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## Wetland Conservation

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**Resolution No.:** 106/2009

**Lead Role:** Chief Commissioner

**Replaces:** N/A

**Last Review Date:** March 3, 2009

**Next Review Date:** 03/2012

**Administrative Responsibility:** Engineering & Environmental Planning

**Special Notes:**

Cross reference with Policy SER-008-015, Dedication of Municipal Reserve and Environmental Reserve Lands, Policy SER-009-032, Biophysical Assessment, Policy SER-009-034, Tree Conservation During Development and Policy SER-009-035, Tree Management.

Wetland Conservation Guide can be accessed in: EDMS - EEP Environmental and Open Space Planning - 4030/12043/Wetland Conservation Guide

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### Policy Statement

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Strathcona County recognizes wetlands as important municipal infrastructure components for environmental, economic and social sustainability and will conserve their value for present and future generations. Conservation of the wetlands in urban and rural development areas is a priority for environmental, economic and human health.

Strathcona County will put in place specific procedures for landowners to realize the goal of No Net Loss of wetlands within the urban and rural areas of Strathcona County based on municipal, community and environmental needs. The goal of No Net Loss of wetland functions is to balance the loss of wetland functions, through rehabilitation of former degraded wetlands or enhancement of healthy, functioning wetlands. As a last resort, compensation for lost functions will be sought through creation of wetlands where there was none before. No Net Loss requires proponents to work through a strict series of Mitigation activities – Avoidance, Minimization, and Compensation – with clear criteria and defined outcomes, as set out by the legislation (*Water Act* and *Public Lands Act*), the Federal Policy on Wetland Conservation (1991) and the Provincial Wetland Restoration/Compensation Guide (2007).

Mitigation is a process to reduce loss of wetland by:

- **Avoidance** to wetland damage or destruction
- **Minimization** of the impact and provision of applicable compensation
- **Compensation** for wetland damage or destruction

Strathcona County shall ensure the conservation of wetlands during the process of developing land and constructing buildings and infrastructure, either through Avoidance, Minimization or Compensation. All development initiated by a landowner or a third party, including Strathcona County, shall be subject to this policy. In addition, all landowners must be compliant with the provincial *Water Act* and *Public Lands Act* as well as other provincial and federal laws and policies. All landowners are responsible for adherence to all relevant provincial and federal legislation/regulations.

Strathcona County will minimize or reverse Wetland Loss, conserve existing wetland resources, convey the importance of wetlands to developers, industry and the public through education initiatives, and restore watershed function through wetland restoration projects.

## 1. Guidelines

1.1 Wetlands make a difference to our environmental health by:

- reducing the greenhouse effect by acting as a carbon sink, removing carbon from CO<sub>2</sub> and releasing oxygen;
- improving water quality through filtration, as water passes through a wetland, impurities are removed;
- providing natural purification and storage of freshwater;
- recharging groundwater by storing surface water and letting some of it seep back into the ground where its filtered further;
- reducing the effects of drought;
- reducing the effects of flooding and soil erosion by storing runoff water and releasing it slowly downstream;
- supporting biodiversity and providing habitat for plants, birds, mammals and fish;
- protecting natural shorelines from wave action and erosion; and
- reducing water pollution (settle out, trap and hold sediment, heavy metals, and hydrocarbons).

1.2 Wetlands make a difference to our economic health by:

- reducing water quality improvements costs (natural filtration reduces engineering water treatment needs);
- reducing flooding and protecting private property; and
- increasing property value.

1.3 Estimates in “Wetlands of Canada” published in 1988 indicate that the economic returns derived from wetlands exceed \$10 billion annually in Canada.

1.4 Wetlands increase our quality of life by:

- adding beauty to the community;
- improving human health by influencing our physical and mental well-being;
- providing opportunities for hunting, trapping and fishing; and
- providing opportunities for tourism and recreation (boating, bird watching, nature photography).

1.5 Strathcona County recognizes wetlands as important municipal infrastructure components for environmental, economic and social sustainability and will conserve their value for present and future generations.

## 2. Definitions

Biophysical Assessment – means standards for an ecological assessment of a site as per Strathcona County Policy SER-009-032.

Developer – means a private sector company, individual landowner or Strathcona County with the purpose of developing a parcel of land for residential, commercial, industrial or other use.

Development – means the activities defined as Development in the Municipal Government Act.

Development Team – means the Developer and appropriate private consultants.

No Net Loss – means no further reduction of hydrological and ecological function of wetlands, for every wetland hectare lost from the landscape a greater amount of wetland area must be provided. A minimum replacement ratio of 3:1 is required (for every hectare lost, 3 hectares will be replaced).

Qualified Professional – means a consulting professional biologist conducting the Wetland Classification and producing the Wetland Mitigation reports for Provincial and Municipal review.

Wetland – means land having the water table at, near, or above the land surface or which is saturated for a long enough period to promote wetland or aquatic processes as indicated by hydric (poorly drained) soils, hydrophytic (water loving) vegetation, and various kinds of biological activity which are adapted to a wet environment.

Wetland Avoidance – means avoiding impacts to the wetland.

Wetland Classification – means an assessment performed by a Qualified Professional using the Cowardin Wetland Classification System or the Stewart and Kantrud Wetland Classification System.

Wetland Loss – means infilling, altering, or physically draining the wetland, any impact to the riparian area and buffer strips, and any type of interference with the hydrology to and from the wetland.

Wetland Minimization – means rehabilitation of former degraded wetlands or enhancement of healthy, functioning wetlands.

Wetland Mitigation – means reducing loss of wetlands by focusing on avoiding loss, minimizing impacts and compensating for unavoidable wetlands loss.

Wetland Compensation – means compensating for impacts that cannot be avoided or minimized.

### 3. Roles and Responsibilities

#### 3.1 Engineering & Environmental Planning (EEP) Department:

(a) is responsible to develop procedures to ensure the proper implementation of this Policy and to provide guidance to Developers and others in complying with the requirements of this Policy.

(b) The Coordinator of Environmental & Open Space Planning is responsible for reviewing Wetland Classification and coordinating the approval of Wetland Mitigation. Representatives of Environmental & Open Space Planning will review reports, provide recommendations and conduct inspections.

(c) The Coordinator of Utilities & Environmental Engineering is responsible for reviewing Wetland Mitigation. Representatives of Utilities & Environmental Engineering will review reports, provide recommendations and conduct inspections.

#### 3.2 Planning & Development Services (PDS) Department:

(a) is responsible for reviewing Wetland Mitigation.

(b) The Coordinator of Land Management Services is responsible for managing municipal property.

EEP and PDS are responsible for coordinating the implementation of the policy. These departments ensure the conservation, maintenance, enhancement and management of wetlands of County lands for their full range of functions.

#### 3.3 Utilities Department:

(a) is responsible for managing wetlands on municipal property.

#### 3.4 Transportation & Agriculture Services (TAS) Department:

(a) is responsible for managing wetlands on municipal property.

Utilities and TAS are responsible for coordinating the management of wetlands per the principles of the policy. These departments ensure the conservation, maintenance, enhancement and management of wetlands on County lands for their full range of functions.

### 3.5 Development Team:

- (a) The Development Team is responsible to follow the procedures of this policy.
- (b) The Development Team will provide Wetland Classification and Mitigation. This information is required in order to make sound science-based decisions regarding conservation priorities. This information will be submitted to Strathcona County for approval in conjunction with the Biophysical Assessment (Strathcona County Policy SER-009-032) at the ASP, ACP or Conceptual Scheme stage of Development.
- (c) The Development Team will ensure that the Wetland Mitigation recommendations are adhered to during construction and maintenance.

If a Conceptual Scheme is being prepared, the level of detail will be determined by Strathcona County and may be included at the Biophysical Assessment (Strathcona County Policy SER-009-032) stage.

During CCC and FAC inspections, the Biophysical Assessment (Strathcona County Policy SER-009-032) will be reviewed by Strathcona County representatives to ensure that the Wetland Mitigation recommendations provided by the Developer have been followed.

The procedures to complete the Wetland Classification and Mitigation are specified with the accompanying Guide to this document.

- (d) The Development Team will ensure that the wetland is sustainable for the long term.