

## Wetlands Policy and Management

As significant landowners and managers, Alberta's producers recognize the importance of an ecologically sustainable landscape that includes wetlands. However, provision of the public goods provided by wetlands, in the form of ecosystem services<sup>1</sup> (ES), can come at a private cost to Alberta's producers, who should not have to bear this cost alone. Early and continued engagement with the agriculture industry is critical to ensure agriculture interests are reflected in wetland policy development.



Photo credit: Ducks Unlimited Canada

### AEPA Key Messages:

- Education, awareness and incentives to encourage wetland protection<sup>2</sup>, conservation<sup>3</sup> and restoration<sup>4</sup> are preferred by the agriculture industry rather than a regulatory approach.
- Incentives and programs should be in place to support producers in the protection, conservation and restoration of wetlands.
- Restoration of prairie wetlands must be voluntary and undertaken in partnership between landowners, municipalities and restoration agencies.
- A wetland policy should have clear outcomes and performance measures and needs to be designed so that all industry sectors are treated equitably and fairly.
- Wetlands should be managed in an integrated watershed approach.

[ For more information about AEPA, please visit [www.agpartners.ca](http://www.agpartners.ca). ]

<sup>1</sup> Ecosystem Services: The benefits received from healthy, functioning ecosystems; also known as "ecological services", "environmental goods and services", and "ecological goods and services".  
<sup>2</sup> Protection: Keeping a wetland in a natural state by preventing any activity that would affect it, through the use of incentives, tenure, securement, formal agreement, policy or legislation.  
<sup>3</sup> Conservation: The planned management and wise use of wetlands to ensure they are available for future generations.  
<sup>4</sup> Restoration: The re-establishment of a wetland with a functioning natural ecosystem whose characteristics are as close as possible to pre-disturbance conditions.



Photo credit: Ducks Unlimited Canada

## Wetland Management

[ Wetlands are an important component of healthy aquatic ecosystems. They contribute many benefits to watersheds, communities and economies. ]



## What is a Wetland?

Wetlands are permanently or intermittently wet land, shallow water and land-water margins. Wetlands are formed when water is present in depressions or low areas for a long enough period to support wetland or aquatic processes. Wetlands are dynamic, complex features that are influenced by a variety of factors including climate, ground and surface water, vegetation and soils, and by human and animal activity. There are two basic types of wetlands in Alberta; peatlands and mineral wetlands. Peatlands include bogs and fen. Mineral wetlands include swamps, marshes, and shallow open water.

Wetlands are an important component of healthy aquatic ecosystems. They contribute many benefits to watersheds, communities and economies. These benefits are also known as ecosystem services (ES), which are the benefits received from a healthy, functioning ecosystem.

Examples of ES provided by wetlands are:

ECOSYSTEM SERVICES	BENEFITS
Biodiversity	Provides critical habitat; home to rare and endangered species
Water Quality Improvement	Filtration; purification of water
Flood Reduction	Influences the timing and magnitude of runoff
Groundwater Recharge	Stores water and slowly releases it to groundwater aquifers
Human Use	Education; cultural significance; economic benefit; recreation

## Who Owns Wetlands?

Producers are significant landowners in Alberta and so a large proportion of wetlands are located on private agricultural lands. However, the bed and shore of permanent and naturally occurring water bodies on both public and private land are owned by the Crown, unless title has been granted to a private landowner. This includes wetlands. A permanent water body is one that exhibits persistent evidence of a bank, bed and shore and usually returns to normal levels under ordinary circumstances after periods of drought or flood. As well, all water in wetlands is owned by the Crown under the *Water Act* (1999). Therefore, any activity that will disturb a water body on public or private land requires written approval from the Government of Alberta. Developers and individuals that are approved to disturb wetlands will need to develop a wetland mitigation plan.

**Bank:** The bank is the line where the bed and shore of the body of water ceases; the distinct line of differentiation caused by the natural, long-continued, ordinary action or presence of surface water at its normal height on either the soil or the vegetation.

**Bed and Shore:** The land covered so long by the water as to remove it from vegetation or as to mark a distinct character on the vegetation where it extends into the water or on the soil itself.

## Wetland Policy

Wetland management in Alberta is currently governed by *Wetland Management in the Settled Area of Alberta: An Interim Policy* (1993), which is enabled through the *Water Act*. The interim policy does not apply to the Green Area (Crown Lands) of Alberta. Several additional pieces of provincial legislation play a role in wetland management. These include the *Environmental Protection and Enhancement Act*, the *Municipal Government Act* and the *Public Lands Act*.

The Government of Alberta is in the process of developing a new wetland policy. This new policy will replace the current interim policy and provide coverage at a provincial scale, including wetlands in both the White (settled) and Green (Crown Lands) Areas of Alberta.

## Relevance to Agriculture

While wetlands can be perceived as an inconvenience to a farming operation, they also offer beneficial services. Wetlands play an important role in drainage and the prevention of floods and erosion, along with many other ecosystem services (as discussed above).

Losses of some types of wetlands, particularly slough/marsh wetlands in the central and southern parts of the province, have been significant. About two-thirds of the wetlands in the White or settled area of Alberta are estimated to have been lost. Drought, urban expansion, utility and transportation development and agricultural development have contributed to wetland loss or degradation. Additional losses are likely not sustainable and may have significant consequences on the landscape.

There are several options available for the management of wetlands in the future. These include protection, conservation and restoration.

**Protection:** Keeping a wetland in a natural state by preventing any activity that would affect it, through the use of incentives, tenure, securement, formal agreement, policy or legislation.

**Conservation:** The planned management and wise use of wetlands to ensure they are available for future generations.

**Restoration:** The re-establishment of a wetland as a functioning natural ecosystem whose characteristics are as close as possible to pre-disturbance conditions.

As producers are significant landowners, wetland protection, conservation and restoration opportunities are often available on agricultural land. Voluntary partnerships with restoration agencies, such as Duck Unlimited Canada, offer the opportunity to take advantage of these opportunities. By partnering with restoration agencies, municipalities and the Government of Alberta, the agriculture industry can play a key role in ensuring wetlands are available to offer social, economic and environmental benefits, while ensuring this is not the agriculture industry's cost to bear alone.

## Resources

[www.wetlandsalberta.ca](http://www.wetlandsalberta.ca)

[www.ducks.ca/province/ab/](http://www.ducks.ca/province/ab/)

[www.waterforlife.alberta.ca/01103.html](http://www.waterforlife.alberta.ca/01103.html)