



## Artificial Blockages in Natural Watercourses

Saskatchewan agricultural lands have thousands of miles of natural watercourses including rivers and seasonal or temporary creeks. When managing water, landowners often need to construct structures to divert or hold back water in natural watercourses. Many of these structures are regulated by Water Security Agency (WSA):

- Dykes or berms which are meant to divert or contain water as part of drainage projects typically require a drainage approval from WSA.
- Municipal road infrastructure that interrupts a natural watercourse and has been modified to facilitate a drainage project may require a drainage approval from WSA.
- Dykes or dams that retain water for irrigation or other uses may require a surface water approval and water rights license from WSA.



A variety of other types of structures may be considered artificial blockages on natural watercourses including:

- Small scale earthen blocks or field rockpiles,
- Low level or field access crossings,
- Absence of or undersized culverts,
- Fences that run through a natural watercourse and collect debris.

WSA does not issue approvals to construct or operate these types of artificial blockages if they have been constructed for purposes other than impounding or storing water for agricultural use (e.g., irrigation or livestock). However, these blockages may result in impacts to upstream or downstream landowners because they are holding back water.

In high-risk situations where public safety and/or critical infrastructure are at risk of being impacted by the artificial blockage, WSA may become involved to determine if regulatory action is warranted. If impacts are low risk, WSA encourages landowners to work together in good faith to arrive at a mutually acceptable solution to address the artificial blockages.

If the impact of the artificial blockage persists, it may require resolution by civil action as described in Section 58 of *The Water Security Act*.

### **Frequently Asked Questions:**

#### **What about silt, beaver dam or blow dirt blockages in a creek?**

WSA encourages landowners to work together and provides program assistance with channel clearing. These activities often require an Aquatic Habitat Protection Permit (see below).

#### **What about blockages on drainage ditches?**

The drainage approval process can help coordinate solutions where drainage ditches are involved. A “works maintenance” agreement is often a useful tool to establish how drainage works will be maintained between landowners.

#### **What about an undersized rural municipal road culvert?**

Rural municipalities are required to have culverts to accommodate the natural flow of water. If culverts are undersized because of upstream drainage works, a drainage approval might be a good way to coordinate local water management and address culvert capacity issues.

#### **What size of dams in watercourses require a surface water approval?**

This really depends on the situation. Contact WSA to determine if you need an approval.

#### **What if a landowner needs to do work in a creek to remove a blockage?**

An Aquatic Habitat Protection Permit (AHPP) may be required for removal or construction of a blockage in or near a watercourse. Please contact WSA BEFORE starting any work to determine whether an AHPP is required.

If WSA confirms that an AHPP is not required, please consider the following Environmentally Friendly Practices before removing an artificial blockage from a watercourse.

- Whenever possible remove the blockage by hand.
- Remove blockages when the risk of impacting agricultural operations is limited (e.g., avoid harvest and haying).
- Remove blockages after peak of spring run-off.
- Remove the blockage gradually to allow the water to release slowly and prevent sediment from being released downstream. As the water levels drop on the upstream side of the blockage, increase the size of the opening in the blockage. Use existing trails, roads or cut lines whenever possible to minimize disturbance to riparian vegetation near the waterway.
- Hazardous substances such as fuel, oil, grease, paint, and solvents must be stored where they will not contaminate any waterway and must be disposed of appropriately.
- Spoil-pile material should be deposited away from the waterway, leveled out and planted with grass or shrubs.

For more information, please contact WSA Client Services at **1.866.727.5420**.

