

[Home](#) > [Central and Arctic](#) > [Publications](#) > [Working Around Water? \(Saskatchewan Fact Sheets\)](#) > What You Should Know About Fish Habitat and Building a Beach

Working Around Water?(Saskatchewan Fact Sheets)

What You Should Know About Fish Habitat and Building a Beach

Saskatchewan Fact Sheet 4

This fact sheet provides information about building beaches and contacts for government agency approvals.

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

Why shorelines are important

Shoreline waters provide habitat for hundreds of aquatic organisms including fish. The nearshore area is where many fish species lay their eggs, feed and seek protection from predators. Changes or disruptions to these areas can threaten their survival. Adding sand to the nearshore area of your lake or river property can harmfully alter or destroy fish habitat.

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 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 to its original state.



Most lands in Saskatchewan below the average annual high-water level are crown lands. Most works or developments in or near water require a permit under the Saskatchewan Environmental Management and Protection Act. You should also contact the local municipal authority.

Other legislation that may be relevant to building a beach is outlined in the introductory fact sheet *Working Around Water? What You Should Know About Fish Habitat*.

Adding sand to the aquatic environment

Experience has shown that in areas where a natural beach does not exist in the first place, beach-building efforts are usually unsuccessful. This is particularly true in areas with strong currents and waves. Over time, artificial beaches created in areas with strong currents or waves are eroded away and the sand is deposited elsewhere. Beach sand may be moved and deposited on neighbouring properties, downstream, in deeper water or as a sand-bar that may interfere with navigation. More productive aquatic habitats such as rocky, weedy or silty areas are smothered by sand, reducing their capacity to support fish and other species.



Deposited sand can show up a great distance from the original beach site. Sand usually does not migrate from beaches created in silty areas but will require ongoing maintenance to remain free of aquatic plants.



The cumulative effects of small, private beaches along a lake shore can have significant negative impacts on fish habitat and fish populations. If sand is likely to be transported by water currents or wind/wave/ice action or is sand harmfully alters, disrupts or destroys fish habitat, your proposal will not likely be approved.

Consider other alternatives like adding sand above the high-water level and contained behind a retaining wall to form a dry beach, and/or building a floating dock or swimming platform. In the interest of navigational safety, swimming platforms should be painted yellow or white and have reflectors on all sides.


[Top of page](#)

Environmentally friendly practices

Following these environmentally friendly practices will help ensure your beach will not harmfully affect fish or fish habitat.

PRIVATE BEACHES

Use community beaches where available:

Community beaches are preferred over private beaches. The potential impacts from many lake users are restricted to one shoreline area and there is better control of ongoing beach maintenance. Ideally, community beaches should be located in areas with natural beaches thus reducing ongoing maintenance.

Keep your beach above the average annual high-water level:

Private beaches created above the average annual high-water level do not require approval from DFO although approvals may be required from provincial or municipal agencies. Vegetation, a berm or a retaining wall may be necessary to prevent the beach sand from spreading into the water. Any berm or retaining wall should be above the average annual high-water level. Refer to fact sheet 3: *Working Around Water? What You Should Know About Fish Habitat And Building Materials* for information on environmentally friendly building materials.

PUBLIC BEACHES

Time work to avoid sensitive periods:

In-water activities should not occur during local fish spawning and nursery periods since it could disturb spawning behaviour, smother eggs and kill young fish. If you are planning any in-water work, contact Fisheries and Oceans Canada.

Maintain or preserve shoreline vegetation:

Shrubs and trees growing adjacent to lakes and streams are an important part of the aquatic habitat. This vegetation provides overhead cover for fish, shade to minimize warming of the water and a source of food for fish as insects fall off the vegetation into the water. Nearshore vegetation also provides benefits to wildlife in the form of nesting sites, cover from predators, etc. Vegetation, particularly woody vegetation, helps stabilize the shoreline in the area, thereby minimising or preventing erosion. After completing any project near fish habitat, all disturbed areas should be stabilized to prevent erosion and be re-vegetated as soon as possible.

Avoid areas with aquatic plants:

Aquatic plants play an important role in the ecology of shoreline areas. Do not add sand to areas with aquatic vegetation. ***Removing aquatic vegetation potentially requires an Authorization from Fisheries and Oceans Canada and your project should be submitted for review.***

Avoid spawning and nursery areas:

If you suspect your property is adjacent to a spawning or nursery site for fish, you should not add any sand or gravel, remove aquatic or shoreline vegetation or otherwise disturb the aquatic environment. Many valuable fish species often have only one spawning/nursery site in a waterbody. Any in-water activity near these sites could adversely affect fish and fish habitat and result in fewer fish in the entire waterbody.

Protect water quality:

When working in the water, a sediment or silt screen should be installed around the entire work area prior to starting. After the work is completed and all of the sediment has settled on the lake bottom, the screen should be carefully removed. Only work in the water on calm days. This will help prevent the suspension of fine sediment particles into the water column by wave action and will ensure the effectiveness of the silt screen is not reduced by wave action. Sediment or silt screens should be inspected continually during the project, and maintained as required to prevent the spread of suspended sediments to adjacent water.

Contacts for approvals and permits

If you are building a beach, the table below will help you determine who you should contact.

Contacts for approvals and permits

If the beach ...	Your first contact should be:
<ul style="list-style-type: none"> • Is proposed below the high-water level on any private, municipal, provincial, or federal lands 	<ul style="list-style-type: none"> • Fisheries and Oceans Canada • In addition, you may also require approval from the agency that administers that land.
<ul style="list-style-type: none"> • Is proposed above the high-water level on any private, municipal, provincial, or federal lands 	<ul style="list-style-type: none"> • Approval from Fisheries and Oceans Canada is not necessary provided you follow the Environmentally Friendly Practices listed on this sheet. • However, you may require approval from the agency that administers that land.

In some instances, you may 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. Remember you should obtain all approvals before starting work. Early consultation can save you from designing a beach that will not be approved.


[Top of page](#)

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 Fisheries and Oceans Canada.

- Your name, address, telephone number and if available, a fax number and an internet address.
- The waterbody name and location of the work site including the lot and block numbers, and park, or section, township, range and municipality.
- A detailed description of the work site including:
 - a map showing where the site is in relation to the waterbody and nearby communities;
 - a survey plan or sketch with dimensions indicating the location of existing buildings, shoreline structures, property lines and the average annual high-water level and the total area to be covered with sand;
 - the combined works, if building a beach in conjunction with your neighbours;
- A cross-sectional (side view) drawing showing the existing and proposed depths, current water level and average annual high-water level.
- A description of the type of substrate being covered indicating approximate percentages of sand, silt, clay, rock, gravel and marsh etc.
- A description of any aquatic plants being removed or covered. 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.
- Any information you have about fish use of the site.
- Open water season photographs of the work site and surrounding shoreline.

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

Working together to protect fish habitat

Help maintain the quality of fish habitat in our lakes and streams. Please contact agency staff before beginning any work in or around water.

For further information or to obtain copies of other fact sheets in this series, contact:



Fisheries and Oceans Canada, Regina District
1804 Victoria Ave East
Regina, SK S4N 7K3
Phone (306) 780-8725;



Fax (306) 780-8722

Fisheries and Oceans Canada, Prince Albert District
125-32nd Street West
Prince Albert, SK S6V 8E2
Phone: (306) 953-8777; Fax: (306) 953-8792

Federal and provincial offices are listed in your phone book under Government of Canada and Government of Saskatchewan.

Cette publication est également disponible en français

Version 1.0 January 2003.

Date Modified: 2010-07-09