



Beaver Dam Removal

Beaver dams can lead to flooding and drainage issues, impacting land, roads and infrastructure. To prevent these problems and protect infrastructure, periodic removal or breaching of beaver dams is necessary. This is typically done using hand tools or equipment like backhoes. However, since these water bodies serve as habitats for fish and other wildlife, dam removal must be conducted in a manner that minimizes impacts on water quality and habitats, ensuring the protection of aquatic and terrestrial habitats.

Beaver dams have environmental benefits including reducing channel scouring and erosion, reducing sediment transport and increasing habitat diversity for fish and waterfowl. While removing dams is sometimes required, an improperly removed beaver dam can negatively affect aquatic habitat by de-watering the upstream pond too quickly, stranding fish and releasing sediment to downstream areas. Removing a beaver dam may not prevent future beaver activity in the area and may only function as a temporary measure to address beaver activity.

Exercise caution when removing beaver dams due to the possibility of causing downstream flooding and damage. **Individuals removing beaver dams are liable for any damages that occur downstream.**

Important

- Ensure all persons working on the beaver dam removal are aware of and follow these guidelines.
- Additional municipal, provincial or federal approvals may be required.
- Consult Fisheries and Oceans Canada's code of practice for beaver dam breaching and removal at <https://www.dfo-mpo.gc.ca/pnw-ppe/codes/beaver-dam-barrage-castor-eng.html> when working in fish-bearing waters.



Questions?

Water Security Agency
Aquatic Habitat Protection
300-2365 Albert Street
Regina, SK S4P 4K1
866.727.5420

Also Contact: Municipal authority for your area

Environmentally Friendly Practices to Consider BEFORE Removing Beaver Dams

- Remove beaver dams by hand whenever possible.
- Remove dams when there is no impact to agricultural operations (e.g., harvest, haying).
- Remove beaver dams after peak of spring run-off and follow the restricted activity periods for in-water work.
- When more than one dam must be removed, start at the downstream dam and remove dams in an upstream direction. This will help to reduce severe flooding and damage to aquatic habitat (or other properties) that may be associated with several dams releasing water at once.
- Remove the dam gradually to allow the water to release slowly and prevent sediment at the bottom of the pond from being released downstream. As the water levels drop in the upstream pond, increase the size of the opening to drain the pond to the desired level.
- Use existing trails, roads or cut lines whenever possible to avoid or minimize disturbance to riparian vegetation.
- Place spoil piles at least 5 m away (recommended) from the watercourse separated by a vegetated buffer to prevent the material from reentering the watercourse.
- Avoid harm to fish when working or using explosives near fish-bearing waters and follow Fisheries and Oceans Canada's (DFO) Code of practice: Beaver dam breaching and removal (<https://www.dfo-mpo.gc.ca/pnw-ppe/codes/beaver-dam-barrage-castor-eng.html>).

Beaver Dam Removal Exemption and Guidelines

Section 5(c) of *The Environmental Management and Protection (General) Regulations, 2010* states that you do not need to obtain an Aquatic Habitat Protection Permit (AHPP) from WSA if you:

1. Remove beaver dams by use of hand tools or dynamite.
2. Remove beaver dams by mechanical means, but only if:
 - (A) The removal does not result in the alteration of the bed, bank or boundary, including noticeable impact to the soil caused by vehicles and equipment; and
 - (B) The material removed is placed in a way that it cannot be washed back into the watercourse.

In addition, the guidelines below must be followed when breaching or removing beaver dams. An Aquatic Habitat Protection Permit Application must be submitted to WSA for review if you are unable to follow all the guidelines.

1. Obtain landowner consent before starting any removal activities.
2. Avoid in-water work in fish-bearing waters during the restricted activity period for your project location. Saskatchewan timing windows can be found at <http://www.dfo-mpo.gc.ca/pnw-ppe/timing-periodes/sk-eng.html>.
3. If removal of trees and/or shrubs is necessary to access the site, it should be limited to the minimum amount necessary to safely operate the requirement machinery. Trees/brush must be cut off the ground level and roots must remain intact to minimize soil erosion.
4. Limit activities to removing or breaching the beaver dam. Activities must not involve channel or shoreline modifications (e.g., widening, straightening, ditching, etc.).

5. Restore banks to their original condition if any disturbance, such as rutting, occurs.
6. Locate and stabilize excavated materials and debris above the bank and separated by a vegetated buffer so they will not erode into any water bodies or watercourses.
7. Do not remove rock from the bed, bank or boundary of any water body or watercourse.
8. Revegetate disturbed or exposed areas by planting or seeding, preferably with native trees, shrubs or grasses.
9. No machinery or heavy equipment will enter the water under any circumstances. The only exceptions are the use of necessary attached booms, buckets or implements.
10. Ensure machinery and heavy equipment arrives at the project site clean and free of fluid leaks or accumulations of external contaminants that may include, but are not limited to oil, fuel, grease, other lubricants, soils, mud or plant materials.
11. Clean, fuel, service and store machinery and heavy equipment in a manner that will not contaminate the bed, bank or boundary of any water body or watercourse.
12. Operate machinery and heavy equipment from a stable location. Utilize appropriate measures to prevent rutting and compaction (e.g., swamp mats) to the bed, bank or boundary of the watercourse or water body.
13. Do not use ammonium nitrate/fuel oil (ANFO) as a type of explosive in or near water.
14. Immediately contain, clean up and properly dispose of all spills of any oil, fuel, hydraulic fluids or other hazardous substances. All spills meeting or exceeding the quantities specified in The Environmental Spill Control Regulations must be reported to the Provincial Spill Control Centre (Spill Line) at 1.800.667.7525.

Definitions:

Bed: That portion of the water body typically, but not always, covered by water.

Bank: The rising ground bordering a water body that serves to confine the water to a channel or bed.

Boundary: The line or elevation contour surrounding a water body or watercourse where the aquatic vegetation and terrestrial plant species known to tolerate water saturated soils change entirely to terrestrial vegetation tolerating little or no soil saturation and includes a minimum surrounding area of five metres measured outward from the top of the bank.

