

Spring Run-off Flood Prevention

FACTS AT YOUR FINGERTIPS

Flood Potential & Debris

The potential for spring flooding in Alberta is dependent on four natural factors: rainfall, soil moisture, snowpack, and temperature.

Flooding factors such as in-stream debris is a factor we can manage to be proactive about flood prevention.

Debris refers to natural plant and woody debris and includes beaver dams. Alberta Environment considers natural vegetative and woody debris to be part of normal aquatic ecosystems. Debris also includes man-made items such as household and farmyard materials.

Natural debris often deposits in rivers and streams. Even though this material can be considered fish habitat, it can also block channels and has the potential to laterally shift watercourse channels. Beaver activity can also increase the accumulation of debris. Debris build-up can result in erosion and flooding thereby requiring in-stream corrective measures.

Who owns Alberta's rivers and creeks?

In Alberta, the rivers and creeks are owned by Albertans. The Government of Alberta manages the province's water resources on behalf of its citizens.

Alberta Environment sets policy and legislation to ensure the quality and quantity of our water resources.

Debris Removal

Activity in or adjacent to a waterbody requires an approval under the *Water Act*. The routine approval process requires an application to be submitted and an approval received before work or activity can commence.

Debris removal activities that are exempt from an approval under the *Water Act* are:

- Landscaping that is not in or adjacent to a watercourse frequented by fish

- Landscaping that does not change the flow or volume of water on an adjacent parcel of land or adversely affects an aquatic environment
- Removal of debris from a waterbody that is not frequented by fish if the person removing the debris owns or occupies the land adjacent to the waterbody where the debris is located
- Removal of a beaver dam from a waterbody if the person removing the beaver dam owns or occupies the land adjacent to the waterbody where the beaver dam is located, or has been authorized to remove the beaver dam under section 95 of the *Water Act*
- Emergencies as described later in this fact sheet

Who is responsible for removing debris from the creek?

There is no one person or government department responsible for the removal of debris. The decision to remove debris, including beaver dams, rests with the landowner where they feel the debris is cause for concern.

Beaver control is permitted under the *Alberta Guide to Trapping Regulations*. Beavers may be hunted and trapped without a license during all seasons on privately owned land by the landowner or occupant of the land (by written permission from the landowner). Most counties have a Beaver Control Officer and may be able to help you with the known areas of infestation and beaver control methods.

Alberta Environment is a regulatory agency and does not physically remove debris. We may provide direction and advice to landowners and local authorities. Alberta Environment Compliance staff conduct both prearranged and un-announced inspections to assess concerns of local landowners where potential blockage of a stream is identified. Approvals staff may also assist landowners by guiding them through any required authorization process – applications are processed generally on a first-come first-served basis.

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Be proactive to ensure that your land does not flood during spring run-off

Alberta Environment empowers landowners and municipalities to remove debris themselves as long as it is in accordance with the legislation

Spring Run-off Flood Prevention (continued...)

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What is the role of the landowner?

The landowner may be an individual or a local authority, such as a city, county or the provincial government.

If the landowner believes that removal of debris is necessary, it is his or her responsibility to ensure that any necessary authorization is obtained from Alberta Environment.

Landowners planning to remove debris should contact Alberta Environment prior to conducting work to ensure they do not require authorization.

Proactive Flood Prevention

There are a number of things you can do to prevent spring run-off flooding. Below are some actions you may want to consider doing before the spring melt:

- Removal of debris and beaver dams
- Ensure there is no blockage in culverts or under bridges
- Remove accumulated snow from areas prone to flooding

Emergency Situations

Emergency situations can arise. Time may be critical and there may not be time to follow the approval process to remove the debris.

Emergency situations occur when:

- Sudden imminent risk caused by debris that presents a high probability of substantial harm to health, or to the safety or general welfare of municipal infrastructure or a residence
- The debris removal can be accomplished in a manner where there is no safety risk to the proponent or others

- The debris removal can be accomplished in a manner where there is no adverse effect on the aquatic environment or, alteration or excavation of the bed and shore
- Where the debris removal will not impact an adjacent or downstream landowner or result in significant downstream erosion
- Where the debris removal can be accomplished in a manner where no debris re-enters any water body

An emergency situation does not include:

- When the condition is threatening but does not present an imminent danger
- Activity to solely address flooding and erosion to land or bed and shore of a water body
- Activity to restore the environmental degradation of soil, water, woodland, fish, wildlife, recreational resources, or agricultural productivity
- Activity to address accretion, loss of lands, or the protection of non-critical infrastructure

In an emergency situation, the landowner should call the local Alberta Environment office or Environmental call centre and advise that they want to remove debris and that it is an emergency situation. This will allow Alberta Environment to assess whether the situation is an "emergency" or requires prior authorization.

Enforcement

Conducting an activity in a water body in Alberta without the appropriate authorizations under the *Water Act* may result in enforcement action and a possible fine of up to \$50,000 for an individual and up to \$500,000 for a company or organization.

If you observe what you believe to be an illegal water related activity, please contact the Alberta Environment call centre at 1-800-222-6514.

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