



Grand River Conservation Authority

Wetlands Policy

Approved by the Grand River Conservation Authority
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Note: Sections 6.2.6, 6.2.7, 7.3.8-7.3.11 are rescinded as of January 1, 2008. Please check the Grand River Conservation Authority's website for the most up-to-date approved policies for the administration of the Development, Interference With Wetlands and Alteration to Shorelines and Watercourses Regulation (Ontario Regulation 150/06).

All references to the Fill, Construction and Alteration to Waterways Regulation have been superseded by Ontario Regulation 150/06 "Development, Interference with Wetlands and Alterations to Shorelines and Watercourse Regulation.

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Grand River Conservation Authority Wetlands Policy

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Grand River Conservation Authority

Wetlands Policy

1 Introduction

Benefits of Wetlands

Wetlands are an essential natural resource. They moderate water flow by absorbing much of the surface water runoff from the land and then slowly releasing it. This helps to reduce flooding and to sustain stream flow during dry spells. Many wetlands recharge groundwater by moving surface water into the groundwater system – the source of much of our drinking water supply in the Grand River watershed

Wetlands improve water quality because they trap sediment and soil-bound nutrients and contaminants before surface run-off reaches open water, thereby protecting our drinking water sources. Carbon, a primary component of the most significant greenhouse gases that contribute to climate change, is sequestered (or stored) in wetlands soils and vegetation.

Wetlands offer shelter to a great number of species. They are especially noted for supporting North America's waterfowl species. Songbirds, shorebirds, and raptors also use wetlands for nesting habitat, protective cover, or sources of food. Wetlands are equally important in providing essential breeding habitat for many amphibians, reptiles and insects. They are prime locations for a large number of freshwater fish seeking shallow waters for cover, spawning and nurseries and serve as a primary habitat for some mammals adapted to aquatic conditions, including beavers and muskrats. They also provide habitat for other upland species that occasionally use these areas to escape predators, reproduce, or forage. In fact, wetlands have the highest biodiversity of any landscape unit.

Wetlands provide socio-economic benefits including outdoor recreation, nature appreciation, bird watching, photography, hunting and fishing, and environmental education and research. Some wetlands also provide opportunities for the harvesting of renewable wood products.

Status of Wetlands

The Grand River watershed has lost 65% of the wetlands over the last 200 years. In some areas of the watershed, this loss exceeds 85%. About 70% of this historic loss in Southern Ontario can be attributed to the turn-of-the-century conversion to agriculture. This loss of wetlands, along with massive deforestation and rapid settlement, resulted in severe water problems including flooding, drought, and degraded water quality. This situation led to the formation of the Grand River Conservation Commission in 1932 and the Grand Valley Conservation Authority in 1948, the predecessors of the Grand River Conservation Authority. Through the activities of these agencies, both structural (dams, dykes) and non-structural (tree planting, land acquisition, regulations), many of the watershed water problems have been managed and reduced, but have seldom been eliminated.

Despite the existence of provincial, Grand River Conservation Authority (GRCA) and municipal policies and regulations to protect wetlands, their effectiveness varies across jurisdictions. As a result, wetlands continue to be lost or degraded in some parts of the watershed. They continue to be drained for agriculture, excavated for peat or ponds, filled for development, fragmented by

roads, and affected by other forms of human activity such as pesticide and fertilizer use, road salt runoff, and unauthorized trail construction.

Even when land use change avoids wetlands, the flow of surface water and groundwater that sustains them is often disrupted or degraded and wetlands become isolated from supporting vegetation units and larger wildlife corridors. Often, the persistent presence of humans also disrupts the habitat functions of wetlands.

Given these impacts, GRCA members requested that staff review existing GRCA wetland policies and programs and recommend changes that would result in better protection and management of wetlands throughout the watershed.

2 Role of the GRCA in Wetlands Management

The Grand River Conservation Authority (GRCA) is, by definition, a partnership of municipalities for the management of water and natural resources on a watershed basis. Its governing body is comprised of representatives appointed by the member municipalities. This board approves the GRCA budget and policies and guides its activities. Under the terms of the provincial Conservation Authorities Act:

"The objectives of the Authority are to establish and undertake in the area over which it has jurisdiction, a program designed to further the conservation, restoration, development and management of natural resources other than gas, oil, coal and minerals." (Conservation Authorities Act, RSO 1990, c. 27, s. 20).

To fulfill its mandate, the GRCA works closely with all levels of government to co-ordinate and implement programs and services to facilitate watershed planning, improve water quality, maintain water supply, reduce flood damages, protect natural areas, educate the public, and provide quality outdoor recreational opportunities.

Programs and services such as the administration of the Fill, Construction and Alteration to Waterways Regulation, municipal plan input and review, land acquisition, landowner contact and land stewardship, research, and outdoor environmental education contribute to the protection and/or management of wetlands.

Fill, Construction and Alteration to Waterways Regulation

The GRCA administers the Fill, Construction and Alteration to Waterways Regulation set out under the terms of the Conservation Authorities Act. The Regulation states that permission must be obtained from the GRCA to:

- *construct any building or structure or permit any building or structure to be constructed in or on a pond, swamp or in any area susceptible to flooding during a regional storm;*
- *place or dump fill or permit fill to be placed or dumped in the areas described in the Schedules whether such fill is already located in or upon such area, or brought to or on such area from some other place or places; or*
- *straighten, change, divert, or interfere in any way with the existing channel or river, creek, stream, or watercourse. (Ontario Regulation 149 as amended by 69/93, 669/94 and 142/98.)*

Permission may be granted by the GRCA if it can be shown that the proposed work will not affect the control of flooding or pollution or the conservation of land.

The GRCA regulates all wetlands that fall within the terms and conditions described above, regardless of size or significance. Under the Regulation, the GRCA regulates construction in wetlands located within floodplains or in swamps. Many wetlands, particularly critical source areas, are defined in 23 schedules attached to the Regulation. The GRCA regulates fill placement in these areas to prevent them from being filled. An applicant who has obtained a Fill, Construction and Alteration to Waterways Permit from the GRCA may also be required to obtain municipal, provincial and/or federal approvals prior to proceeding with any site works.

In 1992, the GRCA adopted the Provincial Policy Statement as its policy for the review of applications for Fill, Construction and Alteration to Waterways permits within or near Provincially Significant Wetlands.

Guidelines for the review of non-provincially significant wetlands were approved in 1988 by the GRCA. These guidelines state:

“For other wetland classes, 3-7, scheduled areas construction or infilling may only be permitted provided that either;

a) the wetland is not of concern to the GRCA or the local municipality,

or,

b) a technical review has been carried out to show any such development will not affect the control of flooding or pollution or the conservation of land.

Similarly for non-scheduled areas the same guidelines apply to construction of buildings or structures in the wetland.”(GRCA Res. No. 521-88).

These guidelines provide limited direction to GRCA staff and members since there are no accompanying criteria to determine when a wetland is of concern to the GRCA. While the Provincial Policy Statement, which was adopted by the GRCA in 1992, also encourages protection of non-provincially significant wetlands, no further policy direction has been developed by the GRCA to make consistent decisions in this regard.

Plan Input and Review

The GRCA is the lead commenting agency for natural hazards. This means that staff review and comment on municipal policy documents and development proposals to ensure that they have appropriate regard to the policies outlined in Section 3.1 of the Provincial Policy Statement “Public Health and Safety – Natural Hazards”. The Minister of Natural Resources delegated this responsibility to the GRCA in 1995. Natural hazards include many wetlands, floodplains, hazardous slopes, Great Lakes shorelines, unstable soils, erodible areas and sinkholes.

The GRCA also provides planning advisory services to member municipalities through Memoranda of Agreement. In its advisory capacity, the GRCA reviews development proposals and provides comments regarding their potential environmental impacts and advises how damaging impacts can be avoided or reduced.

Land Securement

Securing wetlands and contiguous lands that function as buffers is another program of the GRCA that has been ongoing since the 1950s. This is accomplished through such means as land purchase, bequests and conservation easements. Of the 19 000 hectares the GRCA currently owns, about 5 850 hectares are Provincially Significant Wetlands. Important wetlands owned by the Grand River Conservation Authority include large portions of Luther Marsh near the source of the Grand River, and Dunnville Marshes near the river's mouth at Lake Erie.

Landowner Contact and Land Stewardship

The GRCA encourages landowners to identify and implement best management practices on rural lands through such programs as the Rural Water Quality Program. The Rural Water Quality Program provides financial assistance to farmers implementing projects to improve water quality. Delivered by the GRCA, it is funded by numerous municipal and agency partners and is available, to varying degrees, throughout the watershed. Staff also meet with landowners on a one-to-one basis to discuss the need to protect existing wetlands and the management options available.

Research and Outdoor Environmental Education

To further our understanding of wetland functions, significance and natural heritage values, the GRCA facilitates and participates in wetland research. For example, the GRCA has entered into an agreement with the University of Waterloo Wetlands Research Centre to facilitate collaborative wetland research. Wetlands owned by the GRCA and located at Guelph Lake, Puslinch Lake and Grass Lake (near Glen Morris) have been designated and posted as long-term research areas.

Outdoor environmental education programs provided to elementary and secondary classes through watershed school boards are offered by the GRCA at its four Nature Centres including Apps' Mill, Shade's Mills, Guelph Lake and Laurel Creek. These programs instill an environmental ethic and understanding of the need for conservation with school children - our future decision-makers. The GRCA also provides information to the public through weekend nature centre programs, informational materials and its website.

3 Policy Intent

This Policy provides guidance to strengthen the delivery and effectiveness of GRCA programs relating to wetlands management and advocates making more decisions about wetlands using comprehensive planning in collaboration with member municipalities rather than a piecemeal, case-by-case approach. A comprehensive planning process, such as that undertaken for a subwatershed plan, provides terms of reference for appropriate studies to identify natural heritage form and functions and determine the potential impacts of development on them, offers opportunities for public participation, and provides the context within which municipal decisions can be made that minimize negative environmental impacts and result in efficient and cost-effective development design and land-use patterns.

This Policy complements the current Provincial Policy Statement regarding Provincially Significant Wetlands, encourages member municipalities to implement complementary policies in their respective Official Plans, and provides a framework for implementation.

This Policy will result in

- a stronger level of protection for non-provincially significant and unevaluated wetlands,
- a more consistent approach to the review of applications for a Fill, Construction and Alteration to Waterways Permit within or near non-provincially significant wetlands, and,
- more predictability and certainty in the advice given by the GRCA to member municipalities in regard to land use planning policies, development applications, and public undertakings.

4 Guiding Principles

Four guiding principles form the basis of this Policy:

- Wetlands are critical to sustaining surface and groundwater quality and quantity and therefore, essential to the well-being of humans and all other forms of life in the Grand River watershed.
- Wetlands are core components of the natural heritage system of the Grand River watershed.
- Wetlands will be managed on a watershed and subwatershed basis.
- Wetland loss will be avoided.

5 Goals

Through its programs and regulations, the Grand River Conservation Authority will pursue five management goals for wetlands in the Grand River watershed:

- To improve wetland health by improving or restoring wetland functions.
- To increase the area of healthy, self-sustaining wetlands.
- To improve wetland habitat and native biodiversity.
- To link wetlands to other natural heritage features and habitats.
- To increase public appreciation of the value and sensitivity of wetlands.

6 GRCA Wetland Policies

6.1 Wetland Identification and Data Management

6.1.1 The Ontario Ministry of Natural Resources is the lead agency for setting criteria and standards for wetland classification and evaluation in Ontario and reviewing and confirming wetland evaluations and classifications. The GRCA will partner with the Ontario Ministry of Natural Resources, member municipalities and other qualified individuals and groups, to identify, classify, evaluate and map all wetlands using the current standards approved by the Ministry.

6.1.2 The GRCA will partner with the Ontario Ministry of Natural Resources to consolidate and maintain a comprehensive wetland inventory and database for the Grand River watershed.

6.1.3 The GRCA will provide its member municipalities with accurate, up-to-date wetland information in a timely fashion.

6.2 Planning and Protection

Planning –Watershed/Subwatershed

6.2.1 The GRCA will collaborate with its partners in *The Grand Strategy* to develop a comprehensive watershed-wide Natural Heritage Framework to guide wetland protection, management, restoration and creation within the Grand River watershed.

6.2.2 The GRCA will encourage member municipalities to protect wetlands in their Official Plans in support of this Policy.

6.2.3 The GRCA will promote comprehensive plans to assess wetlands at a landscape scale. A comprehensive plan will:

- identify wetland form and functions, benefits and significance, and;
- identify associated surface and groundwater regimes and the hydrological and hydrogeological conditions upon which they depend, and;
- identify and prioritize protection/restoration needs and creation/enhancement opportunities, and;
- identify potential linkages to other natural heritage features and habitats, and;
- prescribe guidelines for determining buffers and setbacks, and;
- develop management recommendations to ensure the long-term sustainability of the wetland.

6.2.4 The GRCA will develop wetlands management plans based on comprehensive plans for all GRCA-owned lands by 2007.

6.2.5 Nothing in this Policy is intended to limit the ability of existing agricultural uses to continue.

Protection - Fill, Construction and Alteration to Waterways Regulation

6.2.6 Refer to GRCA Policy Document for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.

6.2.7 Refer to GRCA Policy Document for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.

Protection – Advisory Comments to Member Municipalities

6.2.8 The GRCA will provide advice to municipalities, provincial agencies and landowners regarding the protection, enhancement or restoration of wetlands in support of this Policy.

6.2.9 Where development is proposed within or adjacent to an unevaluated wetland, the GRCA will request that a wetland evaluation be carried out during the pre-consultation phase using the most recent OMNR Wetland Evaluation System.

- 6.2.10 Where a comprehensive plan is available, the GRCA, in consultation with the affected municipalities, will request a more detailed site-specific study (i.e. a Scoped Environmental Impact Study) to determine the wetland boundary using the most recent OMNR Wetland Evaluation System, appropriate buffers and setbacks using the prescribed guidelines identified in the comprehensive plan, and how the form and functions of the wetlands will be sustained, improved or restored.
- 6.2.11 Where a comprehensive plan is not available or has not prescribed guidelines for determining buffers and setbacks, the GRCA will request an Environmental Impact Statement for development (including lot lines) within 30 metres of the boundary of a non-provincially significant wetland, except where municipal plan policies may require Environmental Impact Statements within a greater distance from the wetland boundary.
- 6.2.12 The GRCA, in consultation with the affected municipalities, will request an Environmental Impact Statement for development (including lot lines) within 120 metres of the boundary of a Provincially Significant Wetland or an unevaluated wetland.
- 6.2.13 The GRCA will encourage member municipalities and the private sector to avoid wetlands in developing golf courses, community trails, cart paths and other recreational facilities.
- 6.2.14 The GRCA will encourage member municipalities and the private sector to avoid wetlands in designing and building transportation and utilities infrastructure.
- 6.2.15 Where wetlands currently used for agriculture are subject to a proposed change in land use, the GRCA will consider them to be wetlands subject to this Policy.

Protection - Advisory Comments to Other Agencies

- 6.2.16 The GRCA will discourage the construction of works proposed under federal and provincial legislation that may destroy or degrade wetlands. Such legislation includes but is not limited to the Canadian Environmental Assessment Act, Ontario Environmental Assessment Act, Ontario Drainage Act, and Ontario Aggregate Resources Act.
- 6.2.17 Where works proceed under federal or provincial legislation, the GRCA will request that they be located and designed to minimize negative impacts on existing wetlands and that opportunities to enlarge or enhance remaining wetlands or linkages among natural heritage features be pursued, where reasonable and appropriate.

6.3 Land Securement

- 6.3.1 The GRCA will acquire wetlands and contiguous buffer lands on a willing-buyer, willing-seller basis, in the following key areas: Keldon Source Area, Amaranth Source Area, Luther Marsh, Roseville Swamp, Beverly Swamp, Mill Creek, Bannister-Wrigley Complex, Irish Creek, Portuguese Swamp, Puslinch Lake, Whitemans Creek Source Area, Oakland Swamp, Dunnville Marshes, and wetlands adjacent to other GRCA-owned lands.

6.3.2 The GRCA will accept land dedications, bequests and conservation easements to protect wetlands in the areas described in Section 6.3.1.

6.3.3 The GRCA will acquire other wetland areas on a case-by-case basis.

6.3.4 The GRCA will partner with member municipalities and other conservation agencies such as the Ontario Ministry of Natural Resources, Nature Conservancy of Canada, Ducks Unlimited Canada, and Eastern Habitat Joint Venture to secure wetlands.

6.4 Stewardship

6.4.1 The GRCA will partner with member municipalities, provincial/federal agencies, First Nations, the development industry, and other conservation organizations to undertake and demonstrate best management practices for wetland protection, enhancement, restoration and creation in the Grand River watershed.

6.4.2 The GRCA will encourage private landowners to adopt best management practices for wetland protection, enhancement, restoration and creation in the Grand River watershed.

6.4.3 The GRCA will partner with member municipalities, provincial/federal agencies, First Nations, the development industry, associations, community groups and landowners to implement the wetland management recommendations contained in comprehensive plans.

6.4.4 The GRCA will partner with member municipalities, provincial/federal agencies, First Nations, associations, community groups and landowners to implement the wetland management recommendations on GRCA-owned lands.

6.4.5 The GRCA will encourage agricultural practices that do not impact on wetland areas. This may include best management practices for soil and water management, wildlife management, forestry, buffer establishment, fragile land retirement, nutrient management planning and linking fragmented wetland areas.

6.4.6 The GRCA will celebrate the actions and accomplishments of member municipalities, federal/provincial agencies, First Nations, the development industry, associations, community groups and landowners in implementing best management practices for wetlands through the Grand Actions Newsletter, Grand Actions Registry and other means.

6.5 Information and Education

6.5.1 The GRCA will encourage and facilitate research and educational uses of GRCA-owned wetlands through Nature Centre programs, Memoranda of Agreement with universities, and other means.

6.5.2 The GRCA will invite scientific studies of wetlands and natural heritage in the Grand River watershed through Memoranda of Agreement with universities, agencies and other means.

6.5.3 The GRCA will provide information and environmental education programs to school children and the general public about the benefits and values of wetlands and the need for protecting, restoring and enhancing them.

6.5.4 The GRCA will provide in a timely manner, the best available wetland information to municipalities, consultants, educational institutions, landowners and the general public to encourage protection and appreciation of the wetlands.

6.5.5 The GRCA will make information available to landowners regarding wetlands on their property and the implication of this Policy on their land use activities.

6.6 Monitoring and Reporting

6.6.1 The GRCA will work with member municipalities, provincial/federal agencies, community groups and the development industry to monitor the impacts of development on wetlands.

6.6.2 The GRCA will report on the state of the wetlands in the Grand River watershed as part of the State of the Watershed Report.

6.6.3 The GRCA will monitor the effectiveness of this Policy in meeting the stated goals.

6.6.4 The GRCA will review this Policy at five-year intervals except where changes in provincial legislation, regulation, or guidelines require otherwise.

7 Implementation

7.1 Effective Date

7.1.1 This Wetlands Policy will come into effect upon approval by the GRCA.

7.1.2 The GRCA in consultation with member municipalities, community groups, the development industry and other stakeholders will develop specific guidelines for implementing this Policy.

7.2 Wetlands Identification and Data Management

7.2.1 The GRCA will work with the Ontario Ministry of Natural Resources, member municipalities, qualified individuals and groups to develop and implement a work plan for the identification, classification, evaluation and mapping of all wetlands in the Grand River watershed by 2005.

7.2.2 Information on wetlands will be updated by the GRCA as it becomes available through inventory updates, comprehensive plans and other research for:

- incorporation into its new Regulation under the Conservation Authorities Act.
- use by member municipalities, watershed universities and the public.
- monitoring the status of wetlands.

7.3 Planning and Protection

Planning – Watershed/Subwatershed

7.3.1 With its partners in *The Grand Strategy*, the GRCA will develop terms of reference, budget and work plan for a watershed-wide Natural Heritage Framework to be completed by 2005.

- 7.3.2 The GRCA will develop terms of reference, budget and work plan for wetlands management studies based on comprehensive plans on all GRCA-owned lands to be completed by 2007.
- 7.3.3 The GRCA will request that a wetland assessment as described in Section 6.2.3 be included in the terms of reference for all future comprehensive plans..
- 7.3.4 The GRCA will work with its member municipalities to jointly identify priorities for updating existing comprehensive plans that do not incorporate a wetlands assessment as described in Section 6.2.3 where possible and appropriate, and for undertaking new comprehensive plans.
- 7.3.5 The GRCA will develop terms of reference and technical standards for updating or developing new comprehensive plans.
- 7.3.6 The GRCA will encourage member municipalities to revise their Official Plans in support of this Policy, when they undertake their scheduled five-year review.
- 7.3.7 The GRCA will work with member municipalities and provincial ministries and agencies to ensure that this Policy is implemented in a manner that complements provincial and municipal initiatives relating to the identification and protection of wetlands and respects private landowners rights.

Protection – Fill, Construction and Alteration to Waterways Regulation

- 7.3.8 Refer to GRCA Policy Document for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.
- 7.3.9 Refer to GRCA Policy Document for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.
- 7.3.10 Refer to GRCA Policy Document for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.
- 7.3.11 Refer to GRCA Policy Document for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.

Protection – Advisory Comments to Member Municipalities

- 7.3.12 GRCA staff will use this Policy, in addition to Memoranda of Agreement and any other mutually agreed upon policies with member municipalities, in the review of all complete applications that are submitted after it comes into effect. Applications must be complete in accordance with all requirements of the Planning Act and the member municipality.
- 7.3.13 The GRCA will encourage its member municipalities to consider application of this Policy, even though the original application predates this Policy, in the following circumstances:
 - 7.3.13.1 When an applicant, in the opinion of the municipality, has caused considerable delay in evaluating the application or in clearing conditions of approval.

7.3.13.2 When an applicant is seeking a modification to an approval that predates this Policy and the modification would be contrary to this Policy.

7.3.13.3 When an applicant is seeking to have a condition of approval amended and the amendment would be contrary to this Policy.

7.3.14 The GRCA will work with its member municipalities to develop technical guidelines and standards for the completion of Environmental Impact Statements and site-specific studies.

Protection – Advisory Comments to Other Agencies

7.3.15 The GRCA will use this Policy in the review of all future works and undertakings proposed under federal and provincial legislation, after it is approved by the GRCA.

7.4 Land Securement

7.4.1 A priority listing and five-year budget for wetlands acquisition by the GRCA will be developed and updated periodically.

7.4.2 The GRCA will consult with the member municipality prior to acquiring wetlands in order to identify and resolve any municipal concerns.

7.5 Stewardship

7.5.1 Member municipalities, the development industry and private landowners will be encouraged to undertake appropriate actions in keeping with the watershed-wide Natural Heritage Framework, once it is completed.

7.5.2 The GRCA will partner with the agricultural community and member municipalities to develop demonstration projects that show means of developing and maintaining agricultural drains in keeping with this Policy.

7.5.3 The GRCA will partner with member municipalities, provincial/federal agencies, First Nations, the development industry and other conservation organizations to develop demonstration projects that show successful means of protecting, enhancing, restoring and creating wetlands.

7.5.4 Best management practices for wetlands will be promoted through extension services programs delivered to landowners by GRCA staff.

7.5.5 The GRCA will work with community groups and others to undertake and/or encourage best management practices in critical areas identified for wetlands stewardship action in subwatershed plans and other comprehensive plans.

7.6 Information and Education

7.6.1 A list of wetland research needs in the watershed will be discussed with universities and non-government groups such as Ducks Unlimited Canada, Nature Conservancy of Canada, and Eastern Habitat Joint Venture, Federation of Ontario Naturalists and other local naturalists clubs in preparation for developing Memoranda of Agreements or other means for undertaking specific research.

7.6.2 The GRCA's four Nature Centres will deliver educational programs that encourage the understanding and stewardship of wetlands.

- 7.6.3 Information materials will be developed by the GRCA to educate the watershed landowners and residents about the benefits of the wetlands and the stewardship actions that are necessary for their protection, enhancement and restoration.
- 7.6.4 The benefits of wetlands and this Policy will be promoted to consultants, developers, and landowners.
- 7.6.5 A notice of the new GRCA Wetlands Policy will be distributed throughout the watershed and posted on the GRCA website within 30 days of its approval.
- 7.6.6 The mapping of wetlands for the purpose of regulation by the GRCA will be subject to a full public consultation process commencing after the approval of the enabling Generic Regulation under the Conservation Authorities Act.

7.7 Monitoring and Reporting

- 7.7.1 The GRCA will report annually on known wetland gains and losses as a means of determining the effectiveness of this Policy.
- 7.7.2 The GRCA will ensure compliance with the terms and conditions of any approvals given under the Fill, Construction and Alteration to Waterways Permit.
- 7.7.3 The GRCA will partner with member municipalities to detect and pursue violations to the Fill, Construction and Alteration to Waterways Regulation.

8 Definitions

Adjacent Lands means those lands, contiguous to a specific natural heritage feature or area, where it is likely that development or site alteration would have a negative impact on the feature or area (Provincial Policy Statement, 1997, page 13).

Artificial Wetlands means wetlands which have developed or have been created as a result of human influence on the landscape. Man-made ponds, lakes, lagoons, drainage courses, , excavated pits, and other structures made to store or convey water on the landscape often become wetlands when they are left to naturalize. Similarly, artificial surface and subsurface drainage systems which are not well managed will cause wetland formation on some sites.

Buffers are planned and managed strips of land and vegetation located between wetlands and development sites, which are intended to protect the wetland and sustain its identified ecological functions. In some developing areas the buffers may be the same as a setback. In others, as a result of detailed investigations, planning studies and site-specific environmental impact studies the buffer can be a combination of topography, vegetation and soil in a relatively narrow area of land, designed to filter surface runoff, noise, and light while functioning as a windbreak to protect sensitive habitat. Buffers are studied and prescribed at a more detailed site specific level than setbacks. The type and scope of development are considered in prescribing buffers.

Comprehensive Plan means a plan prepared at a landscape scale such as a watershed/subwatershed plan, an Environmental Assessment, or a community plan that includes a comprehensive Environmental Impact Statement.

Development means the creation of a new lot, a change in land use, or the construction of buildings and structures, requiring approval under the Planning Act; but does not include

activities that create or maintain infrastructure authorized under an environmental assessment process; or works subject to the Drainage Act. (Provincial Policy Statement, 1997, page 13).

Environmental Impact Study or Statement (EIS) is a report prepared to address the potential impacts of development on wetlands and other parts of the natural heritage framework. There are three types: comprehensive, scoped and full.

- A Comprehensive EIS is a landscape scale, watershed or subwatershed study which sets the width of setbacks and offers guidance for the investigation, establishment and maintenance of buffers.
- A Scoped EIS is an area or site-specific study that addresses the potential negative impacts to features described previously in a comprehensive study.
- A Full EIS is an area or site-specific study prepared, in the absence of a comprehensive study to address possible impacts from a development. Due to the lack of guidance from a comprehensive study, the full EIS is typically much more detailed than a scoped study, and will also include statements to address possible negative impacts at a regional scale.

A **Floodplain** (for rivers and stream systems) means the area, usually low lands adjoining a watercourse which has been or may be subject to flood hazards as described in the Provincial Policy Statement (Provincial Policy Statement, 1997, page 14).

Land Securement means long-term protection achieved through a variety of actions or measures, including acquisition, conservation easements, management agreements, stewardship agreements and other resource protection and management tools.

Provincially Significant Species are species of flora and fauna, which have been classified or designated by the Ontario Ministry of Natural Resources as vulnerable, threatened, endangered, rare, at risk, or of concern.

Natural Hazards are physical environmental processes operating near or at the surface of the earth and sites of unstable soils that limit potential uses of some lands. Sometimes the environmental processes and the characteristics of soils produce unexpected events of unusual magnitude or severity. Floods, ice jams, soil erosion and slope failures have resulted in damage to property, injury to humans and loss of life. Other lands are considered natural hazards due to the presence of unstable and sensitive marine clay, organic soils or karst topography.

Regionally Significant Species are species of flora and fauna, which have been classified or designated by large municipalities and counties, at a regional level, as significant or rare.

Riparian refers to lands, habitat and vegetation found in the valley or floodplain of a stream or associated with flowing water.

Setbacks are a physical distance separation between the wetland and the proposed development site. Impacts generally expected of development can often be avoided or mitigated if a very broad area of land is maintained in an undeveloped state or as green space or setback. The width of the setback is determined in general terms in planning guidelines, subwatershed studies and comprehensive environmental impact statements..

For the purpose of this Policy, Wetlands means lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at its surface. In either case the presence of abundant water has caused the formation of hydric soils and has favoured

the dominance of either hydrophytic plants or water tolerant plants. The four major types of wetlands are swamps, marshes, bogs and fens.

Periodically soaked or wet lands being used for agricultural purposes which no longer exhibits a wetland characteristic are not considered to be wetlands for the purposes of this definition (Provincial Policy Statement, 1997, page 18).

For the purpose of Regulation under the Conservation Authorities Act, **Wetlands** means land that,

- a) is seasonally or permanently covered by shallow water or has a water table close to or at its surface,
- b) directly contributes to the hydrological function of a watershed through connection with a surface watercourse,
- c) has hydric soils, the formation of which has been caused by the presence of abundant water, and
- d) has vegetation dominated by hydrophytic plants or water tolerant plants, the dominance of which has been favoured by the presence of abundant water.

But does not include periodically soaked or wet land that is used for agricultural purposes and no longer exhibits a wetland characteristic referred to in clause c or d (Conservation Authorities Act, R.S.O. 1990, c. C. 27 section 28 (25))

Wetland Complex - A group of wetlands which are usually within the same watershed, located within 0.75 kilometres of each other and related in a functional way. As a group they have similar or complementary biological, social, and/or hydrological functions. (Ontario Wetland Evaluation System Manual, May 1994 revised).

Wetland Form - means the physical character of the wetland, comprised of mainly the combination of site, vegetation, wetland age and water distribution and affected by ecological processes. Bogs, fens, marshes, swamps and open water wetlands have several different forms which develop under the influence of the supply of water, surficial geology, natural drainage, vegetation overstory species, vegetation understory species, aspect, microclimate, age and ecological functions. Some wetland forms are rare and some forms provide specialized habitat preferred by rare species.

Wetland Functions - means the biological, physical, and socio-economic interactions that occur in the environment because of the properties of the wetlands that are present, including, but not limited to:

- groundwater recharge and discharge;
- flood damage reduction;
- shoreline stabilization;
- nutrient retention and removal;
- food chain support;
- habitat for fish and wildlife; and,

- attendant social and economic benefits

(Wetlands Policy Statement (1992), made under the Planning Act).

Wetland Sites: The physiographic position of a wetland in the landscape defines its site type. There are 4 fundamentally different site types – isolated, palustrine, riverine and lacustrine. With the exception of **Isolated Sites** (wetlands found alone, by definition), any particular wetland, depending upon its size, complexity and physiographic position, may be comprised of one or more site types. **Palustrine Wetlands** are often in headwater areas and are positioned physiographically upslope from lacustrine and riverine wetlands. **Lacustrine Wetlands** are associated with lakes and lakes are defined as water bodies greater than 8 hectares in size and 2 metres in depth. **Riverine Wetlands** are riparian wetlands including the channel of continuously moving water to the 2 metre depth, as well as adjacent wetlands in normal flood plains of rivers and permanent streams.

Wetland Types - There are five recognized types of wetlands – marsh, fen bog, swamp and open water. In Wetland Evaluation the open water type is combined with marsh. These wetland types differ in form or appearance, in the numbers and kinds of both plant and animal species present, and in their rates of primary productivity.

- **Marshes** are wet areas periodically inundated with standing or slowly moving water, and/or permanently inundated areas characterized by robust emergents, and to a lesser extent, anchored floating plants and submergents.
- **Bogs** are peat-covered areas or peat-filled depressions with a high water table and a surface carpet of mosses, chiefly Sphagnum. Bogs may be treed or treeless but tree cover does not exceed 25%. Peat mosses (Sphagnum species), ericaceous shrubs and sedges play a prominent role in these nutrient poor, acid peatlands.
- **Fens** are peatlands characterized by surface layers of poorly to moderately decomposed peat, often with well-decomposed peat near the base. Sphagnum moss, if present is usually of different Sphagnum species than occur in bogs. The waters and peats are less acid than in bogs, and are often relatively nutrient rich and minerotrophic since they receive water through groundwater discharge from adjacent uplands. Some fens have developed directly on limestone rock and others have developed at the edges of lakes.
- **Swamps** are wooded wetlands with 25% or more cover of trees or tall shrubs. Many swamps are characteristically flooded in spring, with dry relict pools apparent later in the season. Waters are circumneutral to moderately acid in reaction, and show little deficiency in oxygen or in mineral nutrients. (Ontario Wetland Evaluation System Manual, March 1993).
- **Open Water** refers to bodies of water, which are less than 2 metres in depth and smaller than a natural lake or pond, or, which are part of a wetland complex, pond or lake and cover wetland soils. These are distinguished from ordinary puddles of water by their long-term persistence (months, seasons) and presence of some wetland characteristics including some vegetation, wetland soil and surrounding or contiguous natural vegetation.