Loop Installations, Water | | | | | |
| Intakes, Service Cables for Private Residences | NR | NR | NR | | |
| Turnilia in a T. I. Di C. C. | | | | | |
| Trenching into a Lake or River for Commercial | | | | | |
| or Industrial Cables or Pipelines (where | R | R | R | | |
| excavation is required). | | | | | |



When Do I Need a Permit? Provincial Parks & Conservation Reserves Act

Applies within:

Designated Conservation Reserves
Designated Provincial Parks



Provincial Parks and Conservation Reserves Act (PPCRA)

Section 22(1) PPCRA

- Except in accordance with the terms and conditions of a work permit issued under this Act, no person shall, in a provincial park or conservation reserve, cause or permit,
 - (a) the construction, expansion or placement of any building, structure or thing;
 - (b) the construction of any trail or road;
 - (c) the clearing of any land;
 - (d) the dredging or filling of any shore lands; or
 - (e) any activity permitted under section 17, 18, 19 or 20 that causes, results or is expected to result in a major disruption or impairment of the ecological integrity of a provincial park or conservation reserve. 2006, c. 12, s. 22 (1).
- Section 22(2) For greater certainty, a work permit is required for activities described in subsection (1) even if the lands are occupied under the authority of a lease, land use permit or a licence of occupation.



Work Permit Timing Windows

Fisheries can suffer severe losses if work in water is conducted during a critical phase of their life cycle (spawning and incubation).

To eliminate impacts to fish, MNRF will apply a timing restriction for the work authorized under the work permit.

MNRF may also apply a timing restriction for Species at Risk.

April 1 – July 15 Restriction for

- Spring spawners:
 - Pike,
 - Muskie,
 - Bass,
 - Walleye
 - Suckers
 - Rainbow Trout

October 1 – July 15 Restriction for

- Fall spawners:
 - Lake Trout, Brook Trout
 - Whitefish
 - Herring

Cold water rivers & streams:

October 1 – July 15 restriction.

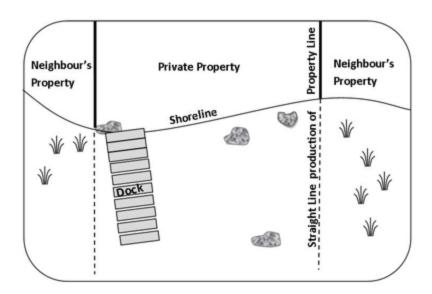


No Permit Required Public Lands Act Exemptions

These exemptions do NOT apply within:
Designated Conservation
Reserves, or
Designated Provincial Parks

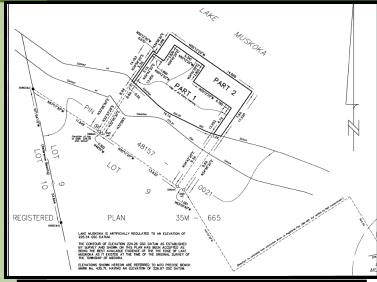


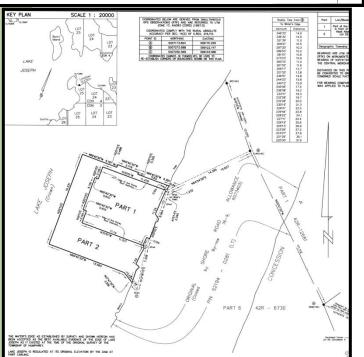
- Dredging of shore lands previously dredged if:
 - Initial dredge was on or after January 1, 2009
 - No later than 5 years after the previous dredge
 - You can only conduct work on shore lands directly in front of your property

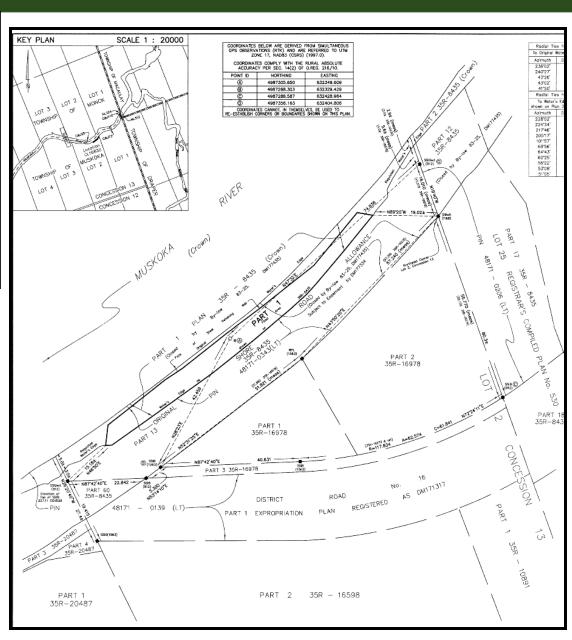


Ministry of Natural Resources











- Removal of <u>invasive</u> aquatic vegetation from shore lands
 - Exemption only applies if the work is directly in front of your private property, and
 - Must be "invasive" as defined by Regulation:
 - "invasive aquatic vegetation" means: plants listed in the document entitled "Ontario's Invasive Aquatic Plant List" and dated March 11, 2013, that is published by the Ministry (list available on MNRF website), and
 - Must follow the conditions in the Regulation (found on the website).
 - All cut or uprooted vegetation must be immediately and permanently removed from the water, and,

- Brazilian Waterweed
- Curly-Leaved Pondweed
- Eurasian Water-Milfoil
- Eurasian and Northern Milfoil hybrid
- European Frog-Bit
- European Lake Sedge
- European Water Chestnut
- Fanwort
- Flowering Rush
- Hydrilla
- Parrotfeather
- Phragmites (European Common Reed)
- Purple Loosestrife
- Rough (Great) Manna Grass
- Yellow Iris
- Water Hyacinth
- Water lettuce
- Watermoss-Salvinia species
- Water Soldier



- Relocating rocks on shore lands
 - Rocks must not be removed from water, and
 - must be distributed randomly so not to create an erosion control structure from forming
 - Area must be perpendicular to the shoreline and not to exceed 6 meters in width

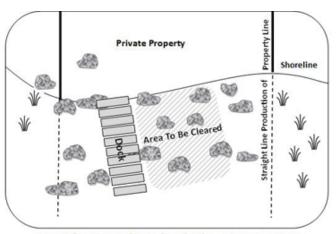


Fig. 1 Relocating Rocks on Shore lands — Existing Features

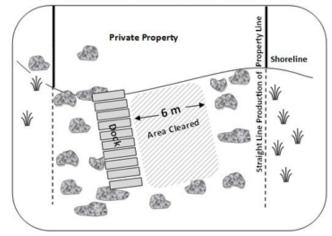
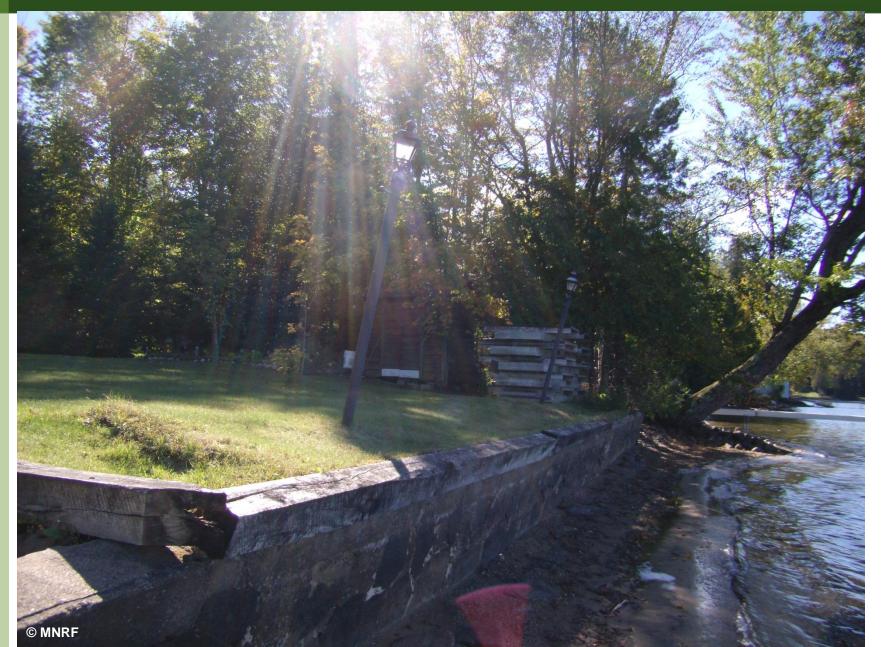


Fig. 2 Relocating Rocks on Shore lands — Exempted from Work Permit



- Construct buildings in a mining claim
 - Must be on your registered claim.
 - You must be a Licensed Prospector in Ontario
 - Must REGISTER this activity on the MNRF online Registry
 - Must follow the conditions in the Regulation (found on the website).
- Maintenance, repair or replacement of erosion control structures on shore lands
 - Footprint of new erosion control structure MUST be the same footprint as the existing erosion control structure
 - Exemption only applies if the work is directly in front of your private property.
 - Must REGISTER this activity on the MNRF online Registry
 - Must follow the conditions in the Regulation (found on the website).
 - Sediment controls to be used if necessary (if there is excavation)
 - Excavation equipment to be operated on land or barge







Exempt From A Work Permit, But Required To Register

How to Register:

- Step 1: Download the Natural Resources Registration Guide
 - Print Paper Copy OR Complete Online
- Step 2: Create a ONe-key ID and Natural Resources client profile
 - Only needed when registering online
- Step 3: Register an activity
- Step 4: Receive confirmation

Always register your work with MNRF at least 10 business days before work begins!



Exemptions- Conditions to be Followed

- Person must be the owner of the waterfront property adjacent to the shore lands.
- Activity must be carried out within the straight line production of the sidelines of the waterfront property.
- If activity is likely to disturb sediments, sediment controls must be installed before work begins and remain in water until after the area has stabilized
- Wheeled or tracked machinery or equipment must be operated and stored on dry land or on a barge
- In water work related to the activity must be carried out during the timing windows when in-water work related to the activity is restricted, as determined in accordance with the In-water Work Timing Window Guidelines (On MNRF Website).

For Exemption specific conditions, please see
Public Lands Act Ontario Regulation 239/13 OR
https://www.ontario.ca/environment-and-energy/crown-land-work-permits



In Water Work Timing Window Guidelines

Table 1. Timing windows when in-water work is restricted – based on species presence and MNR Region

| | Fish Species | Northwest Region | Northeast Region | Southern Region |
|--------|--|--------------------|--------------------|--------------------|
| Spring | Walleye | April 1 to June 20 | April 1 to June 20 | Mar. 15 to May 31 |
| | Northern Pike | April 1 to June 15 | April 1 to June 15 | Mar. 15 to May 31 |
| | Lake Sturgeon | May 1 to June 30 | May 1 to July 15 | May 1 to June 30 |
| | Muskellunge | May 1 to July 15 | May 15 to July 15 | Mar. 15 to May 31 |
| | Large/Smallmouth Bass | May 15 to July 15 | May 15 to July 15 | May 1 to July 15 |
| | Rainbow Trout | April 1 to June 15 | April 1 to June 15 | Mar. 15 to June 15 |
| | Other/Unknown Spring Spawning Species | April 1 to June 15 | April 1 to June 15 | Mar. 15 to July 15 |
| - " | | | | |
| Fall | Lake Trout | Sept. 1 to May 31 | Sept. 1 to May 31 | Oct. 1 to May 31 |
| | Brook Trout | Sept. 1 to June 15 | Sept. 1 to June 15 | Oct. 1 to May 31 |
| | Pacific Salmon | Sept. 1 to June 15 | Sept. 1 to June 15 | Sept. 15 to May 31 |
| | Lake Whitefish | Sept. 15 to May 31 | Sept. 15 to May 15 | Oct. 15 to May 31 |
| | Lake Herring | Oct. 1 to May 31 | Oct. 1 to May 31 | Oct. 15 to May 31 |
| | Other/Unknown Fall Spawning Species | Sept. 1 to June 15 | Sept. 1 to June 15 | Oct. 1 to May 31 |

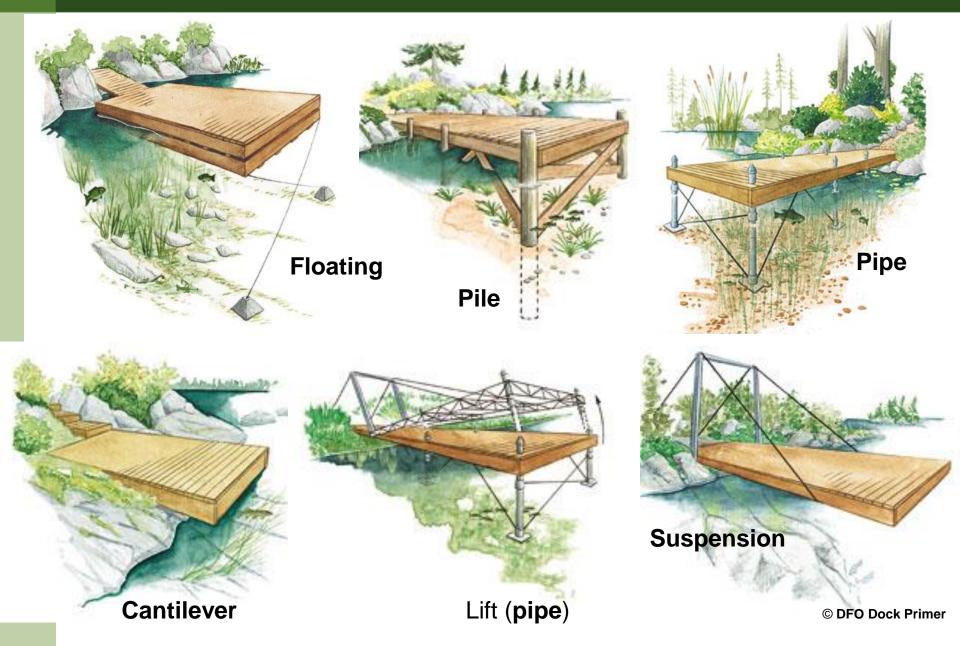


Do I Need a Permit?

A Work Permit is **NOT** required for the following:

- boatlifts and marine railways hand laid (no dredging)
- docks: on posts, piles or stilts, floating, or cantilevered over the water
- crib docks where the crib or combination of cribs (i.e., footprint on lake bottom) occupies <u>less</u> than 15 sq m (160 sq ft), and clean rocks from dry land are used
- removal of old docks and boathouses (crib rock left untouched)
- minor or routine repairs to existing structures
- municipal and private water crossings enclosing <u>less</u> than 20 m of culvert length and draining an area <u>less</u> than 5 sq km
- residential water intakes or heat loops
- Minor road maintenance







Public Lands Act Ontario Regulation 239/13

- Minor maintenance activities carried out on trails, water crossings or roads include:
 - a) Water crossing cleaning for the purpose of maintaining the flow of water
 - b) Superficial grading on trails and roads
 - c) Clearing of existing ditches
 - d) Spot gravel
 - e) Clearing and brushing of existing road or trail surface
 - f) Snow plowing
 - g) Sanding or dust control
 - h) Repair of replace postage signage



Who do I call for a Work Permit?

For general questions, check the website first.

MNRF is first point of contact.

Ministry of Natural Resources and Forestry Parry Sound Office 7 Bay Street Parry Sound, Ontario, P2A 1S4 Tel: (705) 746-4201 Fax: (705) 746-8828

Parry Sound Lands & Waters Program Staff:

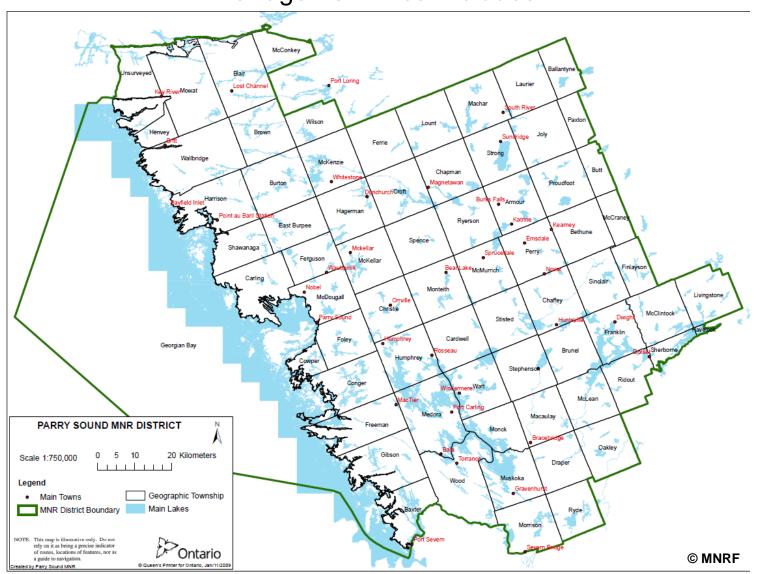
- Ariel Zwicker
 Lands & Water Technical Specialist
 (705) 773-4254
 ariel.zwicker@ontario.ca
- Dean Timson
 Lands & Water Technical Specialist
 (705) 773-4206
 dean.timson@ontario.ca

Other agencies with approval requirements:

- Department of Fisheries and Oceans Canada (DFO)
 - MNRF refers all in water work permit applications to DFO.
- Conservation Authority (none in Parry Sound-Muskoka District)
- Municipality
 - Building permits (docks and boat houses)
 - Bylaws (site alteration, zoning)
 - Official Plan
 - Ownership (shore Rd Allowances)
- Ministry of Environment (MOE)
 - Permit to take water
 - Herbicide removal of aquatics
 - Large scale dredging



Parry Sound District Management Area Includes:





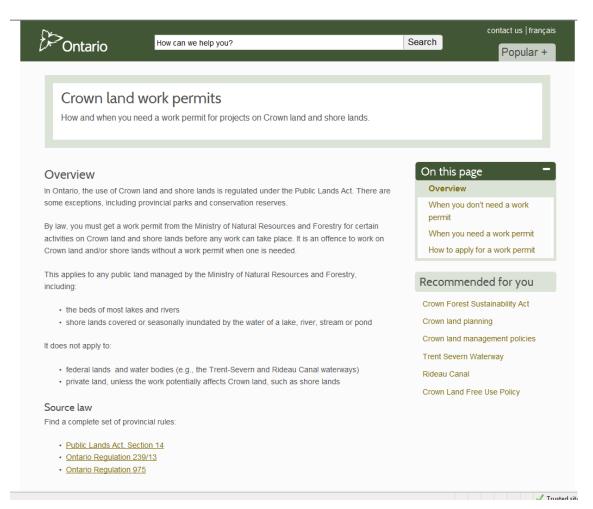
Finding MNRF Work Permit INFO Online

Step 1: www.ontario.ca

Step 2: Search "Crown Land Work Permits"

Step 3: Select Crown Land Work Permits

OR Google: "MNRF Work Permits"



https://www.ontario.ca/environment-and-energy/crown-land-work-permits



Applying for a Work Permit

- What Do I Need To Submit?
 - Proof of Ownership
 - PIN Form & Survey of property
 - Cover letter (rational/justification)
 - Map directions to property
 - Sketches with dimensions
 - Must show EXISTING and PROPOSED
 - Overview and cross section sketches
 - Snow free photos of work area
 - Municipal comment form
 - Neighbours comments

Full application package with checklist available by email.

Important Points to Remember:

- The <u>LAND OWNER</u> is the "applicant"
- NOT their contractor /planner/agent
- Must have land owners signature on application & declaration of agent letter.
- Must have land owners phone and mailing info
 - MNRF may identify other issues with the site such as:
 - illegal filling,
 - occupational authority requirements, or
 - arrears owing to the Crown.
 - MNRF must deal directly with land owner to resolve these issues.



Environmental Assessment Act

MNRF Class EA:

- Class EA RSFD
 - PLA permits
 - LRIA Permits
- Class EA PPCRA
 - PPCRA permits
- Purpose of EA to ensure all potential impacts are considered:
 - Ecological
 - Social
 - Cultural
 - Economic

- MNRF required by law to fulfill this process.
- EA regulated by Ministry of Environment & Climate Change
- MNRF may require proponent to complete components of EA:
 - Aboriginal Consultation
 - Public & Stakeholder Consultation
 - Environmental studies
 - Archeological investigation
 - Engineering



How Long Does it Take?

 Must have a complete application to begin review.

12 weeks for standards PLA apps

No Guarantee of approval.

- Longer for larger or more complex projects:
 - Roads
 - Large Dredge
 - ESA triggers
 - Need for consultation
 - Environmental studies
 - Engineering
 - Tenure requirements



Questions?