

Water Act: Storm Water Management

FACTS AT YOUR FINGERTIPS

This Fact Sheet provides information on the requirements under Alberta's *Water Act* for storm water runoff and outfall works.

Legislative Requirements

Several legislative requirements apply to the construction of outfall structures on natural water bodies. These requirements are described below.

A *Water Act* approval or a notification under the **Code of Practice for Outfall Structures on Water Bodies** may be required before constructing works in a natural water body. The type of *Water Act* authorization required will be dependent on the proposed work.

Details on how to obtain an approval can be found in the *Water Act: Approvals* fact sheet at: <http://environment.gov.ab.ca/info/library/8262.pdf>. The *Code of Practice for Outfall Structures on Water Bodies* can be found at: <http://environment.alberta.ca/1398.html>.

Note: All reports and plans must be stamped and signed by a qualified engineer registered with the Alberta Professional Engineer, Geologists, and Geophysicists Association (APEGGA).

In most cases, an **Environmental Protection and Enhancement Act (EPEA)** authorization is required to ensure the works meet Provincial standards for the timing, quantity and quality of storm water runoff release.

A **Public Lands Act** authorization is required where the proposed construction is on Crown land or a water body that is claimed by the Crown.

Storm Water Management Guidelines for the Province of Alberta

The *Storm Water Management Guidelines for the Province of Alberta* provides a framework for storm water management from planning to design standards. The report can be downloaded at: <http://environment.gov.ab.ca/info/posting.asp?assetid=6786&categoryid=5>

Storm Water Considerations

Some of the storm water considerations in this guideline include:

- Minimize flooding and erosion
- Minimize effects to the aquatic environment
- Maintain the natural stream and wetlands through the property
- Develop above the 1 in 100 year flood level
- Conform with approved master drainage plans
- Minimize impact on groundwater, erosion and sediment transport to the receiving water body

- Provide runoff control to ensure:
 - A maximum release rate equal to pre-development flow unless an adequate outlet exists and the increased rate of release will not cause any adverse effect.
 - Storm water ponds capable of storing flood events up to 1 in 100 years
 - Capture sediments from runoff

Depending on the complexity of the project, you may be required to provide further information.

Master Drainage Plans

Municipalities that prepare Master Drainage Plans, outlining development within their entire boundaries, can determine the cumulative impact on the receiving water body. These plans can be submitted to the Director for an approval under the *Water Act*. This is a voluntary requirement; however, if a municipality can demonstrate the individual components comply with the Master Drainage Plan there would be no requirement to get individual *Water Act* approvals on a project by project basis.

Adequate Outlet

Storm water systems that are demonstrated to have an adequate outlet do not require a *Water Act* approval. More specifically:

- If the impact of the post-development flow cannot be detected, then the outlet is expected to be adequate; **or**
- If the discharge performs within its design capacity during the peak 1 in 100 year storm event and will not create an adverse impact on the environment or others, then the outlet is expected to be adequate.

If requested, technical information must be provided to Alberta Environment confirming the outlet is adequate. A Code of Practice notification is still required to be submitted if outfall works are to be constructed.

Enforcement

Under the *Water Act*, anyone who conducts an activity in a water body without an Alberta Environment approval or diverts water without a licence may face enforcement action with a fine up to \$50,000 for an individual and \$500,000 for a company or organization. Anyone seeing a water-related activity that could be illegal should contact Alberta Environment. Please call the **Alberta Environmental Emergency and Complaint Hotline at 1-800-222-6514** to report on water-related activities or diversions that you suspect to be unauthorized.

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