

Ministry of Water, Land, and Resource Stewardship

Landbase Stewardship BMP Series

Omineca Region

August 1, 2024

Best Management Practices Fact Sheet

BEST MANAGEMENT PRACTICES FOR BEAVER DAM REMOVAL IN THE OMINECA REGION

Scope and Purpose of this Fact Sheet

The control of beavers and removal of beaver dams has been a long-standing issue within the Omineca Region. With many pieces of legislation governing the removal of beavers and their dams, clear guidance is needed to direct proponents to the appropriate course of action to be taken.

Background

Beaver ponds are critical in supporting ecological function, biodiversity, and successional changes in streams, but the removal of beaver dams may sometimes be necessary to avoid flooding and other drainage-related problems on adjacent lands. Both the *Water Sustainability Regulation* and the *Wildlife Act* govern the removal of beaver dams.

Section 39 of the *Water Sustainability Regulation* permits the removal of a beaver dam via a **Notification** made to a Habitat Officer, under the *Water Sustainability Act* (WSA). Habitat Officers are charged with establishing specific requirements (terms and conditions) for instream works needed to protect fish, aquatic ecosystems, and water quality.

Under Section 9 of the *Wildlife Act* it is an offence to disturb, molest or destroy a beaver house, den or dam unless you are a licensed trapper under the Act and operating within the specific (open) trapping season. However, alteration or removal of a dam is permitted under the *Wildlife Act*, "to provide irrigation or drainage under lawful authority for the protection of property."

Applying for Permits

To remove a beaver dam, you will need to submit a **Notification** under the *Water Sustainability Act* (WSA), and may also require a **General Wildlife Permit** under the *Wildlife Act*. The permits you will need depend on your circumstances: consult the table below to determine which permits you require.

What will be removed?	Circumstances of removal	Permits Required
Beaver dam	By a licensed trapper	WSA Notification
	Protection of property	
	Not an immediate threat to property	WSA Notification + Wildlife Permit
Nuisance beaver	Outside open trapping season	Wildlife Permit
	Licensed trapper during open trapping season	None

Applications are linked below or may be obtained from FrontCounter BC. Submit completed applications through FrontCounter BC, who will direct them to the correct agency for review.

Water Sustainability Act (WSA) Notification

A Water Sustainability Act Notification form may be obtained from Notification of Authorized Changes In And About A Stream - Authorization Guidance - Natural Resource Online Services (gov.bc.ca). After submitting your form to FrontCounter BC, a Habitat Officer will contact you with terms and conditions by which the dam removal may proceed. If no response is received within 45 days, you may proceed as planned.

There are no fees associated with a Notification under the Water Sustainability Act.

Information to Include in your WSA Notification

You should include supporting documentation and justification for the proposed works with respect to:

- Location
- Size of dam (length, height) to be modified or removed
- Approximate dimensions of head pond
- Dates when works will occur
- Method of removal
- Level of risk to existing buildings, roads, or services threatened with flooding due to dam removal

Wildlife Permit

If required, you can apply for a **General Wildlife Permit** for the removal of beavers and beaver dams via <u>General Wildlife Permit - Authorization Guidance - Natural Resource Online Services (gov.bc.ca)</u>. There is a fee associated with the wildlife permit, which varies depending on the type of permit needed (see below). During the application process, you may be asked to provide proof of land ownership, or current written permission from the land owner(s) to proceed.

Permitted activity	Situation	Permit Type	Fee
Authorizing a resident to hunt, trap or kill beaver	On the resident's property	2(b)(i) crop protection 2(b)(ii) population control	\$55.00
	On someone else's property	2(c)(iii) problem beaver	\$110.00
Beaver dam removal	Not an immediate threat to property	3(1)(a) Wildlife Act 9(1) exemption	\$55/year

Information to Include in your Wildlife Permit Application

Beaver Removal

- Specific location where the beaver will be trapped
- Professional qualifications of all staff/employees/contractors involved (where applicable)
- Hunting / trapping methods proposed
- Compelling reasons as to why this permit is required
- Preventative measures currently in place to deter beaver

Dam Removal

- Description of problems being caused by the dams or lodges
- Removal methods to be used
- Location and map of dam site

Timing of works

- ✓ The preferred timing window for beaver dam removal is July 15 to September 14.
- Beaver dam removal is not normally permitted from September 15 to March 31, as it may result in mortalities of beavers and overwintering fish.
- Beaver dam removal on known or default fish-bearing streams is not normally permitted from April 1 to July 14, as sediment released may have adverse effects on fish migration and/or breeding success.

Special circumstances (e.g., ice-free conditions later in the Fall, increased risk to the public or critical infrastructure) may warrant dam removal during non-preferred periods. If you want to remove a beaver dam during a non-preferred time of year, you should provide additional supporting information, including justification for an exception from the timing window and known fisheries information, with your *Water Sustainability Act* Notification for a Habitat Officer to evaluate.

Before you start:

- Notify all licensed water users that may be affected prior to dam removal.
- Where more than one dam on the same watercourse will be modified or removed, begin with the one
 furthest downstream. Allow the associated pond to drain to the target level before modifying or
 removing the next dam upstream.
- Install effective sediment and erosion control measures to prevent introducing sediment into the stream.

IMPORTANT: your obligations under the Water Sustainability Act and Regulation

All reasonable care must be taken to avoid damaging any land, works, trees, stream banks or other property. The authorized individual must make full compensation to the owners for any damage or loss resulting from the removal of any beaver dam(s). For details, see <u>A User's Guide to Changes In and About a Stream in British Columbia</u> and <u>Requirements and Best Management Practices for Making Changes In and About A Stream in British Columbia</u>.

Operational Best Management Practices

- Avoid disturbing riparian vegetation: use existing trails, roads, or cut lines to access the dam.
- Removal by hand is preferred, and should proceed gradually, so water is released slowly.
- All equipment used on site should be in good repair and free of grease and oil leaks.
- If machinery is used, it must work from the stream bank or naturally dry channel; only the bucket from machinery should enter the stream.
- In removing the dam, gradually increase the size of the opening as water drops to the desired level in the upstream pond. The width of the breach opening should not exceed the width of the original stream channel, to prevent bank erosion and flooding of adjacent properties. The breach area should not normally exceed 0.2 square meters (i.e., a typical breach could measure 1 meter by 20 centimeters).
- Draw down of beaver ponds should not lead to the stranding of fish.
- Material removed from the dam must be side-cast so that it cannot re-enter the stream.
- After removal is complete, if disturbed areas are likely to pose an erosion risk, re-vegetate them by
 planting and seeding, preferably with native trees, shrubs, or grasses; cover these areas with mulch to
 prevent erosion and help seeds germinate.