

Provincial Wetland Restoration/Compensation Fact Sheet

Alberta's wetland areas provide clean water, wildlife viewing opportunities and other outdoor recreation activities. They can also help to reduce soil erosion, retain sediments, absorb nutrients, degrade pesticides, store water to moderate impacts of floods and droughts, and help to moderate climate change.

Alberta's wetland areas are under considerable pressure from development in the province. Alberta has lost approximately 64% of its slough/marsh wetlands in the settled area of Alberta.

Alberta's *Water Act* requires that an approval be obtained before undertaking a construction activity in a wetland. A construction activity includes but is not limited to disturbing, altering, infilling or draining a wetland.

A *Water Act* fact sheet about approvals and licenses can be obtained from:

<http://www3.gov.ab.ca/env/water/legislation/factSheets/index.cfm>

Alberta's priority is to reduce loss of wetlands by:

- **Avoiding** impacts to the wetland;
- **Minimizing** impacts and requiring applicable compensation; and
- **Compensating** for impacts that cannot be avoided or minimized.

It is not always possible to avoid wetland impacts. This fact sheet has been written for cases where wetland compensation is required.

Wetland compensation will be provided through restoration of a drained wetland. Restoration should take place within the same watershed as the impacted wetland, or in a watershed close by.

Compensation requires approval applicants to pay into a fund established for wetland restoration work.

Wetland restoration

Wetland restoration is the responsibility of Wetland Restoration Agencies. Ducks Unlimited Canada is currently the only recognized agency in Alberta.

These agencies are responsible for selecting, developing, and maintaining restored wetlands. The benefit to the approval applicant is:

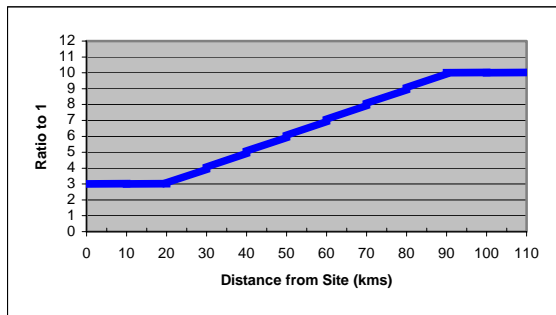
- Overall cost and time required for restoration projects is less than if an applicant were to restore a wetland area on their own.
- The agency accepts the long-term management responsibility or liability of the restored wetland.

Approval process and the use of wetland compensation

- Approval applicants should discuss their proposal, including options to avoid or minimize the impact on the wetland, with a wetlands specialist or restoration agency and the local municipality before applying for a *Water Act* approval.
- Approval applicants should also consult with Alberta Sustainable Resource Development's Public Lands and Forest Division.
- An assessment and classification of the affected wetland must be completed if the wetland is to be destroyed or altered¹.
- It is almost impossible to fully replicate a wetland ecosystem. To compensate, an approval applicant must restore a larger area of wetland (hectares) when a smaller area of natural wetland is destroyed. See wetland replacement graph.

1 To classify a wetland use either the Cowardin or Stewart and Kantrud wetland classification system.

Wetland replacement graph



Graph based on material sourced from "Wetland Mitigation in Canada a Framework for Application".

Wetland compensation (example)

- An approval applicant is planning to develop a site that affects a five-hectare wetland.
- The site assessment indicates that the wetland is an emergent freshwater wetland² and that four hectares of restored wetland will be required for every one hectare of naturally occurring wetland destroyed. This ratio is selected because the nearest wetland restoration site is less than 30 km from the impacted wetland.
- The approval applicant now has the option of contacting a wetland restoration agency to do the restoration work. The company is required to pay the agency to restore twenty hectares³ of wetland.
- The payment is based on the agency's cost to restore the same type of wetland (e.g. land acquisition, including upland area and wetland margins, cost of restoration work and monitoring).
- Payment to the wetland restoration agency is required before an approval to affect a wetland will be issued.

Note: The Director, under the *Water Act*, can refuse to grant an approval where he/she considers it appropriate to do so.

Definitions:

Approval Applicant: a person(s) who is proposing activities in and around a wetland or considering restoring a naturally occurring wetland.

Compensation: payment into a fund for wetland restoration work.

Restoration: re-establishment of a naturally occurring wetland with a functioning natural ecosystem whose characteristics are as close as possible to conditions prior to drainage or other alteration.

Wetland area: the flooded portion of the wetland including the transition zone from aquatic to terrestrial vegetation.

Wetland Restoration Agency: a conservation agency responsible for restoring drained or altered wetlands to near natural conditions.

Supplementary Information

View the complete Provincial Wetland Restoration/Compensation Guide at:
www.gov.ab.ca/env/info/infocentre/publist.cfm

Submit *Water Act* applications and wetland mitigation plan to your nearest regional office:
<http://www3.gov.ab.ca/env/water/legislation/RegionalContacts.html>

Visit Ducks Unlimited Canada at:
www.ducks.ca

Cowardin Classification System can be found at:
<http://www.npwrc.usgs.gov/resource/1998/classwet/classwet.htm>

Stewart and Kantrud Wetland Classification System can be found at:
<http://www.npwrc.usgs.gov/resource/tools/pondlake/pondlake.htm>

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- 2 This classification is based on the Cowardin Wetland Classification System.
- 3 The agency will restore twenty hectares based on the requirement for the approval applicant to restore four hectares of wetland for each of the five hectares impacted by development.