Worksheet #3 - Before and During Construction on Water

Use this worksheet to assess opportunities and constraints for planned construction in the water.

Why should you be concerned?

• Your shore line is part of a larger landscape. This “ribbon of life” where the water meets the land provides vital habitat for many wildlife species including spawning areas for fish. Any project you do may not only affect you and your immediate neighbours but also impact people and wildlife farther away.

• The water level of Georgian Bay fluctuates greatly. With a change in wind direction, water levels can fluctuate 20 centimetres in less than two hours. Seasonal changes from historic high to low have, over a couple of decades, swung almost two metres. It is prudent to keep these facts in mind when planning to build.

• Under low water conditions, much of your shoreline may actually be dry lakebed. Almost all lakebed is owned by the Crown including these dry portions. You should confirm ownership before starting construction.

• Shorelines and lake beds along the shore are protected under the Federal *Fisheries Act.* It is your responsibility to ensure that you do not “harmfully alter, disrupt, or destroy” fish habitat. Offenders may be substantially fined or face criminal charges and be required to restore the shore line to its previous state. Shorelines are also protected by the Public Lands Act ; boathouses or docks with crib structures over 161 sq ft, all dredging, filling and shoreline stabilization require work permits. The MNR reviews applications to ensure the protection of wildlife and provincially significant wetlands.

What you can do.

1. Make a plan. Include weed beds, gravel and rock areas, old crib and dock ruins.

2. Realize that shoreline alterations can have a negative impact on fish and other wildlife that use the lake.

3. Before making any alterations, to your shoreline such as building, repairing or renovating a dock or boathouse:
- → Contact your municipality to determine if you need a building permit.
- → Contact the MNR to determine if you require a work permit (issued under the Public Lands Act)
- → Contact the Federal Department of Fisheries and Oceans for advice relating the impact of your project on fish habitat and applicability of their “Operational Statement” to your project. (See Resources List at end of this section.)

4. Protect yourself. Keep records and copies of permits.

5. If you must build a dock, please consult *The Dock Primer-Ontario Edition* produced by the Department of Fisheries and Oceans.

6. Be a land and water steward. Keep the shoreline in its natural condition. Fish and other aquatic life need weed and rock beds. Natural shorelines also reduce the risk of erosion and, as a result, help protect water quality.

7. Gales and storms blow through this latitude beginning in late August to November. It is wise to estimate how these storms might affect your docks and boathouses and plan accordingly.

Before and During Construction on Water: How do you rate?

Topic	Best 4	Good 3	Fair 2	Poor 1	Your Rating
PERMITS AND REGULATIONS					
1. Knowledge and understanding of application process	Planning begins the year before work is to begin. Check with local municipality and provincial and federal authorities respecting permit requirements.		No planning involved and an immediate start expected.	No permit obtained.	☐
PREPARING A SITE PLAN					
2a) Knowledge of shore and underwater features of the site	Thorough knowledge of all natural features, including history of water levels.	Identification of sensitive natural areas.	General idea of natural features.	No knowledge of natural features or sensitive features.	☐
2b) Knowledge of effect of work on natural features.	Construction done in a manner that has the least impact on sensitive and important aquatic features and accounts for water level fluctuations.	Aware of impacts and some precautions taken into consideration. Construction is of primary concern.	Aware of potential impact but construction goes ahead. Few precautions taken.	No knowledge of how construction will affect sensitive and important aquatic features and no attempt is made to minimize impacts.	☐

FYI

Work done in or around the water must not result in the 'Harmful Alteration, Disruption or Destruction (HADD) of fish habitat. Contact your local MNR office or Fisheries and Oceans Canada if you are planning a construction project along your waterfront.

Topic	Best 4	Good 3	Fair 2	Poor 1	Your Rating
PREPARING A SITE PLAN					
3. Plan for access to water	Minimal path clearing and/or vegetation removal planned and stairs or bridges used in steep areas. Sensitive natural features avoided.	Minimal path clearing with bridges over sensitive natural features.	Multiple pathways planned with considerable under brushing and vegetation removal and no avoidance of natural features.	No fixed path and people will walk wherever they please.	
4. Plan for effects of storms	Thorough knowledge of direction and expected strength of prevailing winds and seasonal storms Dock and other structures planned and constructed accordingly.	Good knowledge of wind strength and direction.	Some knowledge of prevailing winds.	No knowledge of winds or storm directions/strength. Dock planned without consideration of winds.	
5. Avoiding important habitats.	Docks, boathouses and other structures are located well away from wetland features and away from large underwater cobble or boulder areas (i.e. greater than 15 metres).	Docks, boathouses and other structures are located outside of wetland features and away from large underwater cobble or boulder areas but with little buffering provided.	Docks are located in wetland features and over underwater cobble or boulder areas but boathouses are located outside these areas.	No concern for underwater habitat in the placement of docks and boathouses.	

Topic	Best 4	Good 3	Fair 2	Poor 1	Your Rating
DESIGN AND CONSTRUCTION					
6. Assessing and building what you need.	The size of docks and boathouses are minimized to reduce environmental and visual impact.			Large extensive docks and boathouse constructed with docks used as large recreational areas.	
7. Using environmentally friendly designs.	Docks are constructed to allow some light to filter to bottom and with a minimal dock footprint. Refer to the Resource Section for more information.	Docks are constructed with a small footprint on the bottom or using floating docks and anchors with minimal light filtration.		Docks are constructed with a large footprint on the bottom and wide decks so that no light filtration can occur under docks.	
8. Materials Used.	Environmentally friendly materials are used for all aspects of construction that won't leach chemicals into the environment and that were sustainably harvested (i.e. FSC wood). Styrofoam blocks are not used to float dock. Refer to the Resource Section for more information.	Those components of the dock/boathouse which are exposed to water are non-polluting and non-toxic.		Docks are constructed with materials that are potentially toxic to the environment.	

...TIP

Eastern White Cedar is an excellent choice of wood for dock construction.

FYI

FSC – stands for Forest Sustainability Certified. Wood with this certification is managed, harvested, and milled in environmentally friendly manners. Westwind Forest Stewardship can be contacted for more information about this excellent choice for local wood products.

Resource List

Before and During Construction on Water

For more information….

- **Fisheries and Oceans Canada**
  28 Waubeek Street
  Parry Sound, ON P2A 1B9
  Tel: (705) 746-2196
  Fax: (705) 746-4820
  Email: ReferralsParrySound@DFO-MPO.GC.CA

  Factsheets/Leaflets:
  Working Around Water? Factsheet #13: "What you should know about Fish Habitat and Fluctuating Water Levels on the Great Lakes
  The Dock Primer; The Shore Primer; The Fish Habitat Primer-Ontario Edition
  Working in and Around Water www.dfo-mpo.gc.ca/oceans-habitat/

- **Living by Water**
  www.livingbywater.ca

- **Muskoka Watershed Council**:
  Tel (705) 645-7393
  www.muskokaheritage.org

- **Muskoka Water Web**:
  www.muskokawaterweb.ca

Locating High Water Mark

- Municipal Office – *see Blue Pages*

- Registered Land Surveyor – *see Yellow Pages*

Forest Sustainability Certified Wood

- **Westwind Forest Stewardship**
  www.westwindforest.ca

Work Permits

- **Ontario Ministry of Natural Resources**
  7 Bay Street, Parry Sound P2A 1S4
  Tel: (705)746-4201
  Fax. (705)746-8828
  www.mnr.gov.on.ca/en/Business/CrownLand/

- Municipal Office – *see Blue*

Action Plan Worksheet #3 - Before and During Construction on Water

Any ratings of 1 or 2 indicate areas where your property management needs to be changed to reduce the potential for environmental damage. Use the information from the worksheet and the resource section to help analyze your potential problems and decide what you can do to solve or control them. Remember, this is YOUR Action Plan. It must suit you and your property.

Topic Number	Workshop Theme	My Rating	Short-term Action	Long-term Action
3	*Plan for access to water*	*2*	*Identify where paths can be consolidated or removed especially those near sensitive natural features, e.g. stream edge*	*Reduce the number of paths and replant previously cleared areas with native plants.*