Working Around Water?

What you should know about Fish Habitat and Controlling Aquatic Plants



from predators. Aquatic plants help maintain water quality by stabilizing sediments. Having too many aquatic plants can interfere with boating, swimming and other recreational water activities and at times some control may be necessary.

Be Aware of the *Fisheries Act* and Other Legislation

The federal *Fisheries Act* provides for the protection of fish habitat. Under this Act, no one may carry out any work that harmfully alters, disrupts or destroys fish habitat unless authorized by Fisheries and Oceans

his fact sheet provides information about removing aquatic plants and who you should contact for government agency approvals.

Recently there have been a number of changes in the way proposals for in-water works are reviewed and approved. These changes are outlined in the introductory fact sheet: Working Around Water? What You Should Know About Fish Habitat. The introductory fact sheet introduces the entire Working Around Water? series of fact sheets that are designed to help plan different types of in-water works.

Aquatic Plants Provide Fish Habitat

Aquatic plants are part of a natural aquatic ecosystem. Plants play an important role in the ecology of shoreline areas. They provide habitat for fish to spawn, feed, and hide

If the removal . . .

- includes the use of herbicides
- is in the Rideau Canal or Trent Severn Waterway
- ▶ is in a federally owned Small Craft Harbour
- ▶ is north of Hwy 7 from Lake Huron to Sharbot Lake or north of Hwy 401 from Kingston to the eastern Ontario border (See Map 1)

is more than 100 meters square and south of Hwy 7 from Lake Huron to Sharbot Lake or south of Hwy 401 from Kingston to the eastern Ontario border (See Map 2)

is less than 100 square meters and is south of Hwy 7 from Lake Huron to Sharbot Lake or south of Hwy 401 from Kingston to the eastern Ontario border. (See Map 2)

Your first contact should be . .

- your local Ontario Ministry of Environment District office
- Parks Canada Department of Canadian Heritage
- Fisheries and Oceans Canada —
 Small Craft Harbours
- your local Ontario Ministry of Natural Resources District or Area office

 Approvals are not required by Fisheries and Oceans Canada, the Ontario Ministry of Natural Resources or Conservation Authorities. Follow the Environmentally Friendly Practices listed in this fact sheet.

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Canada. The Act also states that no one is permitted to deposit a deleterious (harmful) substance into water containing fish. Violations can result in substantial fines, the risk of imprisonment, and a requirement to cover the costs of returning the site back to its original state. Other legislation that may also be relevant to the removal of aquatic plants is outlined in the introductory fact sheet: Working Around Water? What You Should Know About Fish Habitat.

Contacts For Approvals and Permits

If your project involves aquatic plant removal, the table below will help you to determine whom you should contact.

In some instances you will have to contact more than one agency. Keep in mind that approval from one government agency does not guarantee that you will be able to obtain approval from another agency. You should get all approvals **before starting work**. Additional approvals may be required where aquatic plant removal takes place in a wetland. Early consultation can save you from planning an aquatic plant removal project that will not be approved.

Information You Will Need to Submit

When seeking approvals or permits you will likely be asked for the following information. It will save time if you have this information available when you contact the agencies listed.

 Your name, address, telephone number and if available a fax number and an e-mail address

- ▶ Rationale for aquatic plant removal
- ▶ Proof of ownership of the properties where the work is to be done and the most recent legal survey(s)
- ➤ The waterbody name and location of the work site including the lot and concession numbers, county, township and municipality
- A detailed description of the work site including a map, survey plan or sketch indicating the location of the aquatic plant removal
- ▶ A plan view (top down) drawing of the area for aquatic plant removal showing existing shoreline, dimensions and any other structures (docks, breakwaters etc.). If you are doing this work in conjunction with your neighbours it should show the combined works
- A description of the type of aquatic plants being removed. Include a description of whether the aquatic plants are free-floating, submerged (rooted in the bottom but not extending out of the water) or emergent (rooted in the bottom and extending out of the water). The density of the aquatic plants should be given. This can be the percentage of the bottom that is covered
- When the plant removal will take place
- Proposed method of plant removal
- ► A description of how the plant material will be disposed of
- ▶ A description of the type of substrate in the area indicating approximate percentages of sand, silt, clay, rock, gravel and marsh etc.
- ► Any information you have about fish use of the site
- ▶ Summer photographs of the site

- for aquatic plant removal and surrounding shoreline
- Other agencies contacted

A site visit by agency staff may be necessary before your proposal can be approved.

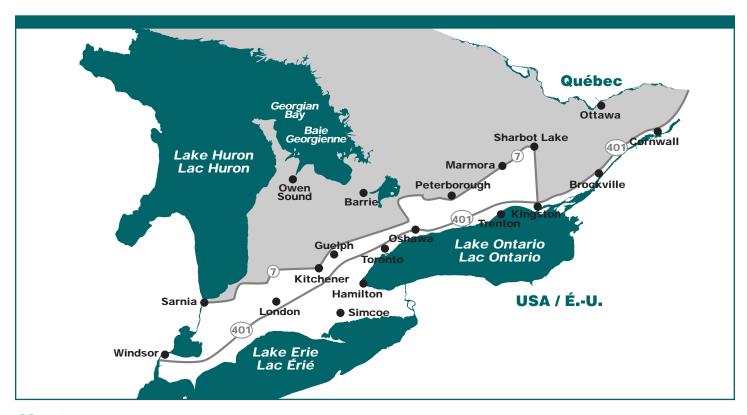
Environmentally Friendly Practices

To protect the aquatic environment, all aquatic plant control projects must be carefully planned and evaluated. Important factors include:

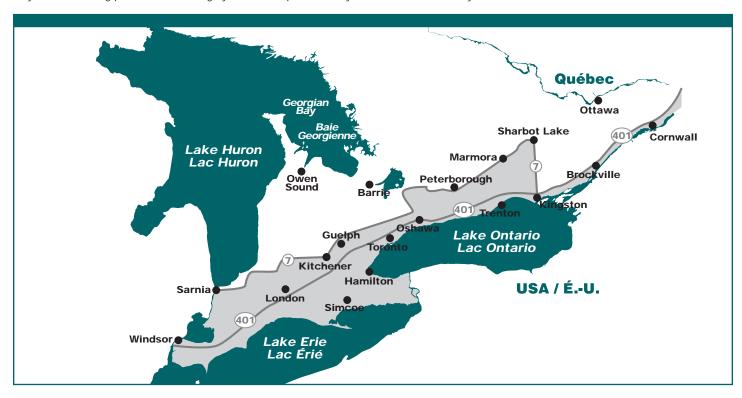
▶ Control methods: Many control methods are available for aquatic plants. These include raking, removing by hand, mechanical harvesting, using cutter-bar devices, bottom barriers such as mats or blankets, and the use of chemicals (herbicides). Generally, the preferred methods from a fish habitat perspective are hand removal and raking. The use of cutter bar devices or mechanical harvesting is also acceptable provided the lake bottom is not disturbed.



Aquatic plants provide habitat for fish to spawn, feed and hide.



Map 1
If you are removing plants found in the gray areas of Map 1, contact your local Ontario Ministry of Natural Resources District or Area office.



Map 2
If you are removing plants found in the gray areas of Map 2, who you contact is dependant on the size of the removal area (see chart on page 1).

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Floating aquatic plants



Submerged aquatic plants.



Emergent aquatic plants.

- ▶ Timing is critical: Warmwater fish species spawn during spring and early summer. Removing aquatic plants at this time could kill eggs and young fish or other aquatic organisms. If you do not require a permit, remove vegetation after the third week in June or later.
- ► **To Use a Herbicide**: The Ontario Ministry of the Environment must approve your project.
- How much to remove: The amount of plant material you may remove depends on the conditions in the waterbody. Factors include the fish species present, the abundance and distribution of plants and the reasons

why you are controlling the

plants. In lakes with limited plant growth, the removal of even small amounts of plant growth may be unacceptable. In lakes, choked with one type of plant growth, plant removal may be beneficial.

- ▶ Dispose of the plants on dry land:

 If the plants are removed by physical or mechanical methods, they should be disposed of well above the average annual highwater mark to prevent any leaching of nutrients back into the water.
- in-water dredging: Dredging may be harmful to fish and their habitat. If your project involves dredging (removal of rocks or sediment from the bottom), you will need to seek approvals for dredging. For more information, see the fact sheet: Working Around Water? What You Should Know About Fish Habitat and Dredging.

Working Together to Protect Fish Habitat

Help ensure that aquatic plant removal is done in an environmentally friendly fashion and does not harm fish or fish habitat. For more detailed advice on how to remove aquatic plants please contact agency staff.

Contacts

For further information or to obtain copies of other fact sheets in this series, contact your local Conservation Authority, Ontario Ministry of Natural Resources, Parks Canada site or:

Fisheries and Oceans Canada Ontario Area Fish Habitat Management Program Referrals Coordinator 867 Lakeshore Road Burlington Ontario L7R 4A6 (905) 336-4595 or by fax at (905) 336-6285

Federal, provincial and conservation authority offices are listed in the blue pages of your phone book under Government of Canada, Government of Ontario and Municipal Governments respectively.

Cette publication est également disponsible en français.

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Raking is a preferred method of aquatic plant removal



Working together to protect and conserve Ontario's aquatic resources



Fisheries and Ocean: Canada Pêches et Océans Canada



Canadian Heritage Parks Canada Patrimoine canadien Parcs Canada



