

Manitoba Guide for Beaver Dam and Lodge Removal

- Legal Requirements
- Beneficial Management Practices

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Introduction

This document provides a summary of information from federal and provincial sources to provide the legal requirements that must be met when removing beaver dams:

1. **on private land**: Requirements from the Beaver Dam and Lodge Removal Regulation, under The Wildlife Act of Manitoba
2. **on Crown land**: Requirements from The Wildlife Act of Manitoba
3. **from fish bearing waters**: Requirements from the Government of Canada's Interim Code of Practice for Beaver Dam Removal and the Government of Canada's Measures to Protect Fish and Fish Habitat

Additional **beneficial management practices** that are recommended, but not legally required, have also been included.

Throughout this document, words in bold underline indicate active links. **Links** to external websites are provided in full at the end of the document.

Definitions of Terms used in this document are also provided.

Manitoba Requirements for Beaver Dam and Lodge Removal on Private Land

The following information is adapted from the Beaver Dam and Lodge Removal Regulation under The Wildlife Act of Manitoba.

PURPOSE

- The Beaver Dam and Lodge Removal Regulation outlines the requirements that must be followed by owners of private land who are destroying or removing a beaver dam or beaver lodge, under section 40.1 of The Wildlife Act.

KILLING BEAVERS ASSOCIATED WITH A DAM OR LODGE

- Before any activity to destroy or remove a beaver dam or beaver lodge is undertaken, the landowner must ensure that reasonable efforts are made to kill any beavers living in the area around the dam or living in the lodge.
- The owner, or a person authorized by the owner, may kill beavers under authority of this regulation only by trapping or with a firearm.
- The owner or a person authorized by the owner may kill a beaver under authority of this regulation at any time of year, without being required to hold a licence or permit, or complete any trapper or hunter education program. Despite this, it is recommended that beaver removal be undertaken by a person who has been certified with appropriate training, and possesses the appropriate knowledge and skills to be successful.
- A person trapping beavers under authority of this regulation must conduct the trapping in accordance with the Trapping of Wild Animals Regulation (Manitoba Regulation 245/90), except they are not required to retrieve the dead animal.

FIREARM REQUIREMENTS

- A person killing beavers under authority of this regulation with a firearm may only use a rimfire rifle or a shotgun with shot.

BEAVER DAM AND LODGE REMOVAL REQUIREMENTS

- The owner is responsible for ensuring compliance with the following requirements and prohibitions respecting the destruction or removal of a beaver dam or beaver lodge:
 - No alteration or modification of the bank or the bed of the water body is permitted.
 - The only items that may be removed are material used to construct the dam or lodge, any food cache and any associated debris that has accumulated against the dam or lodge.
 - If multiple beaver dams are to be destroyed or removed, the downstream dam must be destroyed or removed first.
 - The destruction or removal of a beaver dam must not result in water flow exceeding the downstream channel capacity (bank-full capacity).

NO SALE OR USE OF BEAVER PELT

- A person must not sell, barter or otherwise make use of the pelt or any other part of a beaver killed under authority of this regulation, unless they have a trapping licence and it is done in accordance with trapping laws or they have obtained a permit that authorizes such activities.

Manitoba Requirements for Beaver Dam and Lodge Removal on Crown Land

Beaver dam or lodge removal must be authorized by the province before any removal activities may commence. Request authorization from a Conservation Officer at the local district office.

The authorization holder is typically subjected to the following conditions:

- Any dam that has an active beaver lodge or bank den upstream must be preceded by a reasonable attempt to trap the resident beavers.
- The only items that may be removed are material used to construct the dam or lodge, any food cache and any associated debris that has accumulated against the dam or lodge.
- If multiple beaver dams are to be destroyed or removed, the downstream dam must be destroyed or removed first.
- The destruction or removal of a beaver dam must not result in water flow exceeding the downstream channel capacity (bank-full capacity).
- Additional authorization from the director of Wildlife, Fisheries and Resource Enforcement Branch is required for dam removal in a wildlife refuge, special conservation area or wildlife management area.
- If use of explosives is authorized, individual detonations of more than one kilogram must not be used.

Other considerations:

- Additional authorization from the Director of Parks and Protected Spaces is required for dam removal in an ecological reserve or provincial park.
- A Crown Land Work Permit may also be required if heavy equipment or explosives will be used.

Government of Canada's Interim Code of Practice: Beaver Dam Removal

The following information is adapted from the Government of Canada's [Interim code of practice: beaver dam removal \(dfo-mpo.gc.ca\)](https://www.dfo-mpo.gc.ca) (accessed 2021-06-15).

1.0 ABOUT THIS CODE OF PRACTICE

This code of practice outlines national best practices for the removal of beaver dams. Beaver dams need to be removed or breached periodically to protect, maintain or construct infrastructure or to avoid the flooding of private or public land. Dam removal is normally accomplished using hand tools, or mechanical equipment such as backhoes. Be aware that the removal of a beaver dam may not necessarily prevent future beaver activity in the area.

Potential impacts to fish and fish habitat from the removal of beaver dams could include, but are not limited to, direct damage to substrates, release of accumulated sediments, loss of riparian habitat and stranding of fish. It is therefore important to exercise caution when proceeding with dam removal because of the possibility of downstream flooding and damage and the re-entry of dam material into the water body.

This code of practice allows for the removal of a beaver dam, which is impounding water that may cause imminent threat of damage to nearby infrastructure, or is obstructing fish passage.

A project review by Fisheries and Oceans Canada (DFO) is not required when the conditions and measures set out in this code of practice and all applicable [measures to protect fish and fish habitat](#) are applied.

This code does not remove or replace the obligation to comply with all applicable statutory and regulatory requirements of the [Fisheries Act](#), [Species at Risk Act](#), or other federal, provincial or municipal legislation and policies.

2.0 YOU CAN USE THIS CODE OF PRACTICE IF

- There are no shellfish listed under the Species at Risk Act, or critical habitat or residences of endangered or threatened aquatic species present in the work zone or the vicinity of the works, undertakings and activities. Consult the aquatic species at risk maps to determine where at-risk populations occur in Canada and where their critical habitat is located.
- The removal activities are limited to removing or breaching the beaver dam itself and do not involve channel or shoreline modification straightening, ditching, etc.
- Explosives are not used to remove the dam.
- You follow the measures in this code of practice and all other applicable Measures to Protect Fish and Fish Habitat.

Request a project near water review when the works, undertakings and activities do not meet all of the criteria listed in this section.

3.0 MEASURES TO PROTECT FISH AND FISH HABITAT

3.1 PROTECTION OF FISH

- Plan in-water works, undertakings and activities to respect timing windows to protect fish and fish habitat.
- Limit the duration of in-water works, undertakings and activities so that it does not diminish the ability of fish to carry out one or more of their life processes (e.g. , spawning, rearing, feeding or migrating).

3.2 PROTECTION OF THE RIPARIAN ZONE

- Use existing trails, roads, access points or cut lines wherever possible.
- Avoid tree and shrub removal whenever possible.
- Use methods to prevent substrate compaction (e.g., swamp mats and pads).
- Avoid stockpiling of material on stream banks and in riparian zones.
- Do not grade streambanks or approaches.
- Limit access to shorelines and banks or areas adjacent to water bodies.
- Construct roads, access points and approaches perpendicular to the watercourse or water body.
- Prune or top the vegetation instead of grubbing/uprooting.
- Limit grubbing on watercourse banks to the area required for the footprint of the works, undertakings and activities.
- Remove vegetation species selectively and in phases.
- Re-vegetate the disturbed areas with native species suitable for the site.
- Restore stream banks and riparian vegetation affected by the works, undertakings and activities to their natural state (substrate granularity, profile, vegetation, etc.).

3.3 PROTECTION OF AQUATIC HABITAT

- Operate machinery in a manner that minimizes disturbance to the banks of the watercourse.
- Conduct in-water works, undertakings and activities during periods of low flow or at low tide.
- Maintain an appropriate depth and flow (i.e., base flow and seasonal flow of water) for the protection of fish habitat.
- Replace or restore any other disturbed habitat features and remediate any areas impacted by the works, undertakings and activities.

3.4 PROTECTION OF FISH HABITAT FROM SEDIMENTATION

- Install effective erosion and sediment control measures prior to beginning works, undertakings and activities.
 - Develop and implement an erosion and sediment control plan to prevent the introduction of sediment into any water body during all phases of the works, undertakings and activities.
 - Schedule work to avoid wet, windy and rainy periods (and heed weather advisories) that may result in high flow volumes and/ or increase erosion and sedimentation.
 - Regularly inspect and maintain the erosion and sediment control measures and structures during all phases of the works, undertakings and activities.
 - Regularly monitor the watercourse for signs of sedimentation during all phases of the works, undertakings and activities and take corrective action if required.
 - Use biodegradable erosion and sediment control materials whenever possible.
 - Operate machinery on land in stable dry areas.
 - Keep the erosion and sediment control measures in place until all disturbed ground has been permanently stabilized.
 - Remove all sediment control materials once the site has been stabilized.
 - Dispose of and stabilize all excavated material above the ordinary high water mark or top of bank of nearby water bodies and ensure sediment entry to the watercourse is prevented.

3.5 PROTECTION OF FISH AND FISH HABITAT FROM DELETERIOUS SUBSTANCES (INCLUDING SUSPENDED SEDIMENT)

- Develop and immediately implement a response plan to prevent deleterious substances from entering a water body.
 - Stop works, undertakings and activities in the event of a spill of a deleterious substance.
 - Immediately **report** any spills (e.g., sewage, oil, fuel or other deleterious material), whether near or directly into a water body.
 - Keep an emergency spill kit on site during all phases of the works, undertakings and activities.
 - Contain any water with deleterious substances.
 - Ensure clean-up measures are suitably applied so as not to result in further alteration of the bed and/or banks of the watercourse.
 - Clean up and appropriately dispose of water contaminated with deleterious substances.
 - Maintain all machinery on site in a clean condition and free of fluid leaks.
 - Wash, refuel and service machinery and store fuel and other materials for the machinery in such a way as to prevent any deleterious substances from entering the water.
 - Dispose of all waste materials (e.g., construction, demolition and commercial logging) above the ordinary high-water mark of nearby water bodies to prevent entry into the watercourse.

3.6 ADDITIONAL MEASURES FOR BEAVER DAM REMOVAL

- Remove beavers prior to undertaking the removal of the beaver dam. Their removal must be undertaken in compliance with all relevant acts and Regulations.
- When a series of dams is to be removed, this should be done from downstream to upstream in order to avoid severe flooding and damage to fish habitat.
- Removing a beaver dam by non-mechanical methods (by hand) is preferred over using industrial equipment.
- When dewatering beaver impoundments:
 - Remove the dam gradually to prevent sediment at the bottom of the pond from being released downstream.
 - Ensure the width of the breach opening of the beaver dam does not exceed the width of the original stream channel.
 - As the water levels drop in the upstream pond, increase the size of the opening to drain the pond to the desired water level.
 - The original watercourse bed and bank material and/or the beaver lodge(s) may not be removed or disturbed.
- Relocate any fish that become trapped in isolated pools or stranded in newly flooded areas to the main channel of the watercourse.
 - Relocate any fish as per applicable permits for capturing and relocating fish.

4.0 NOTIFICATION

When making use of this code of practice, please submit a **Notification Form** (PDF, 50 KB) to your **regional DFO office** to help us improve this fish and fish habitat protection guidance over time.

It is your *Duty to Notify* DFO if you have caused, or are about to cause, the unauthorized death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to the **Fish and Fish Habitat Protection Program**.

5.0 CONTACT US

If you have questions regarding this code of practice **contact the Fish and Fish Habitat Protection Program** located in your region.

Government of Canada's Measures to Protect Fish and Fish Habitat

The following information is adapted from the Government of Canada's [Measures to protect fish and fish habitat \(dfo-mpo.gc.ca\)](https://www.dfo-mpo.gc.ca) (accessed 2021-06-15).

Beaver dam removal activities must comply with the fish and fish habitat protection provisions of the *Fisheries Act* by incorporating measures to avoid:

- causing the death of fish
- harmful alteration, disruption or destruction of fish habitat in your work, undertaking or activity

You're responsible for reviewing the complete list of measures and implementing those that are applicable to your work, undertaking or activity. If you can't completely implement the protection measures, [check if your project needs a review](#).

Additional Beneficial Management Practices (BMP)

Although not required by law, there are additional beaver dam removal practices that are recommended to lower the risk of negative impacts to upstream or downstream lands, water systems, wildlife and people. Some of these recommended practices are outlined below.

BMP BEFORE BEAVER DAM REMOVAL

- Consider if site conditions would allow the installation of a beaver damage mitigation device, such as a pond leveler or beaver deceiver, to reduce the impacts of the beaver dam while maintaining/allowing a beaver presence within the area.
- For the removal of beaver(s) associated with a dam, ensure that a certified person with the applicable skills and knowledge undertakes this activity.
- Prior to the removal of the beaver dam, notify all upstream and downstream landowners and municipalities that may be affected by the change in water levels. Consult with them to determine that the release of water will not damage any existing infrastructure.
- Avoid removing the beaver dam during late fall and when the pond is ice-covered. This will minimize the inhumane death of beavers through starvation or freezing if a dam is removed during winter or late in the ice-free season.
- If the beaver impoundment has established a wetland that is being used by breeding waterfowl, remove the beaver dam after the waterfowl broods have fledged and left.

BMP DURING BEAVER DAM REMOVAL

- Remove beaver dams by hand or light machinery whenever possible.
- At the first evidence of self-propelled equipment causing ruts within 30 metres of the bank of a watercourse, or the edge of a wetland, the equipment should be halted and the ruts smooth graded and overlain with slash that is trampled in place.
- Remove each dam gradually to allow the water to release over an extended period of time. An initial maximum flow area 1 meter wide by 20 centimetres deep is generally recommended. As the water levels drop in the upstream pond, increase the size of the opening to drain the pond to the desired level. This slow release of water will prevent:
 - sediment at the bottom of the pond from being released downstream
 - erosion of the channel downstream of the dam
 - stranding fish in isolated pools
 - increasing the downstream water level by more than 20 centimetres

BMP AFTER BEAVER DAM REMOVAL

- In areas where beavers and beaver dams are recurring problems, consider protecting culverts using devices such as pond levelers or beaver deceivers.
- Where beavers and their dams have been removed, only long-term monitoring and continued management will prevent their return to occupy the waterway. Consider:
 - Contacting local licensed trappers to remove beavers from the area during the licensed trapping season
 - Monitoring the waterway regularly during the open water period, and removing nuisance beavers before they are able to build substantial dams
 - Where possible, installing 1.5 metre high fencing to protect trees from beaver damage

Definition of Terms

Deleterious Substance

This is any substance that, if added to any water, would degrade, alter or form part of a process that would degrade or alter the quality of that water, so it is rendered or is likely to be rendered deleterious to fish, fish habitat or to the human use of fish that frequent that water.

Ordinary High-water Mark

This is the usual or average level to which a body of water rises at its highest point and remains for sufficient time to change the characteristics of the land. In flowing waters (e.g., rivers or streams) this refers to the active channel or bank-full level, which is often the one to two-year flood flow return level. In inland lakes, wetlands or marine environments, it refers to the parts of the water body, bed and banks that are frequently flooded by water so as to leave a mark on the land, and where the natural vegetation changes from predominately aquatic vegetation to terrestrial vegetation (excepting water tolerant species). For reservoirs, this refers to normal high operating levels (e.g., full supply level).

Riparian Zone

This is an area adjacent to streams, lakes and wetlands that support a unique mixture of water tolerant vegetation, from trees and shrubs to aquatic and herbaceous plants.

External Links Used in This Document

GOVERNMENT OF MANITOBA

The Wildlife Act of Manitoba: <https://web2.gov.mb.ca/laws/statutes/ccsm/w130e.php>

Beaver Dam and Lodge Removal Regulation, under The Wildlife Act:
<https://web2.gov.mb.ca/laws/regs/current/pdf-regs.php?reg=52/2021>

Trapping of Wild Animals Regulation, under The Wildlife Act:
<https://web2.gov.mb.ca/laws/regs/current/pdf-regs.php?reg=245/90>

GOVERNMENT OF CANADA

Fisheries Act: <https://laws-lois.justice.gc.ca/eng/acts/f-14/>

Species at Risk Act: <https://laws-lois.justice.gc.ca/eng/acts/s-15.3/>

Aquatic Species at Risk Maps:
<https://www.dfo-mpo.gc.ca/species-especes/sara-lep/map-carte/index-eng.html>

Interim Code of Practice for Beaver Dam Removal:
www.dfo-mpo.gc.ca/pnw-ppe/codes/beaver-dam-barrage-castor-eng.html

Measures to Protect Fish and Fish Habitat:
www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html

Check if Your Project Needs a Review:
www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-003-eng.html

Request a Near-water Project Review:
www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-001-eng.html

Timing Windows to Protect Fish and Fish Habitat:
www.dfo-mpo.gc.ca/pnw-ppe/timing-periodes/index-eng.html

Fish and Fish Habitat Protection Office Contact Info:
<https://www.dfo-mpo.gc.ca/pnw-ppe/contact-eng.html>

Notification Form:
www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/forms-formes/notification-eng.pdf?

Reporting the spill of a deleterious substance:
www.dfo-mpo.gc.ca/contact/report-signaler-eng.htm