NIAGARA PENINSULA CONSERVATION AUTHORITY

Policies, Procedures and Guidelines for the Administration of Ontario Regulation 155/06 and Land Use Planning Policy Document

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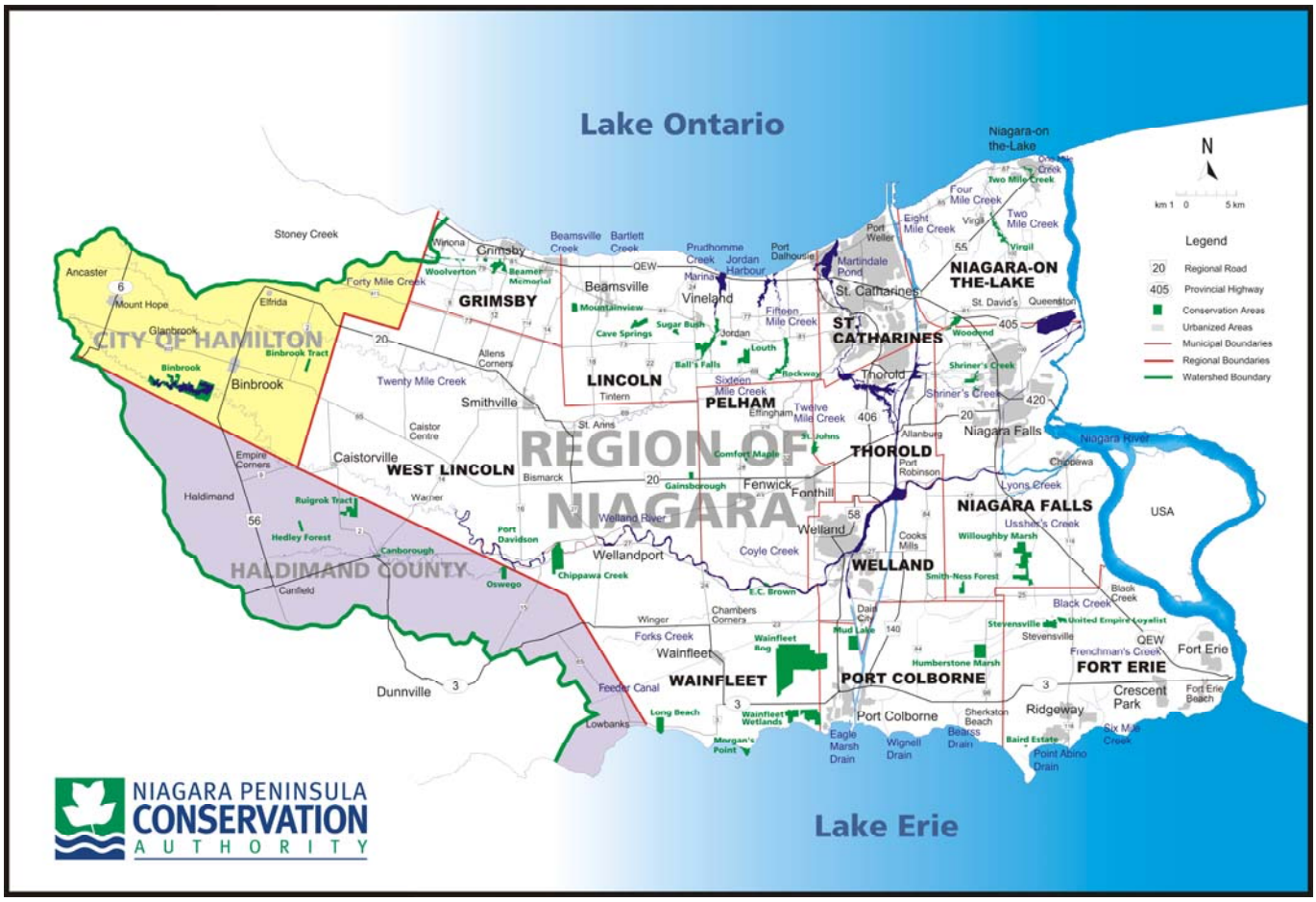


Section 1
Legislative and Policy Background

How to Read this Document

This document consists of:

Section 1: Introduction – Legislative and Policy Background which describes the authorizing legislation and regulation that NPCA on is governed by in addition to providing a summary of other legislation and policy that NPCA staff utilize when making regulatory and planning decisions and recommendations.

Section 2: Procedures for the Administration of Ontario Regulation 155/06 outlines the procedures that NPCA staff utilize when processing applications made pursuant to Ontario Regulation 155/06.

Section 3: Policies for the Administration of Ontario Regulation 155/06 describes the guiding, general and specific policies that NPCA staff utilize when reviewing applications made pursuant to Ontario Regulation 155/06.

Section 4: NPCA Land Use Planning Policies outlines those policies that NPCA staff utilize when providing plan input and review comments to municipal watershed partners and Provincial agencies.

Section 5: Guidelines for the Administration of Ontario Regulation 155/06 and Land Use Planning Review outlines various additional guidelines that NPCA staff utilize or refer applicants to utilize when reviewing regulatory and/or land use planning applications.

Section 6: Definitions provides a list of definitions used in this document.

Section 7: Appendices provides background on the delegation of Natural Hazard review to Conservation Authorities and Hearing policies.

Purpose

The need to prepare a comprehensive policy document for the Niagara Peninsula Conservation Authority (NPCA) was driven by a number of factors including:

- The need to update the NPCA's outdated Municipal Plan Review Guidelines dated July 1993 (revised January 2005); and
- In response to the implementation of a new Generic Regulation 155/06, there was a need to update the NPCA's Policy and Procedural Manual dated June 1981 (revised August 1996).

The purpose of the Policy document, taking guidance from Provincial Policy, is to provide local NPCA watershed policies which will guide Development and Site Alteration while protecting, preserving and enhancing the natural environment within the legislative mandate of the NPCA. The policies are based on the interrelationship between environmental, physical and social factors that impact land use planning and Development in the watershed.

This document will be used by NPCA Staff through its Watershed Planning Services program and it is envisioned that this Policy Manual will be a valuable tool for the NPCA Board of Directors of Directors and Staff as well as for watershed municipalities, the land development industry and the public.

Environmental Commitment & the Watershed Approach

The Niagara Peninsula Conservation Authority (NPCA) was formed in 1959. Since then, the Authority's original water resources mandate and programs have evolved to respond to the issues of watershed municipalities, scientific findings as well as Provincial Policy and Legislation. This includes developing a broad range of watershed management programs and services that engage the community in responding to watershed issues. The Authority continues to strive towards implementing a watershed or Ecosystem Approach to planning. This approach is consistent with Section 2.2.1a) of the Provincial Policy Statement (PPS), which encourages the use of the watershed "as the ecologically meaningful scale for planning" because it is considered to be the most effective and comprehensive systems-based approach for Ecosystem planning. While this concept has only recently been incorporated into the PPS, the Authority has a long legacy of planning, implementing and monitoring using a watershed approach. Through the application of this approach, the implications of local management actions and municipal decisions can be evaluated in a watershed context. The watershed approach addresses the fact that water does not respect political boundaries and the riparian rights of the downstream community are considered.

Conservation Authorities Act RSO 1990 as amended (August 2002)

The Niagara Peninsula Conservation Authority (NPCA) is an autonomous corporate body, established under the Conservation Authorities Act of Ontario, to work in partnership with member municipalities and the Province, to further the conservation, restoration, Development and management of the renewable natural resources within the NPCA jurisdiction.

The Conservation Authorities Act (the Act) was originally created in 1946 in response to Erosion and flooding problems and the recognition that these and other natural resource initiatives are best managed on a watershed basis. The Act's latest revision was approved by the Ontario legislature on August 2, 2002. It should be noted that the Conservation Authorities Act will be amended from time to time and therefore, reference to the most recent amendment should be made where appropriate.

Among the primary mandates of the NPCA are the prevention of loss of life and property due to flooding, the prevention of Pollution, and the conservation and enhancement of natural resources. Section 20 of the *Conservation Authorities Act* sets out the objects of the Conservation Authority:

> 20. The objects of an 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.

The Act also establishes the powers of the Conservation Authority, under Section 21, which include the following*:*

> 21. For the purposes of accomplishing its objects, an authority has power,
>
> (a) to study and investigate the watershed and to determine a program whereby the natural resources of the watershed may be conserved, restored, developed and managed.

Sections 20 and 21(a) provide the mandate direction to the NPCA in the making and administration of land use planning policy.

Section 28 governs NPCA in the making and administration of its Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation. This regulation is passed pursuant to Section 28 and must be approved by the Lieutenant Governor in Council. Under Section 28

of the Conservation Authorities Act*,* R.S.O 1990, a regulation may:

a. Restrict and regulate the use of water in or from rivers, streams, inland lakes, ponds, Wetlands and natural or artificially constructed depressions in rivers or streams;
b. Prohibit, regulate, or require the permission of the authority to straighten, change, divert, or interfere in any way with the existing Channel of a river, creek, stream or Watercourse, or change or interfere in any way with a Wetland; and
c. Prohibit, regulate or require the permission of the authority for Development if, in the opinion of the authority, the control of flooding, *Erosion,* dynamic beaches or Pollution or the Conservation of Land may be affected by the development.

The following objectives provide the basis for the decision making process for implementing the Authority's regulation and permit process:

- prevent loss of life;
- minimize property damage and social disruption;
- reduce public and private expenditure for emergency operation, evacuation and restoration;
- minimize the hazards and unnecessary Development of riverine flood plains and flood and Erosion susceptible shoreline areas which in future years may require expensive protection measures;
- regulate works and Development which, singularly or collectively, may reduce riverine Channel capacities to pass flood flows resulting in increased flood levels, and creating potential danger to upstream and downstream landowners;
- control Filling and/or draining of natural storage areas such as Wetlands;
- encourage the Conservation of Land through the control of construction and placement of Fill on existing or potentially unstable valley Slopes or shoreline bluffs,
- reduce soil Erosion and sedimentation from Development activity;
- control Pollution or other degradation of existing and potential groundwater aquifer(s) and aquifer recharge areas, created by Fill activities; and
- control Water Pollution, sedimentation, and potential nuisances due to floating objects and debris. It should be noted that the Conservation Authorities Act will be amended from time to time and therefore reference to the most recent amendment should be made where appropriate.

Ontario Regulation 155/06 - Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.

Beginning in 1981, the NPCA administered the Fill, Construction and Alteration to Watercourse Regulation, which controlled:

(a) placing of Fill and grading,

(b) construction of Buildings and Structures, and

(c) alteration of Watercourses.

On May 1, 2004, the Generic Regulation (Ontario Regulation 97/04) was approved by the Province under Subsection 28(1) of the Conservation Authorities Act. This regulation, commonly referred to as the "Development, Interference with Wetlands and Alterations to Shorelines and Watercourses" regulation establishes the content that a regulation made by an authority under Subsection 28(1) of the Conservation Authorities Act must meet. The result of Ontario Regulation 97/04 is that the NPCA will continue to regulate those areas they have historically regulated, in addition to regulating the following:

- river and stream systems affected by Erosion hazards and lands adjacent to: Wetlands (up to 120 metres);
- valleys (up to 15 metres from stable top of bank); and,
- Great Lakes shorelines (up to the furthest landward extent of the aggregate of the flooding, Erosion and dynamic beach hazards).

These regulations apply to areas affected by flooding and Erosion hazards, Wetlands, other Hazardous Lands and land adjacent to these features/functions. For lands under NPCA's jurisdiction, the Regulatory Storm, which is used to determine the flooding hazards, is normally defined as the 100-year storm, except for the watersheds associated with Shriner's Creek, Ten Mile Creek and Beaverdams Creek (including Tributary W-6-5) in the City of Niagara Falls where the Regional Storm (Hurricane Hazel) Flood Event Standard applies. The Regional Storm is normally defined as the rainfall event and soil conditions that existed during Hurricane Hazel, which occurred within the Humber River watershed in Toronto in 1954, transposed over a specific watershed and combined with local conditions. The regulation applies all of the lands within the NPCA watershed. NPCA's regulation is Ontario Regulation 155/06. Section 2 of this regulation states:

2.(1)Subject to section 3, no person shall undertake Development, or permit another person to undertake Development in or on the areas within the jurisdiction of the Authority that are,

(a) adjacent or close to the shoreline of the Great Lakes-St. Lawrence River System or to inland lakes that may be affected by flooding, Erosion or dynamic beaches, including the area from the furthest offshore extent of the Authority's boundary to the furthest landward extent of the aggregate of the following distances:

(i) the 100 Year Flood level, plus the appropriate allowance for wave uprush shown in the column headed "100 Year Flood Limit" found in Table 3 of the document entitled "Lake Ontario Shoreline Management Plan", January 1994, which is available at or through the Authority at its head office located at 250 Thorold Road West, Welland, Ontario, L3C 3W2,

(ii) the 100 Year Flood level, plus the appropriate allowance for wave uprush shown in the column headed "100 Year Flood Limit" found in Section 3.2 of the document entitled "Lake Erie Shoreline Management Plan", June 1992, which is available at or through the Authority at its head office located at 250 Thorold Road West, Welland, Ontario, L3C 3W2,

(iii) the predicted long term stable Slope projected from the existing stable toe of the Slope or from the predicted location of the toe of the Slope as that location may have shifted as a result of shoreline Erosion over a 100-year period,

(iv) where a dynamic beach is associated with the waterfront lands, the appropriate allowance inland to accommodate dynamic beach movement shown in Section 4.4 of the document entitled "Lake Ontario Shoreline Management Plan", January 1994, which is available at or through the Authority at the address given in subclause (i), and

(v) where a dynamic beach is associated with the waterfront lands, the appropriate allowance inland to accommodate dynamic beach movement shown in Section 3.8.2 iii) of the document entitled "Lake Erie Shoreline Management Plan", June 1992, which is available at or through the Authority at the address given in subclause (ii);

(b) river or stream valleys that have depressional features associated with a river or stream, whether or not they contain a Watercourse, the limits of which are determined in accordance with the following rules:

(i) where the river or stream valley is apparent and has stable Slopes, the valley extends from the stable top of bank, plus 15 metres, to a similar point on the opposite side,

(ii) where the river or stream valley is apparent and has unstable Slopes, the valley extends from the predicted long term stable Slope projected from the existing stable Slope or, if the toe of the Slope is unstable, from the predicted location of the toe of the Slope as a result of stream Erosion over a projected 100-year period, plus 15 metres, to a similar point on the opposite side,

(iii) where the river or stream valley is not apparent, the valley extends the greater of,

(a) the distance from a point outside the edge of the maximum extent of the flood plain under the applicable flood event standard, to a similar point on the opposite side, and

(b) the distance of a predicted meander belt of a Watercourse, expanded as required to convey the flood flows under the applicable flood standard, to a similar point on the opposite side;

(c) Hazardous Lands;

(d)Wetlands; or

(e) other areas where Development could interfere with the hydrologic function of a Wetland, including areas up to 120 metres of all Provincially Significant Wetlands and Wetlands greater than 2 hectares in size, and areas within 30 metres of Wetlands less than 2 hectares in size, but not including those where Development has been approved pursuant to an application made under the Planning Act or other public planning or regulatory process.

O. Reg. 155/06, s.2 (1).

(2)The areas described in subsection (1) are the areas referred to in section 12 except that, in case of a conflict, the description of the areas provided in subsection (1) prevails over the descriptions referred to in that section. O. Reg. 155/06, s. 2 (2).

Additional Legislation and Policy

In addition to the permitting and enforcement programs associated with Ontario Regulation 155/06, other programs to further the conservation mandate include but are not limited to: commenting on Environmental Assessments, Provincial Plans, municipal planning documents and applications, participating in watershed and subwatershed studies, and stewardship assistance to private landowners. Section 4 of this document outlines NPCA's land use planning policies that are utilized, in addition to the regulatory policies, when reviewing applications made pursuant to the *Planning Act*, the *Environmental Assessment Act*, the *Niagara Escarpment Planning and Development Act*, the *Greenbelt Act,* the *Places to Grow Act* and the Drainage *Act*. Normally, unless specified elsewhere, where discrepancies between plans and policies exist, the more restrictive policy will be applied.

The Federal Fisheries Act

The NPCA has a Level II agreement with Fisheries and Oceans Canada (DFO) to administer the review of projects under section 35(1) of the *Fisheries Act* which states "No person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of Fish Habitat" (HADD). This agreement has been established for the conservation and protection of Fish Habitat while promoting the principles of good fisheries management and client service. Under this agreement, NPCA will assess all proposals within its jurisdiction, regardless of other permitting requirements unless agreed to by DFO

under a separate agreement (e.g.. Union Gas, some Provincial projects). This review is conducted independently of other permitting requirements.

NPCA screens and processes applications for DFO under the Level II agreement to determine if a HADD will occur as a result of the proposed works. A HADD may occur as a result of any direct or indirect manipulation which changes, alters, disrupts or destroys habitat in or adjacent to the water or which induces probable changes to the conditions of habitat (including, but not limited to, temperature, light, dissolved gasses, water clarity, sediment load and other factors).

Upon review, if a HADD is deemed to occur, staff will provide the proponent with the following options:

1. Revise the application in order to avoid any impact to Fish Habitat;
2. Advise the proponent of mitigation measures necessary to avoid a HADD (actions taken during the planning, design, construction and operation of works and undertakings to prevent potential adverse effects on the productive capacity of Fish Habitats); or
3. Refer the project to DFO if the HADD is not mitigable, which will require the project to be reviewed by DFO staff.

Under the Level II agreement, NPCA staff are not responsible for facilitating the preparation of compensation plans with the proponent.

Further details of this process can be found in "A Protocol Detailing the Fish Habitat Referral Process in Ontario" (Fisheries and Oceans Canada, 1998) and "The Fish Habitat Referral Process in Ontario" (Fisheries and Oceans Canada, 2001), as may be amended.

The Planning Act and Provincial Policy Statement

The Greenbelt Plan

The Greenbelt Plan builds upon the existing policy framework established in the Provincial Policy Statement. The Plan identifies where urbanization should not occur in order to provide permanent protection to the agricultural land base and the ecological features and functions occurring in this landscape. The Plan includes lands within, and builds upon the ecological protections provided by, the Niagara Escarpment Plan (NEP) and complements and supports other provincial level initiatives. A large part of NPCA's watershed is within the Greenbelt Plan and Niagara Escarpment Plan Areas. The Plan identifies the "Protected Countryside" which is further divided into the "Agricultural System", "Natural System" and "Settlement Areas". The "Natural System" consists of the "Natural Heritage System" and the "Water Resources System".

The "Natural Heritage System" includes the following key natural heritage features: Significant habitat of endangered species, threatened species and special concern species; Fish Habitat; Wetlands; Life Science Areas of Natural and Scientific Interest (ANSIs); Significant valleylands; Significant woodlands; Significant wildlife habitat; sand barrens, savannahs and tallgrass prairie; and, alvars. The key hydrologic features within the "Water Resources System" include: permanent and intermittent streams; lakes (and their littoral zones); seepage areas and springs; and, Wetlands. Many of the key features identified in the "Natural System" are either directly regulated by NPCA (Ontario Regulation 155/06) or staff provide comments with respect to the features to watershed municipalities and provincial partners (Planning Act, Environmental Assessment Act, Niagara Escarpment Plan).

The Greenbelt Plan must be read in conjunction with all other applicable land use planning policy, regulations and/or standards, as amended from time to time. Decisions made under the *Planning Act* or the *Condominium Act* must conform to the policies in the Greenbelt Plan. Specifically, Section 3.2.2.7 of the Greenbelt Plan states that, where regulations or standards of other agencies or levels of government exceed the standards related to key natural heritage features or key hydrologic features in the Greenbelt Plan, such as may occur with Hazardous Lands under section 28 of the *Conservation Authorities Act* or with fisheries under the Federal *Fisheries Act*, the most restrictive provision or standard applies.

When providing comments on applications to which the Greenbelt Act/Plan applies, the NPCA is required to be consistent with the Greenbelt Plan.

Places to Grow Act

The Places to Grow Act (2005) provides the legal framework for the Government of Ontario to designate any geographic region of the Province as a growth area and to develop strategic plans for those areas. In essence, the Act enables the government to plan for population growth, economic expansion and the protection of the environment, agricultural lands and other natural resources in a coordinated manner. Overall responsibility for implementation of the Government's various growth strategies is held with the Ministry of Public Infrastructure. The Greenbelt Act (2005) is complementary legislation to Places to Grow Act (2005).

The Growth Plan for the Greater Golden Horseshoe, approved June 16, 2006, is prepared under the Places to Grow Act (2005). This Growth Plan is the framework for implementing the Government of Ontario's vision for Building stronger, prosperous communities by controlling growth until 2031. This Plan addresses issues as they relate to economic prosperity which include transportation, infrastructure planning, land use planning, urban form, housing, natural heritage, and resource protection.

This Growth Plan addresses the challenges of the above issues through policy directions that:

- Direct growth to built-up areas where the capacity exists to best accommodate the expected population and employment growth, while providing strict criteria for settlement area boundary expansions;
- Promote transit-supportive densities and a healthy mix of residential and employment land uses;
- Preserve employment areas for future economic opportunities;
- Identify and support a transportation network that links urban growth centres through an extensive multi-modal system anchored by efficient public transit, together with highways systems for moving people and goods;
- Plan for community infrastructure to support growth;
- Ensure sustainable water and wastewater services are available to support future growth;
- Identify natural systems and prime agricultural areas, and enhance the conservation of these valuable resources;
- Support the protection and conservation of water, energy, air and cultural heritage, as well as integrated approaches to waste management.

Staff of the Conservation Authority should be aware of the implications of the legislation and associated growth plans, and consider them in the context of planning decisions.

Watershed Planning

The NPCA has developed a program for the Niagara Peninsula Watershed including 78 watersheds that drain to Lake Ontario, Niagara River and Lake Erie. The NPCA watershed has an area of 2424 square

kilometers, a population of approximately 500,000 residents and drains land in the City of Hamilton, County of Haldimand and Region of Niagara.

The predominant land use in the watershed is agriculture, covering approximately 60% of the land area. Urban land use covers approximately 12% of the watershed. Woodlands, Wetlands and meadows make up the remaining 28% of land area. Through the Niagara Water Quality Protection Strategy (2003) the NPCA, the Region of Niagara, City of Hamilton and Haldimand County, the 145 watersheds were amalgamated into 32 Local Management Areas (LMAs). Each area is of a sufficient size for evaluating environmental information, monitoring environmental change and targeting rehabilitation work. Because of its location in a highly developed part of southern Ontario, the watershed experiences pressures from both urban and rural land uses. The water quality and quantity in the LMAs is influenced by the relatively intense land uses and land management in the watershed.

The broad plan for the Niagara Peninsula watershed follows the Watershed Planning model approach. As illustrated in Figure 1, Watershed Planning is a continuous cycle of plan Development, plan implementation, monitoring and research and reporting and evaluating. It is critical that the various components of the cycle are undertaken collaboratively with the community which includes municipalities, landowners, professionals, other government agencies and interest groups.

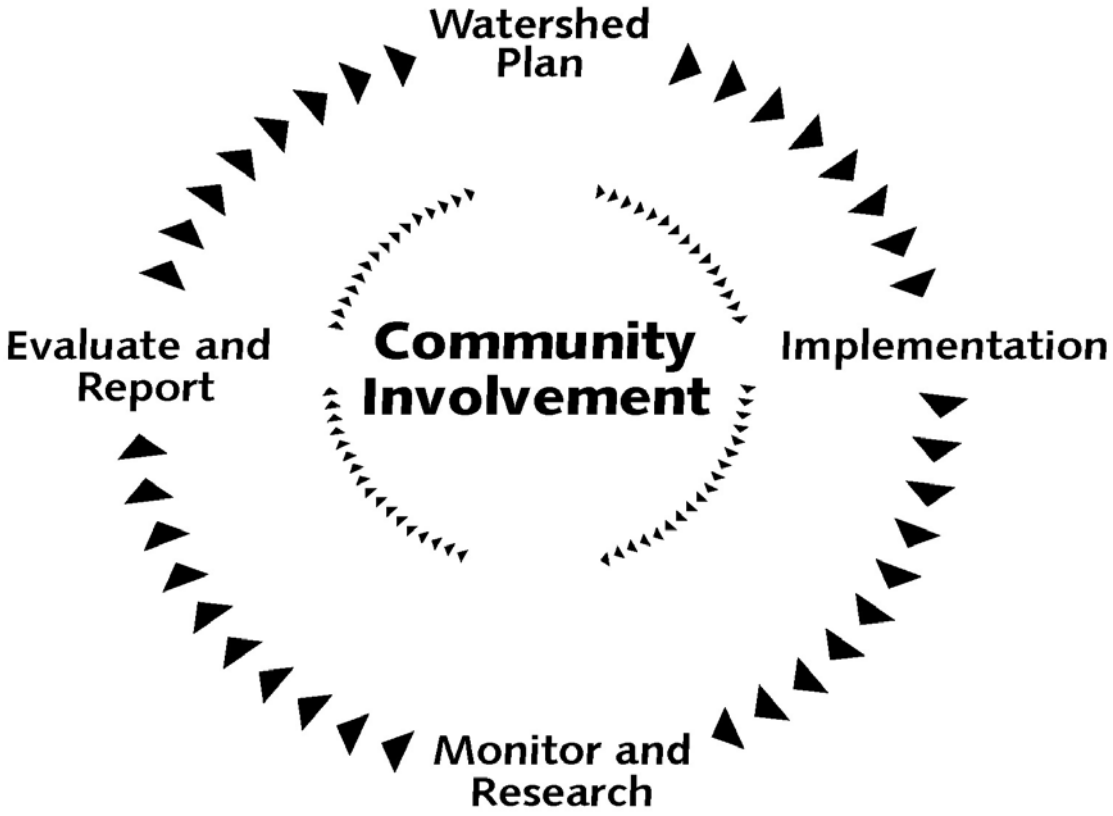


Figure 1: Continuous Cycle of Watershed Planning

The continuous process involves the following components:

- ***Plan Development***: a Watershed Plan is developed based on the information that is available about the watershed at the time. The plan is developed collaboratively with the community and includes

the identification of implementation activities. It is recognized that the plan is based on available information and projections for implementation and the need for future adjustments or revisions depending on results is acknowledged.

- ***Implementation***: a number of strategies are identified to implement the plan. These may include activities such as education, regulation of land acquisition.

- ***Monitoring***: as the plan is implemented, monitoring needs to be undertaken to collect information to assist with assessing plan effectiveness and to expand the understanding of the management activities and watershed processes.

- ***Evaluation & Reporting***: the continually evolving understanding of the watershed through monitoring and research is evaluated and reported. This information is used to make modifications to the plan and the cycle continues.

The five main implementation strategies include:

1. Acquisition - The purchase of land or easements as a means of obtaining management control. The Authority owns approximately 7000 acres of land which is managed for various purposes including recreation, protection of Wetlands, and protection of the public from flooding processes.

2. *Stewardship* - Providing the tools to landowners and the community to undertake measures which sustain and improve resources. Stewardship is often combined with incentive measures that support good management practices. The incentive can be financial or simply recognition.

3. Education – Creating a broad awareness of the importance of watershed resources and actions that can be taken to maintain and restore these resources. Education and stewardship are closely linked.

4. Water Management – Conservation Authorities are uniquely positioned to develop and implement water management programs that include strategies such as flood control and low flow management using dams.

5. Regulatory Measures – The Authority may be involved as the direct implementer of legislation or as an advisor to other organizations that implement legislation.

The Environmental Assessment Act

The purpose of the *Environmental Assessment Act* is “the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment”. Within the Act, the term “environment” includes:

(a) air, land or water;
(b) plant and animal life, including human life;
(c) the social, economic and cultural conditions that influence the life of humans or a community;
(d) any Building, Structure, machine or other device or thing made by humans;
(e) any solid, liquid, gas, odour, heat, vibration or radiation resulting directly or indirectly from human activities; or
(f) any part or combination of the foregoing and the interrelationships between any two or more of them.

Staff of the NPCA generally focuses on items (a) and (b) when reviewing Individual and Class Environmental Assessments prepared by provincial and municipal agencies pursuant to the *Environmental Assessment Act*. Review and comments are based on the policies set out in this document, the *Environmental Assessment Act*, the Provincial Policy Statement and the Greenbelt Plan.

The Niagara Escarpment Planning and Development Act/Niagara Escarpment Plan

The purpose of the Niagara Escarpment Plan is to provide for the maintenance of the Niagara Escarpment and land in its vicinity substantially as a continuous natural environment, and to ensure only such Development occurs as is compatible with that natural environment. Staff of the NPCA review proposed amendments to the Niagara Escarpment Plan as well as Development Permit applications. Review and comments are based on the policies set out in this document, the Niagara Escarpment Plan, the Provincial Policy Statement and the Greenbelt Plan.

Niagara River Remedial Action Plan

The Niagara River Remedial Action Plan is a detailed strategy to improve the water quality of the Niagara River and the Watercourses that drain into it (Figure 2).

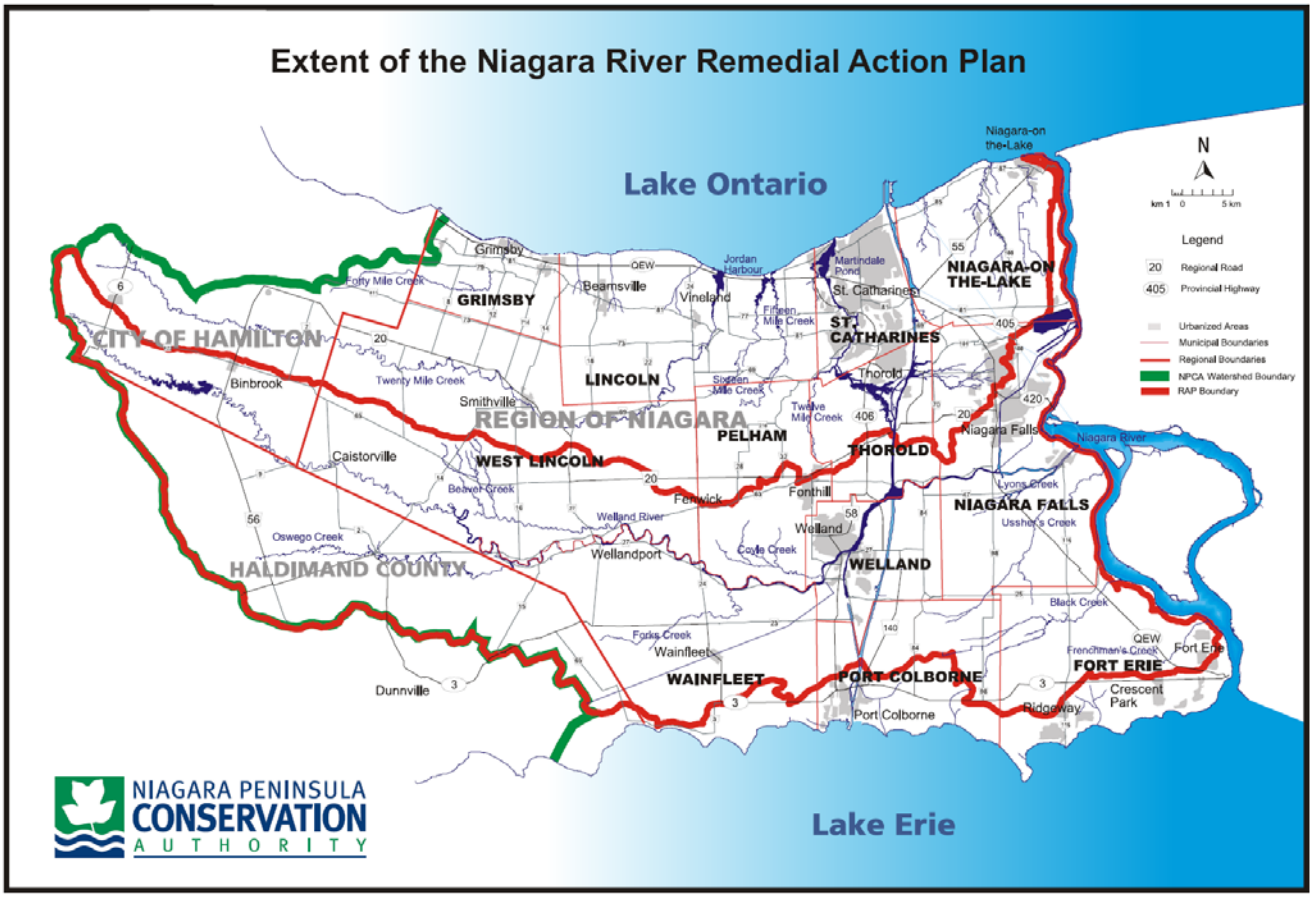


Figure 2: Extent of the Niagara River Remedial Action Plan

This Plan includes actions related to:

- Reducing discharges of toxic contaminants that are harmful and bioaccumulate in living things;
- Developing and implementing remediation strategies to address contaminated sediments in the watershed;
- Reducing nutrients and bacteria from non-point source pollution, sewers and wastewater treatment plants;
- Creating and enhancing habitat for fish and wildlife; and
- Increasing public awareness and obtaining public input on issues pertaining to the RAP.

To update the Stage 2 report (1995), the Niagara Peninsula Conservation Authority (NPCA) is coordinating a review of implementation Recommendations and the status of use impairments to help identify what remains to be done to delist the AOC, along with an estimated timeframe.

The Drainage Act

Statute law for land drainage dates back almost 150 years in Ontario. In 1894, the original Municipal Drainage Act was passed and provided for the first orderly, equitable mechanisms, through which agricultural drainage issues could be handled. This Act has been amended several times during the last 100 years, the last revision having occurred in 1976, when the newly named Drainage Act was established. This Act is in use today and outlines very detailed and sophisticated means through which several types of drainage issues may be resolved. Local municipalities administer the provisions of the Act; while the Ministry of Agriculture and Food provides policy and program implementation assistance to them.

The Drainage Act outlines three types of `outlet' drains that may be constructed under its' provisions. They are:

A) Mutual Agreement Drains (Section 2 of the Act)
B) Requisition Drains (Section 3 of the Act)
C) Petition Drains (Section 4 of the Act)

The most common types of drain proposals in the Niagara Peninsula are `Petition Drains'. Where drains are `petitioned' by the majority of landowners in the `watershed' that will benefit from the proposed new drainage works. All watershed landowners are assessed the costs of the works. Note that a municipality may also `petition' municipal drainage works (Section 4.(1)(c)) if they are required for a road (i.e. seasonal flooding problem).

Due to the watershed focus of Conservation Authorities, they have been specifically noted as commenting agencies for `Petition Drains' under various sections of the Drainage Act. Specifically, the Act states that CA's are to receive `notice' of the filing of a petition (Section 5.(1)b)); have the right to request, at their own expense, that an `environmental appraisal' be undertaken as part of the project (Section 6.(1)); are to receive the preliminary engineering reports for the works (Section 10.(2)(c)); have the right to appeal to the Drainage Tribunal the contents of a requested environmental appraisal if deemed unsatisfactory (Section 10.(7) and (8)); are to receive the final engineer's report (Section 41.(1)(f)); and, the Conservation Authority may appeal the final engineer's report to the Tribunal (Section 49) when, in its' opinion, the drainage works "will injuriously affect a scheme undertaken by the authority under The Conservation Authorities Act". Time limits for circulations and appeals are provided for in the above-noted sections of the Act. Authority staff will refer directly to the Drainage Act when dealing with such matters in order to ensure concerns are included in the design of the drainage works.

In dealing with new Drainage Reports, Authority interests will involve:

1. The control of sediment during construction;
2. The stability of side Slopes, given existing soil conditions;
3. Proposed Erosion protection measures at any bends in the drain;
4. Gradient reduction measures, if necessary, to reduce velocities and to prevent Erosion of the Channel bed;
5. The establishment of a suitable vegetative cover subsequent to the grading work; and,
6. The location of the disposal area for any removed sediment from the drain, during cleanout.
7. Permits under the CA Regulation 155/06 where the drain inadvertently or ultimately results in the draining of a Wetland (as defined in the Conservation Authorities Act)or imports water to a natural watercourse

Approval for the drainage works will only be issued if it can be demonstrated that the hydraulic and ecological impacts to the wetland or watercourse can be mitigated.

The Building Code Act

The Building Code Act and the Building Code, itself (i.e. the regulations), are administered by the Ministry of Municipal Affairs and Housing. The Council of each municipality is responsible for the enforcement of the Act, and its' regulations, within the municipality (Section 3.(1)). The Chief Building Official of a municipality serves as the implementer and enforcement officer of the Act, and the Code.

As a Conservation Authority, we work closely with local Building officials to ensure that legislative requirements for Development/construction within regulated areas are adhered to. The Building Code Act specifies a need to conform to other existing legislation. Specifically, Section 8(1)a) states,

> **8.** (2) The chief building official shall issue a permit referred to in subsection (1) unless,
>
> (a) the proposed building, construction or demolition will contravene this Act, the building code or any other applicable law.

The Regulations under Section 28 of the Conservation Authorities Act are considered applicable law under the Building Code Act. Ontario Regulation 349/06 made under the Building Code Act, 1992 Amending O. Reg. 403/97 (Building Code came into place in 2006 following the approval of NPCA Regulation 155/06. Section 5 Clause 1.1.3.3.(1)(c) of the Regulation was revoked and the following substituted:

> (c) regulations made by a conservation authority under Clause 28 (1) (c) of the *Conservation Authorities Act* with respect to permission of the authority for the construction of a building or structure if, in the opinion of the authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development,".

This means that the Chief Building Official must consult the Conservation Authority before issuing a building permit where the Conservation Authority Regulations apply. The majority of local Building departments contact the NPCA office (or have the landowners contact us themselves) to ensure that the Conservation Authority regulations are addressed prior to building permits issuance. The Building departments have screening maps to assist in redflagging areas of potential concern.

The Conservation Authority uses this contact with municipalities to also promote awareness of other program responsibilities and resource concerns.

When responding to Building permit application enquiries, Authority staff provide `location approval' for certain construction activities, recommend the carrying out of technical investigations, as well as provide general site control recommendations to promote good conservation practices.

Section 2

Procedures for the Administration of Ontario Regulation

Processing Section 28 Permit Applications

Regulations Officers

In accordance with Section 28 (1) of the Conservation Authorities Act, officers may be appointed to enforce enacted regulations.

These officers have the responsibility of liaising with applicants, inspecting properties upon request, and processing the permit applications. Responsibilities also include investigating and monitoring violation situations as well as undertaking all other enforcement work under the regulation, as directed by senior management of the Authority. Regulation officers carry identification for inspection purposes.

Completing an Application Form and Information Required

Before work (Filling, grading/Site Alteration, or construction) can proceed in an area regulated by Niagara Peninsula Conservation Authority, a permit must be issued. Application forms are available at Niagara Peninsula Conservation Authority's Administration Office and on the website (www.npca.ca). Permits are non-transferable and must be made by a person having an interest in the land (i.e. owner, purchaser with owner's knowledge and permission, or an authorized agent). Upon submission of an application it will be stamped received and assigned a file number which can be referred to for processing.

Before submitting plans, all potential applicants are encouraged to consult with Niagara Peninsula Conservation Authority staff to determine if an application is required and, if so, what information should be submitted with the application (e.g., studies, drawings, etc.). Staff will provide pre-application comments or guidelines on works proposed however, a final decision on whether or not a proposal would be supported by Niagara Peninsula Conservation Authority staff can only be provided once an application and detailed plans are submitted.

At the time of the formal permit application, details of the works proposed must be provided along with site access, construction phasing, sediment and Erosion control and re-vegetation plans. All works should adhere to the policies within this document and follow the various municipal, provincial, federal and Niagara Peninsula Conservation Authority guidelines as may be applicable (see Section 5). Works that involve substantial site Development should be prepared using the services of professionals from a variety of disciplines. Any proposals for construction of Buildings within the flood plain or shoreline flooding hazard will normally, by their very nature, involve flood proofing and have to be submitted by a professional civil engineer. Any proposals that involve issues of Slope stability must include an assessment by a professional geotechnical engineer. The shoreline protection Structures must be designed by a professional engineer with experience and qualifications in coastal engineering. Simpler proposals for farm ponds or a minor alteration of an intermittent Watercourse may only require a sketch plan with cross sections, etc. In all cases, it is necessary that the information provided with the application is clear as to the work proposed and is sufficient to allow Niagara Peninsula Conservation Authority staff to complete a technical review.

Processing Fee

Fees for the processing of applications are set by the Board of Directors of Niagara Peninsula Conservation Authority and must be paid at the time of submitting an application. Fees are non-refundable. For major projects an additional charge, based on actual staff review and inspection time, at a rate set by the Board of Directors, may be applied. All fees must be paid prior to issuance of the permit. The fee schedule is attached to the application form.

Processing of Applications

All applications, as a first step, are reviewed to determine if they conform to the policies set out in Section 3 of this document. Niagara Peninsula Conservation Authority staff may request revisions to plans or reports submitted as part of an application. This is a normal part of the review process and applicants are encouraged to consult with Niagara Peninsula Conservation Authority staff as reports and plans are prepared in order to make the most efficient use of time involved in the design and review process. If, in the opinion of Niagara Peninsula Conservation Authority staff, an application does not conform, the applicant will be advised of options that may be pursued to either bring the application into conformity or of steps that can be taken to seek a formal hearing before the Niagara Peninsula Conservation Authority Board of Directors.

Concurrent with the review under Ontario Regulation 155/06 Niagara Peninsula Conservation Authority staff will undertake the review of project proposals under Section 35 (1) of the *Fisheries Act* as part of the Level II agreement with the Fisheries and Oceans Canada. This agreement has been established for the conservation and protection of Fish Habitat while promoting the principles of good fisheries management and client service. Under this agreement Niagara Peninsula Conservation Authority will assess all proposals within its jurisdiction, regardless of other permitting requirements. This review is conducted independently of other permitting requirements. Further details of this process can be found in *A Protocol Detailing the* Fish Habitat *Referral Process in Ontario*, Fisheries and Oceans Canada, 1998 and *The* Fish Habitat *Referral Process in Ontario,* Fisheries and Oceans Canada, 2001, as may be amended.

Niagara Peninsula Conservation Authority staff may also contact other review agencies to discuss the proposed project, however, it is the proponent's responsibility to obtain all other necessary approvals from federal, provincial and municipal authorities.

Approval of the Permit

Niagara Peninsula Conservation Authority has established types/classes of applications where approval has been delegated to staff.

Applications that conform to the policies set out in Section 3 will be recommended for approval, along with any conditions, and submitted to the General Manager/Secretary Treasurer of the Niagara Peninsula Conservation Authority or designate for authorization and permit issuance under Ontario Regulation 155/06.

The General Manager/Secretary Treasurer or designate may refer applications to the Niagara Peninsula Conservation Authority Board of Directors for review and ruling if deemed warranted by Niagara Peninsula Conservation Authority staff or the applicant.

In all cases, any approval is only valid upon issuance of a permit on the prescribed form, signed by the

General Manager/Secretary Treasurer or designate accompanied by drawings stamped and signed by either the Director of Watershed Management or designate.

Any proposed amendments to the approval will require review and approval and may be subject to additional fees.

Permits are normally issued for one year from the date of issuance. Requests for an extension of one year, provided that the scope of work remains unchanged from the original application, must be made in writing prior to the one-year expiration date of the original permit.

Any permits that were issued under the previous regulation (Ontario Regulation 99/91 as amended by O. Reg. 266/92 and O. Reg. 508/94) will continue to be valid for the duration identified on the permit. In addition, those permits can be extended, for a maximum of one year from the expiry date, under the previous regulatory policies, provided no substantial changes are being requested to the contents of the application.

Permit applications for works associated with complete planning applications received prior to the Minister's approval of Niagara Peninsula Conservation Authority's revised regulation will be reviewed as per the August 1996 Regulation *Policies, Procedures* policy document as long as the planning application has not been inactive for more than 5 years.

Issuance of a permit does not relieve the applicant from the responsibility of acquiring approval from other agencies, or relieve the applicant from compliance with any conditions that other agencies may impose on the work.

Hearing (refusal of a permission)

If an application does not conform to policy or it does not satisfy technical requirements, or if the applicant does not agree with any recommended condition of permit approval, the application may be recommended for refusal. In such a case, the applicant may request a hearing before the Niagara Peninsula Conservation Authority Board of Directors.

Niagara Peninsula Conservation Authority shall, by personal service or by registered mail, give written notice of the time and place of the hearing of the application, together with a brief explanation of the nature of the application, not less than ten (10) days prior to the day of the hearing to:

(a) the applicant or their designated agent,

(b) all members of the NPCA Board of Directors,

(c) Niagara Peninsula Conservation Authority may at its discretion request representation to the hearing as follows:

1. the municipality in which the property is located,
2. any Federal or Provincial Government Representative,
3. any surveyor, consulting engineer or other expert retained by Niagara Peninsula Conservation Authority.

Where the Notice of Hearing is given to the applicant or their designated agent by registered mail, it shall be sent to the address given in the application.

Upon hearing evidence submitted by the applicant or their designated agent, and reviewing any other information submitted in support or rejection of the application, the NPCA Board of Directors shall approve (with or without conditions) or refuse the application. Upon refusal of the application or if permission is granted subject to conditions, the Board of Directors shall give written response to the applicant, including reasons, for its decision.

A hearing for refusal of permission cannot proceed unless the applicant or their designated agent is present. If the applicant or agent does not appear at a hearing, the application will be held in abeyance.

Appeal Process

An applicant who has been refused permission or is not in agreement with conditions of an approval may, within thirty (30) days of the receipt of the reasons for the decision, appeal to the Minister of Natural Resources, care of the Mining and Lands Commission, who may dismiss the appeal or grant permission.

In all cases, hearings/appeals will be conducted in accordance to the "Procedural Guidelines for Appeals, Under the Conservation Authorities Act", October 2005 (refer to Appendix 1).

Terms and Conditions

Permission granted by Niagara Peninsula Conservation Authority cannot be changed or transferred without prior written approval by Niagara Peninsula Conservation Authority. Transfers will require the written authorization from the original applicant and confirmation that the details of the project have not changed.

Approvals, permits, etc., may be required from other agencies prior to undertaking the work proposed. Niagara Peninsula Conservation Authority's permission does not exempt the applicant from complying with any or all other approvals, laws, statutes, ordinance, directives, regulations, by-laws, etc., that may affect the property or the use of same.

Niagara Peninsula Conservation Authority may, at any time, withdraw any permission given if, in its opinion, the representations contained in the application for permission are not carried out or the conditions of the permit are not complied with.

Enforcement

Any initiators of unauthorized works that contravene the regulation will be requested to halt the works immediately. Authority staff will advise the offender(s) of the Regulation and its purpose. Works that proceed without the proponent or their agent obtaining any permission required under Ontario Regulation 155/06 may result in charges being laid pursuant to Ontario Regulation 155/06 and the Conservation Authorities Act.

Normally a "Notice of Violation" will be sent to the landowner, their agent and/or the contractor as well as the Clerk of the respective municipality. This notice will advise that the subject area is regulated, identify the section of the regulation contravened, advise that activities observed require permission and will request that work cease and the respective parties contact Niagara Peninsula Conservation Authority to discuss options for resolution of the matter within fourteen (14) days of issue of the Notice. Should the

violator not contact the Authority within the specified time period, legal action may be pursued under Section 28 of the Conservation Authorities Act, R.S.O. 1990.

In cases where other legislation, such as, the Fisheries Act, Lakes and Rivers Improvement Act, Ontario Water Resources Act, etc. may also have been contravened, Niagara Peninsula Conservation Authority will notify the appropriate authorities and may carry out a coordinated investigation and prosecution.

Once contacted, the Conservation Authority will subsequently review the violation in more detail and notify the offender(s) by registered mail with an option(s)/recommendation(s) for resolution of the matter. It may be necessary to obtain additional information/details of the violation before options for resolution of the matter can be provided. In this case, specific information will be requested from the offender, by registered mail.

If the violation is contrary to the Authority's Regulation Policies the offender(s) will be requested to remove the works and restore the site to it's original condition (i.e. prior to the works being undertaken). If the offender(s) chooses not to remove the violation, the Conservation Authority may elect to pursue legal action under Section 28 of the Conservation Authorities Act, R.S.O. 1990.

The offender may apply for a permit for approval of the works. If they are in conformity with the policies outlined in Section 3 of this document a permit may be granted. Permit applications received by the NPCA after a “Notice of Violation” is sent will be subject to a fee surcharge as identified in the fee schedule that is approved by the Board of Directors. The application will be processed in a normal manner by the Conservation Authority, in accordance to the policies outlined above. The Authority will work with the applicant to ensure that the works meet all of the criteria for approval outlined in the appropriate sections of this procedure document. If a permit is subsequently approved the works may proceed.

If the permit is refused and the violation continues the Conservation Authority may elect to pursue legal action under Section 28 of the Conservation Authorities Act, R.S.O. 1990.

In all cases, The Authority will work to resolve violations within the six (6) months. If the matter is not resolved within 30 days prior to six month period, the NPCA may pursue legal action. This will allow for ample time for court preparation, if required. This deadline will be made clear to the violator(s) at the onset of negotiations. If negotiations fail to resolve the violation the Authority may pursue legal action under Section 28 of The Conservation Authorities Act, R.S.O. 1990.

The provisions of the Conservation Authorities Act and the Provincial Offences Act direct the Niagara Peninsula Conservation Authority staff, when investigating a violation.

It is normal that in addition to any penalty levied by the court upon conviction, Niagara Peninsula Conservation Authority will seek an order for rehabilitation of the site and/or removal of any Buildings and/or Structures ruled in contravention of Ontario Regulation 155/06.

Transitional policies (approved by NPCA Board of Directors June 2006)

Applications Submitted Before May 4th, 2006

Applications for permission that are submitted to the Authority prior to May 4th, 2006 will be subject to the procedures for the administration of the Fill, Construction and Alteration to Watercourses Regulation provided that the application is complete to the satisfaction of the Authority.

Applications that are deemed by the Authority to be incomplete, and are within an area regulated under the new Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation, as of May 4th, 2006 will be subject to the procedures under the new regulation, and the proponent must re-submit a new application under the new regulation.

If the subject application for the proposed works is not within an area regulated under the new regulation, then the applicant will be advised that a permit is not required for the proposed works, and an Inquiry form will be issued by staff.

Applications Submitted After May 4th, 2006

All applications for permission to develop within an area regulated under the new Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation that are received after May 4th, 2006 will be subject to the provisions under the new regulation.

Extension of Permits Issued under Regulation 99/91

Any permits that were issued under the previous regulations and have expiry dates beyond May 4th, 2006 will continue to be valid for the duration identified on the permit. Inspections and conditions enforced under the Fill, Construction and Alteration to Waterways Regulation will continue until such time as the permit expires.

The old regulations will be revoked when the new regulations are approved. Therefore, a request for an extension of the existing permit must be received by the Authority prior to the date of expiry shown on the permit, and an extension will be issued under the new regulation. Extensions will not be required for those works not located within an area regulated under the new regulation.

Violation Notices and Legal Actions Commenced Before May 4th, 2006

Violation Notices issued prior to May 4th, 2006 will continue to be addressed by enforcement staff in order to remedy/rectify the situation under the requirements of the Fill, Construction and Alteration to Waterways Regulation.

For those Violation Notices issued for works in an area not regulated under the new Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation, upon satisfactory resolution of the matter, the proponent will be issued a letter advising that the works occurring in violation of the Fill, Construction and Alteration to Waterways Regulation have been satisfactorily remedied /rectified.

Legal actions that commenced prior to May 4th, 2006 will continue to proceed.

Section 3

Policies for the Administration of Ontario Regulation 155/06

The following are the policies of the NPCA used in the administration of Ontario Regulation 155/06. They apply to all watercourses, floodplains, valleylands, hazardous lands, wetlands, the shoreline of Lake Ontario, Lake Erie and the Niagara River, and lands adjacent to each of these features/functions, within NPCA's watershed. The policies are considered in their entirety when determining if permission requested should be approved, approved with conditions or denied.

Guiding Policies

3.1 Watercourses, Floodplains, Valleylands, Hazardous Lands, Wetlands and Shorelines

Except where allowed under Policies 3.4 – 3.28 (inclusive), development is prohibited within a watercourse, regulatory floodplain, valleyland, hazardous land, wetland and along the shoreline of the Great Lakes.

3.2 Lands Adjacent to Watercourses, Valleylands, Hazardous Lands, Wetlands and Shorelines

Except where allowed under Policies 3.4 - 3.28 inclusive, development is prohibited:

(a) within 15 metres of the stable top of bank of a valley system where a valley is apparent;
(b) within the limit of the regulatory floodplain
(c) within 120 metres of a Provincially Significant Wetland and all wetlands greater than or equal to 2 hectares in size;
(d) within 30 metres of wetlands less than 2 hectares in size;
(e) within the furthest landward extent of the aggregate of the flooding, erosion and dynamic beach hazards along the Lake Ontario and Lake Erie shorelines;
(f) within hazardous lands.

3.3 One Zone Concept

Notwithstanding the provisions under Section 3.22 (Special Policy Area), the Niagara Peninsula Conservation Authority shall implement a one zone approach to flood plain management. Under the one zone approach, the Regulatory Flood plain shall be defined as follows:

(a) Where 100 Year Flood information is available; the 100 Year Flood;

(b) Where Regional flood information is available and the 100 Year Flood information is not available; the Regional flood. Under this clause, however, the landowner will have the option of the determining, at the landowner's expense, the limits of the 100 Year Flood; and

(c) Where no flood plain information is available and the Authority has a flooding concern, the landowner will be requested to determine the limits of the 100 Year Flood.

The exceptions to the above are the Watercourses; Beaverdams Creek, Shriner's Creek, Ten Mile Creek

and Tributary W-6-5, all within the City of Niagara Falls; in which the Regional flood shall apply.

The limits of the floodplain shall become the Regulatory Flood Lines. For Watercourses that have been Floodplain mapped, engineered Flood Line information is available at the Authority Office.

Under the one zone approach, construction activities are limited /restricted within the Regulatory Floodplain. Permitted Development may include Reconstruction or minor additions to existing Structures as well as extensions to existing agricultural operations, provided certain technical requirements of the Conservation Authority can be achieved. Other uses, such as open space, or others which are not likely to incur or create damage to other properties from floodwaters, or cause a threat to public safety, or are not of a polluting nature may be permitted within the Floodplain. Examples of uses or Structures that would create adverse impacts in the Floodplains of riverine systems include, but are not limited to, new Buildings, above-ground swimming pools, septic tile fields and tanks, as well as manure storage and handling facilities.

General Policies

Policies 3.4 to 3.14.are general policies. All works permitted under the Specific Policies must also meet the requirements of the general policies unless specifically exempt.

The Authority recognizes that exceptions to these policies may be required for public works, utilities and other projects undertaken by Crown Corporations, as well as unusual circumstances, subject to Authority approval of the detailed design plans and technical reports.

3.4 Agriculture

Normal and current farming practices can be carried out without a Permit from the NPCA provided that the farming practice:

a) is not undertaken within a wetland;
b) is not undertaken within a valleyland;
c) does not involve an alteration to a watercourse;
d) does not involve a negative impact to a floodplain; and,
e) does not include structures requiring a building permit and/or Planning Act/Niagara Escarpment Plan approvals

3.5 As Built Drawings

As required, staff may request the submission of as-built drawings to ensure buildings and/or earthworks have been constructed as per the conditions of a NPCA Permit. The drawings will be prepared by a qualified professional and may include the need for elevation surveys.

3.6 Fish Habitat Development Setbacks

Fish habitat, as defined in the Federal Fisheries Act, means the spawning grounds and nursery, rearing, food supply, and migration areas on which fish depend directly or indirectly in order to carry out their life processes. Fish habitat is comprised of those physical, chemical and biological attributes of the environment, which are required by fish to carry out their life processes (e.g., spawning, nursery, rearing, feeding, overwintering, migration). It consists of those environments that directly or indirectly support fish stocks or fish populations that sustain, or have the potential to sustain, subsistence, commercial or recreational fishing activities. These guidelines can be applied to habitat, which although not directly supporting fish, provides nutrients and/or food supply to adjacent or downstream habitat or contribute to

water quality for fish. Changes to riparian vegetation can alter watercourse temperatures. The introduction of sediment, pesticides or other deleterious substances degrades water quality. A vegetated buffer adjacent to watercourses can assist in removing some of these substances prior to entering the watercourse. Fish require adequate substrate and water quality for successful reproduction. The provision of adequate vegetated buffers is essential to the maintenance and enhancement of fish habitat.

Any development, permitted in accordance with Policies 3.4 – 3.26, with the exception of watercourse alterations, will maintain a minimum setback of 30 metres from the bankfull channel of any Type 1 watercourse and 15 metres from the bankfull channel of any Type 2 or Type 3 watercourse.

Exceptions to the setbacks specified in Policy 3.6 may be considered on a site specific basis in areas of existing development, where the works will not encroach into the setback any further than the existing building/structure or for proposals (e.g. walkways) where no reasonable alternative, exists to achieve the desired setbacks. In these circumstances, special studies and/or unique treatments may be required to mitigate impacts to the satisfaction of the NPCA.

Additional setbacks may be required as per Ontario Ministry of Natural Resources and Fisheries and Oceans Canada guidelines, the Greenbelt Plan and/or when endangered, threatened or special concern species habitat is involved.

3.7 Conservation of Land and Pollution

Where development is proposed within an area regulated pursuant to Ontario Regulation 155/06, it will be assessed based on whether the development will affect the conservation of land and/or pollution. Applications will be assessed to ensure no adverse environmental impacts to existing natural features and/or ecological functions as a result of the proposed development. A net environmental benefit will be encouraged. In addition, applications will be reviewed to determine whether there is any potential for a deleterious physical substance or other contaminant to be generated by the development.

3.8 Construction Access and Site Controls

Any application for development, permitted in accordance with Policies 3.4 – 3.26, must demonstrate that access to the work area and completion of the works can be carried out in an acceptable manner (see Section 5). Consideration must be given to the impacts on flooding, erosion, valley slope and channel stability, water quality, and natural environment (including, but not limited to, wildlife habitat and ecological functions). Information required for review and approval includes, but is not limited to: limit of work area delineation; sediment and erosion controls; deleterious substances; tree protection; staging/phasing, etc.

3.9 Design Flows

In 1989, the NPCA completed a Watershed Hydrology Study for all watercourses within its jurisdiction. The report lists flow values at various points for all regulated watercourses through a uniform approach. These flows have been approved as the minimum allowed for design purposes and are available at the Authority office.

3.10 Erosion and sediment control

Erosion and sediment control practices shall be carried out both during and after the construction phase for any new Development. These practices may include, but are not limited to, the following:

i) stable, vegetated valley Slopes shall not be disrupted, where possible;

ii) the duration that areas are exposed to natural forces shall be minimized;

iii) exposed or disturbed areas shall be stabilized as soon as possible (ie. prolonged exposure of disturbed areas to wind and water Erosion must be limited) and shall be rehabilitated, where possible, through the re-establishment of vegetative cover as construction or Development proceeds;

iv) adequate sediment controls shall be installed to retain sediment on-site;

v) stormwater management techniques shall be implemented, to minimize the rate and volume of stormwater runoff, where required;

vi) natural features, such as vegetation, Watercourses, natural grades, shall be maintained, where possible; and,

vii) snow fences, or other suitable barriers shall be installed, to prevent the unauthorized placement of Fill material or other disruptions to natural vegetation in Floodplain, valleyland and other natural resource areas.

3.11 Fencing

Fencing is normally considered exempt from permission required under Ontario Regulation 155/06, however, the NPCA generally discourages fencing in natural hazard and natural heritage areas. Where fencing is necessary, such as agricultural fields, it must be constructed in such a fashion that it does not impede conveyance of flow of watercourses and does not require the use of fill within the flood plain and wetlands.

There may be instances where a Permit may be required, for example, if a fence is proposed to cross a watercourse or forms a solid barrier that would impede conveyance of flood flows. Fencing may be permitted in wetlands provided no fill placement/removal is required. Staff will work with the applicant to review other options in order to avoid fencing within the wetland such as fencing the perimeter of the wetland. The placement of fill or changing of grades within a regulated area would be subject to formal approval under Ontario Regulation 155/06 as per other policies in this document.

In order to prevent encroachment into valleylands past the surveyed stable top of bank, a permanent 1.8 metre high continuous fence (no gates), as approved by the Conservation Authority, shall be established at the property line (between the development and publicly owned land) by the proponent of development prior to construction. Bollards, or similar markers to delineate property lines, may be used to identify a top of bank when the establishment of a fence will result in the removal of an inordinate amount of vegetation.

3.12 Public Safety

There are some types of development which could pose an unacceptable threat to public safety if damaged by natural hazards and, as such, should not be permitted to locate in a watercourse, valleyland, hazardous lands, or close to the shoreline of the Great Lakes that may be affected by flooding, erosion or dynamic beaches including:

A) an institutional use associated with hospitals, nursing homes, pre-school, school nurseries, day care and schools, where there is a threat to the safe evacuation of the sick, the elderly, persons

with disabilities or the young during an emergency as a result of flooding, failure of floodproofing measures or protection works, or erosion;

B) an essential infrastructure and emergency services such as that provided by fire, police, ambulance stations and electrical substations, which would be impaired during an emergency as a result of flooding, failure of floodproofing measures or protection works, or erosion;

C) uses associated with the disposal, manufacture, treatment or storage of a hazardous substance.

3.13 Timing

Any development permitted in accordance with Policies 3.4 - 3.26 may be required to adhere to strict timelines in order to ensure the work takes place at the appropriate time of year relative to in-water fisheries windows, growing seasons to achieve vegetative cover, migration and nesting, etc.

3.14 Vegetation Protection Zone

The NPCA endeavours to set back development from natural features and hazardous lands such as watercourses, valleylands, wetlands, shorelines, etc. Ideally a vegetation protection zone should be established within these setbacks. It is intended that the vegetation protection zone should utilize vegetation native to the watershed and be established to achieve and be maintained as natural self-sustaining vegetation, wherever possible. Invasive species will not be permitted on any plans. In some cases, (i.e., Greenbelt Plan Area) vegetation protection zones are required as per the policies of that Plan. While the establishment of natural self-sustaining vegetation is preferred, it is not required, if the land is, and will continue to be, used for agricultural purposes.

Specific Policies

Unless specifically exempted within the policy, all works permitted under Policies 3.15 - 3.26 must also meet the requirements of the General Policies. Works permitted under Public Infrastructure Policies are not subject to the other Specific Policies unless specifically stated.

Unless indicated otherwise, a Permit is required for all works outlined in Policies 3.15– 3.26.

3.15 Watercourses and Floodplains

Floodplain mapping (possibly including modeling) and/or an elevation survey may need to be prepared by the applicant to verify the limit of the flooding hazard for any application in proximity to the flood plain. Where the Floodplain of any Watercourse has not been calculated to the Regulatory Flood level, the Authority may require that the limits of the 100 Year Flood level be determined on-site by the proponent, as per the mapping criteria established by the Ministry of Natural Resources (NOTE: the N.P.C.A. has engineering models and has undertaken a Watershed Hydrology Study which has generated 100 Year Flood flows for all Watercourses within the NPCA jurisdiction for use in this exercise).

In areas where inland Watercourses outlet to the Great Lakes, the established 100 Year Flood with wave uprush levels are due to lake levels only. Riverine Floodplain criteria must, therefore, be reviewed concurrently with shoreline management criteria in these instances in order to ensure that the objectives

of each program are fulfilled. In areas where inland watercourses outlet to the Great Lakes the greater of the hazards will be used (e.g. the flooding hazard from the Great Lakes may be a greater hazard than the 100 year flood hazard on the riverine system).

3.16 Alterations to Watercourses and Floodplains

Construction activities within the Channel of any Watercourse are regulated where the drainage area, upstream of the construction site, is greater than 125 hectares (320 acres). In areas where the upstream drainage area is less than 125 hectares (320 acres), the Authority may regulate Channel construction activities, if the specific Channel area is determined to be of significance to ecological function, low flow augmentation and/or discharge/recharge purposes. The significance of these areas will be determined through the review of existing published reports and studies (ie. ESA Studies, Wetland Inventories, etc.). Examples of construction activities that may occur in the Channel of a Watercourse with a valid permit include: Channel realignments and clean-outs, full or partial Diversions, retaining walls, revetments, bridges, culverts, docks, pipeline crossings, Erosion control measures and the construction of storm sewer outlets.

The following criteria will be considered when reviewing proposals for an alteration to a waterway:

(a) An alteration to a waterway should be designed in accordance with Natural Channel design principles and Sound Engineering Standards; and

(b) An alteration to a waterway may be permitted, provided that:

(i) The works do not increase Floodplain elevations, flood frequency, Erosion rates or Erosion frequency along either side of the Watercourse, upstream and/or downstream of the proposed works;

(ii) The works are designed to ensure that the storage capacity of the Floodplain is maintained;

(iii) The works will not adversely affect the ecological function of the watercourse or riparian area;

(iv) Adequate erosion protection measures are utilized when required;

(v) Adequate sediment control measures are incorporated during the construction phase and;

(vi) They are considered Minor Works as defined under Section 3.21 and conform to the general and specific conditions.

3.17 Permitted Uses in the Floodplain

Permitted uses shall be consistent with the objectives of the Conservation Authorities Act, R.S.O. 1990 and for all lands subject to the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation 155/06 of this agency. These objectives are with respect to:

(1) preventing loss of life;
(2) minimizing property damage and social disruption; and,
(3) encouraging a co-ordinated approach to the use of land and the management of water.

In light of the above, the Conservation Authority's permitted use policies are designed to maximize the natural, open space character of Floodplains. These policies do, however, provide for certain flexibilities in order to ensure that no undue hardship is placed on landowners with existing flood susceptible Structures.

The following uses may be permitted within the Regulatory Floodplain:

(a) Reconstruction or minor additions to existing Structures as outlined in Section 3.18 of this document.

(b) Additions or extensions, including new Structures, to existing primary agricultural operations which are not likely to incur significant flood damages, impede flows, reduce flood storage, or cause Pollution to a Watercourse, as a result of a flooding event.

(c) Open space uses, public and private recreational areas (including boat docks and marina facilities), excluding Buildings.

(d) In ground swimming pools provided:

(i) adequate hydrostatic pressure relief is incorporated into the design; and,

(ii) excavated material is removed from the site.

(e) Parking lots, driveways, access roads provided:

(i) the flood depths under a Regulatory Flood event do not exceed 0.3 metres (1.0 foot) (based on the technical criteria developed through the "PPS Natural Hazards Training Manual, "); and,

(ii) the depth criteria, noted in item (i) above, is not achieved through the placement of Fill material.

(f) Material and equipment storage provided that:

(i) they are properly anchored to prevent flotation;

(ii) they are not subject to major damage by flooding;

(iii) they are not of a polluting nature; and,

(iv) flood flows or flood water storage are not impeded.

(g) Railroads, streets, bridges, public services, and pipelines for transmission and distribution of water, gas, oil and electricity, provided that the approved engineering designs recognize and, where necessary, address the flooding potential at the site.

(h) Works constructed under The Drainage Act provided that the proposed works comply with Section 3.23.

(i) Uses not likely to incur or create damage from floodwaters.

3.18 Existing Floodplain Development

3.18.1 Replacement/Relocations of Buildings and Structures

a) Any Building or structure which is located in the Floodplain and has been destroyed for reasons other than flooding may be allowed to be rebuilt, provided the Building cannot be relocated to an area outside of the Floodplain, as determined by the Conservation Authority. All of the following criteria must be achieved through the Reconstruction proposal:

(i) The existing flood depths do not exceed 0.8 metres (2.6 feet), the velocity does not exceed 1.7 metres/second (5.5 feet/second) and the product of depth and velocity is not greater than 0.4 square metres/second (4 square feet/second) under a Regulatory Flood event (based on Ministry of Natural Resources Policy and Water Survey of Canada "Hydrometric Field Manual (1981)");

(ii) The structure will be built on the existing foundation area and will not exceed the original floor area (ground floor area) of the previous Structure;

(iii) All openings in the ground floor of the Building are to be located above the Regulatory Flood elevation.

(iv) Vehicular and pedestrian Ingress/Egress is not to be flooded to a depth greater than 0.3 metres (1 foot) under the Regulatory Flood event; and

(v) Other landowners, upstream and downstream of the proposal, will not be adversely affected by the Reconstruction.

b) Where an existing watercourse crossing to a residential dwelling, industrial, institutional, or commercial operation is proposed for replacement, NPCA staff will endeavour to have the crossing upgraded (where appropriate) in order to provide full access and egress under regulatory storm conditions.

3.18.2 Minor Additions

Minor additions to existing Buildings in the Floodplain may be permitted provided that:

(i) They are of a peripheral nature (such as, decks, patios, open porches); and, they are properly anchored to prevent flotation; they are not subject to major damage by flooding; and, flood flows and flood water storage are not impeded; or,

(ii) They meet all of the following criteria:
(a) Any addition to the ground floor area of an existing Building shall not exceed 20 per cent of the Original Ground Floor Area or 300 square feet, whichever is the lesser. Subsequent requests for additions which will cumulatively exceed 20 per cent of the original floor area or 300 square feet, whichever is the lesser, will not be considered under this section. Proposed additions greater than that noted above will be regarded as 'major' additions and are not permitted;

(b) The existing flood depths do not exceed 0.8 metres (2.6 feet), the velocity does not exceed 1.7 metres/second (5.5 feet/second) and the product of depth and velocity is not greater than 0.4 square metres/second (4 square feet/second) under a Regulatory Flood event (based on Ministry of Natural

Resources Policy and Water Survey of Canada "Hydrometric Field Manual (1981)");

(c) All openings in the ground floor of the Building are to be located above the Regulatory Flood elevation;

(d) Vehicular and pedestrian Ingress/Egress is not to be flooded to a depth greater than 0.3 metres (1 foot) under the Regulatory Flood event; and,

(e) Other landowners, upstream and downstream of the proposal, will not be adversely affected by the addition.

3.19 Balanced Cut and Fill

Cut and fill is a technique that is used to balance flood storage losses resulting from the placement of fill within a flood plain. This is achieved by removing a volume of earth at the appropriate elevation and location to offset areas within the flood plain to be filled. The suitability of cut and fill operations is extremely site-specific.

It should be recognized that in conducting a cut and fill, additional flood free lands are not obtained. A cut and fill will only serve to transfer floodwaters from one area to another as a result of the manipulation of the land's contours. In reviewing applications that will require cut and fill, the following policies will be applicable.

3.19.1 General Balanced Cut and Fill Policies

Any proposals that will require cut and fill operations within the jurisdiction of the Authority and within the flooding hazard limit must be in accordance with the following policies and guidelines and must be to the satisfaction of the Authority.

a. The preservation of valleylands, wetlands and natural vegetation must be taken into account in all proposed cut and fill operations.

b. All fill removed (cut) shall be required to be moved to an area that is outside of the flood plain.

c. The amount of fill removed (cut) must be equal to or greater than the volume of fill proposed for placement within the flood plain.

d. Cut and fill must be balanced in 0.3 m (1 foot) increments. An excess of cut volume may be permitted at any given increment, however, inadequate cut volume will not be permitted.

e. No negative impacts on the hydraulic conveyance capabilities of the watercourse will be permitted.

f. Depending on the location of the proposed works, a geotechnical evaluation may be required in order to ensure the long-term stability of the works.

g. A cut and fill plan must be submitted and meet all requirements of Policy *3.19.2*

3.19.2 Cut and Fill Plan Requirements

At a minimum, all plans for cut and fill operations shall be prepared by a qualified engineer or surveyor and required to contain the following criteria:

a. Detailed summary of total fill volumes and total cut volumes.

b. Cross sectional plots to scale showing existing and proposed flood lines and ground areas.

c. Detailed contour/topographic plan to scale showing existing conditions and proposed works.

d. Adequate erosion and sediment control measures will be implemented on-site, both during and after construction, and must be in accordance with Policy 3.10.

e. A hydraulic analysis may be required as deemed necessary by the Authority (i.e. HEC-RAS modelling).

f. A geotechnical analysis may be required as deemed necessary by the Authority.

3.19.3 Hydraulic Analysis Requirements

In order to ensure that there is no significant impact on upstream or downstream flooding and erosion potential, a hydraulic analysis may be required for existing and proposed conditions.

At a minimum, this analysis shall be required to submit the following information:

a. When generating a flood line the following information is required:
    i. Explanation of how the starting water level was determined;
    ii. A description of how/where flow values utilized in the model were determined;
    iii. A topographic map showing cross-sections and flood lines;
    iv. Hard copy and electronic files of the input and output for existing and proposed conditions and
    v. Electronic files as required.

3.20 Floodplain Spill Areas

There are several areas within NPCA's watershed in which flood plain spills occur. Spill areas are locations where hydraulic modeling and mapping of the flooding hazards indicates that flood waters may leave the flood plain and "spill" into surrounding lands that are outside of the regulated flooding hazard limits. Generally, the depth of flooding cannot be precisely/readily determined as the flood depths that may occur depend on a number of factors such as the local (and downgradient) topography and storage volume as well as the amount of spill flow that would occur. Typically spills would occur only during the higher flow rates of the storm and hence the volume and depth of flood water is dependent also on the duration of the storm and the foregoing factors. The NPCA does not regulate development in spill areas in the same manner as development within flood plain areas, as these areas are not readily defined and the storage/flow that occurs in these areas is not considered as part of the natural flood plain, hence preservation of flood storage is not required. Where spill locations can be identified; while not subject to Ontario Regulation 155/06, the NPCA would review any Environmental Assessment or land use application under the Planning Act, Niagara Escarpment Plan or Building Code so that the possible flood

hazards can be assessed and appropriate mitigation can be established as part of the Municipal/Conservation Authority review process. Mitigation for development proposed within a spill area could include:
a) Raising the elevation of proposed buildings or structures above the anticipated flood level; and/or,
b) Raising the lands within the spill location to prevent its occurrence

For lands within a spill zone, buildings and structures are permitted provided that adequate floodproofing measures are undertaken.

3.21 Minor Works within a Floodplain for Which Permits Will Not be Required

3.21.1 Agriculture

The use of the flood plain or valleyland for existing ongoing cropland, livestock feeding and grazing, orchards, and nurseries and associated activities such as plowing and fencing will not be considered development, provided the use/activity does not represent fill placement or interference with a wetland or a watercourse.

Development to improve water quality as part of farm management enhancements will be considered favourably provided a net benefit to the environment would result.

3.21.2 Fill Not Exceeding 25 Cubic Metres of Material

All disturbed areas shall incorporate adequate sediment control devices to prevent the off-site transportation of sediment; and

- Fill shall not be placed in a manner which may result in blockage/impediment to flood flow;
- No works shall be undertaken within a watercourse,
- All disturbed areas shall be revegetated or protected from Erosion as soon as possible and immediately following completion of earth work,
- There shall be no interference with a wetland, watercourse, valley slope, or shoreline.

3.21.3 Landscaping

Normally, a Permit is not required for the addition of top soil to lawns or the augmentation of soil mixtures for landscaping purposes, to a maximum thickness of 50 mm. The raising of grades to allow for changing the landscape characteristics of a property is considered development in the flood plain.

This policy is not applicable to the placement of fill within a wetland for landscaping (or any other) purposes. No fill placement is permitted within a wetland.

3.21.4 Pipeline Under and Over Crossings and Other Utility Crossings by Non-Intrusive Methods

The preferred method of construction which minimizes Watercourse disturbances is installation by trenchless technologies.

Where open cut methods are necessary a permit is required, full consideration must be given to sediment control, working in dry (dry time of year or Diversion), selection of suitable clean backfill material and site restoration or enhancement. Creek bed restoration should incorporate native or non-porous backfill material.

Adequate sediment control measures shall be used at the locations of the bore pits.

All pipeline and utility crossings shall be adequately protected and encased to prevent Pollution to the Watercourse in the event of pipe failure.

3.22 Special Policy Areas

While the Floodplain management objectives of the Province of Ontario are clear, the practical achievement of these objectives across the Province necessitates that a degree of flexibility be exercised. This flexibility has been introduced to recognize certain exceptional situations where historically, many villages, towns and cities have been located in Floodplains. In these cases, the standards of Floodplain management would not provide sufficient Development capability to maintain community viability.

Currently, there is only one Special Policy Area in the NPCA's jurisdiction. It is located in the Town of Fort Erie in the Fort Erie Industrial Park.

Upon application by a municipality, an S.P.A. may be initiated, whereby the normal regulations for Floodplain management are modified and special Development control mechanisms are applied. Two broad types of Special Policy Areas have been recognized:

(a) Where a municipality's core has historically developed in a Floodplain; and

(b) Where there are large areas of very flat land within Floodplains which are susceptible only to very shallow floods of low velocity.

The application of the Special Policy Area permits Development to proceed in specially-designated locations where proposed Development is capable of being protected by suitable flood damage reduction measures (level of protection to be determined on an individual S.P.A. basis), and where acceptable upstream and downstream effects would result.

Special Policy Area applications must be approved by the Ministry of Municipal Affairs, the Ministry of Natural Resources, and the Conservation Authority, in consultation with the affected local and regional municipalities. After such approval is obtained, Development will proceed only in accordance with an approved amendment to the municipal Official Plan containing the required provisions of the Special Policy Area. (Additional information on Special Policy Areas may be obtained from the document entitled –Natural Hazards Training Manual, Version 1, OMNR, January 1997)

3.22.1 Site Specific – Fort Erie Special Policy Area

In 1985 the Ministry of Municipal Affairs approved Fort Erie Official Plan 32 that included provisions for a Special Policy Area for the Fort Erie Industrial Park to recognize that parts of the approved Industrial Park were located within the 1 in 100 year floodplain of Frenchman's Creek and site specific policies apply.

3.23 Municipal Drains

Municipalities are responsible for managing, maintaining, repairing and improving drainage systems that have been constructed under the authority of the Drainage Act. Generally, Municipal Drains are designed by a Drainage Engineer and constructed by the municipality.

The Conservation Authorities Act does not exempt Municipal Drains and drainage works may require permits subject to the conditions outlined below. The Authority will ensure that comments to municipalities regarding proposed drainage works as per the Drainage Act will be consistent with the requirements

under Regulation 155/06 to prevent conflicting issues.

a) **Maintenance and Repairs to Existing Municipal Drains**

No permits or studies will be required from the NPCA for the modification of an existing Engineer's Report in accordance with Section 78 of the Drainage Act or normal drain maintenance activities such as brushing of side slopes, bottom cleanouts, debris cleanouts and the installation of erosion control works on existing municipal drains that have been identified as Class A, B, C or F drains (as defined in the Class Authorization System for Agricultural Municipal Drains in the Southern Ontario Region), provided that the following mitigation measures are incorporated into the works:

i) The width to depth ratio of the drain is not increased;
ii) Adequate sediment and erosion control measures are implemented prior to construction to prevent sediment from entering the watercourse or migrating out of the work area;
iii) Works are conducted during dry conditions whenever possible or conducted during low flow periods and where timing restrictions are not in force;
iv) Any disturbed bank vegetation is replaced when necessary in order to stabilize the channel;
v) All dredged material is either leveled and stabilized adjacent to the watercourse to minimize any impacts to regulatory flood limits or removed from the area; and
vi) Any drain maintenance activity within or adjacent to a wetland, that may have a negative impact on the wetland, should include measures to minimize impacting the hydrologic function or hydrologic regime of the wetland. The NPCA should be contacted directly to recommend project specific mitigation measures.

Work in any municipal drain that has been identified as a Class E drain (as defined in the Class Authorization System for Agricultural Municipal Drains in the Southern Ontario Region), will require a permit from the NPCA, supported by appropriate study, if the proposed works:

i) Alter the ecological function of the watercourse
ii) Impact a regulatory floodplain; or
iii) Alter or interfere with a wetland.

The NPCA should be contacted prior to the commencement of any works on a Class E drain that may impact the above noted features.

b**) New Municipal Drains and the Extension of Existing Drains**

New Municipal Drain works, including new sections of existing drains, will require permits supported by appropriate study under Regulation 155/06 if the proposed works:

i) alters the ecological function of an existing watercourse,
ii) impacts a regulatory floodplain,
iii) alters or interferes with a wetland, or
iv) are entirely or partially located on the shoreline of Lake Ontario or Lake Erie; or
v) are contained within a valley.

c) Potential Study Requirements Where Permits Are Required

Where proposals to maintain, repair, improve, modify, or create a municipal drain require a permit under

regulation 155/06, the Conservation Authority may require related studies be undertaken in order to quantify anticipated impacts and recommend mitigation measures. The extent of such studies will depend on the nature of anticipated impacts of the works. The Conservation Authority may consider cost sharing on any study requested under this section. The applicant should pre-consult with Authority staff in this regard.

3.24 Wetlands

Wetlands provide for natural flood attenuation during storm events and, as such, it is important to maintain the hydrologic function of wetlands to assist in minimizing flooding impacts downstream. Development setbacks from wetlands are required for many of the same reasons as those for valleylands. In addition to providing a buffer to the natural feature and its functions, the setback also assists in maintaining the hydrologic regime adjacent to the wetland, helps to minimize the potential for contamination of the ground water and surface water and provides lands for activities such as nesting, resting, feeding and shelter for wildlife species. Setbacks from wetlands need to be of sufficient size to protect the hydrologic function of the wetland and the Critical Function Zone, which is defined as the non-wetland area within which biophysical features or attributes directly related to the wetland occur (*How Much Habitat is Enough? A Framework for Guiding Habitat Rehabilitation in Great Lakes Areas of Concern, Second Edition,* Environment Canada, 2004).

3.24.1 Wetland Development Policies

The wetland limit is to be established in the field by an applicant in conjunction with and approved by NPCA or Ministry of Natural Resources staff. If the applicant is other than the landowner, permission must be received from the landowner prior to staking the wetland.

a. **Wetland Boundary –**

The wetland boundary will be established where less than 50% of the plant community consists of upland species. **To be considered a wetland and subject to these policies, a wetland must be evaluated or identified as a Provincially Significant Wetland (PSW) or a Locally Significant Wetland (LSW) or a wetland must:**

i) be seasonally or permanently covered by shallow water or have a water table close to or at its surface, as indicated by the presence of organic soils or hydric soils or gleying within 45 centimetres of the soil surface or mottling within 45 centimetres of the soil surface,
ii) directly contribute to the hydrological function of a watershed through connection with a surface Watercourse,
iii) have hydric soils, indicated by a soil moisture regime of 5, 6, 7, 8 or 9 as described in the Ontario Centre for Soil Resource Evaluation, Field Manual for Describing Soils in Ontario, and
iv) have vegetation dominated by obligate, facultative or water tolerant plant species, as defined according the Coefficient of Wetness reported by the Natural Heritage Information Centre or by Authority staff.

b. **Development Within a Wetland** –

For development in this area, this policy does not include those instances where development and/or site alteration has been approved pursuant to an application made under the Planning Act or other public planning or regulatory process.

It is important to note that these Policies are specific to hydrological and ecological impacts that may be caused by any proposed development. There may be instances where proposed development may be permitted under these Policies (as a result of no hydrological or ecological impact to the wetland), however, there may be other natural heritage impacts that would cause the NPCA to recommend denial of a Planning Act *or* Niagara Escarpment Plan application.

1) Development and/or site alteration will not be permitted in or on the areas of any PSW, LSW, or wetland greater than 2 hectares in size. Some Restricted Uses may be permitted in a wetland (other than PSWs) provided that the proposed use(s) is supported by an NPCA approved Environmental Impact Study (EIS) or Environmental Assessment which conforms to Authority Wetland Policy (e).

2) Replacement *s*tructure*s* may be permitted within any wetland subject to the following:
   i) The structure is restored to its original form (i.e. same dimensions, square footage, and Building footprint);
   ii) In all cases, the viability of locating the structure on a portion of the property outside of the appropriate Area of Interference of the wetland must be examined and applied;
   iii) Where applicable, floodproofing measures will be required, as outlined in Policy 3.18.

3) Additions, accessory *s*tructure*s*, decks, or swimming pools will generally not be permitted within any wetland.

4) Ponds will generally not be permitted within any wetland. Ponds will only be permitted if it can be demonstrated through the appropriate studies that the proposed pond will not have any impact to the existing hydrological function or hydrological regime of the wetland and improve the overall ecological function of the wetland and adjacent lands.

5) The Authority will permit the development of private roads through wetlands other than PSWs, provided:
   i) No reasonable alternate location for the access road exists outside of the wetland,
   ii) The proposed access road traverses no greater than 30 m (or 98 feet) of wetland and have a footprint no greater than 6 m (or 19 feet) in width,
   iii) Any impacts to flood flows, flood storage or groundwater movement are mitigated,
   iv) The proposed access road be designed to provide safe access and egress,
   v) The proposed access road be designed to minimize impacts on the existing hydrological function and ecological function of the wetland; and
   vi) The detailed plans of the proposed access road conform to Authority Wetland Policy (e)

6) The Authority will permit the construction or development of public infrastructure (roads, pipelines, sewers and associated appurtenances, other than stormwater management facilities) within a wetland, provided:
   i) The proposed infrastructure is supported by the completion of an appropriate Environmental Assessment or a Comprehensive EIS to the satisfaction of the Authority,
   ii) No reasonable alternate location for the infrastructure exists outside of the wetland

iii) Any impacts to flood flows, flood storage or groundwater movement are mitigated; and,

iv) The proposed infrastructure be designed to minimize impacts to the existing hydrological function, hydrological regime and ecological function of the wetland and adjacent lands; and

c. **Development Within 30m of a Wetland** –

For development in this area, this policy does not include those instances where development and/or site alteration has been approved pursuant to an application made under the Planning Act or other public planning or regulatory process.

It is important to note that these Policies are specific to hydrological and ecological impacts that may be caused by any proposed development. There may be instances where proposed development may be permitted under these Policies (as a result of no hydrological or ecological impact to the wetland), however, there may be other natural heritage impacts that would cause the NPCA to recommend denial of a Planning Act *or* Niagara Escarpment Plan application.

1) Except as described in Section 3.24.1 (c) 4 herein, development and/or site alteration will not be permitted within the adjacent lands of any wetland (30 m or 98 feet), unless the hydrological and ecological function of adjacent lands has been evaluated and it has been demonstrated to the satisfaction of the NPCA that there will be no negative impacts on natural features or their ecological functions. Development proposals may require the completion of an EIS or similar study and should utilize all opportunities for the protection and rehabilitation of the wetland feature.

2) Where buildings and structures already exist within 30 m of any wetland, **replacement structures or additions** may be permitted subject to the following:

i) No new septic systems permitted within 30 m of any wetland ;

ii) Existing septic systems may be replaced provided there are no viable locations available outside of the 30 m area of interference and it does not encroach any closer to the wetland than the existing system;

iii) The replacement structure or addition does not encroach any closer to the wetland than the existing development at its closest point;

iv) Even if the existing development is closer than 15 m to the wetland, no proposed development is permitted within 15 m of any wetland;

v) No suitable building envelope or area of development is available on the property greater than 30 m from a wetland; and

vi) A hydrologic study may be required to determine whether there will be a negative impact on the hydrologic functions of the wetland as a result of the proposed development and/or site alteration.

3) Where there is an existing residential dwelling, in existence prior to the adoption of these policies and where no land exists outside of the 30 m area of interference, **decks and accessory structures** may be permitted subject to the following:

i) The deck or accessory structure does not encroach any closer to the wetland than the existing residential dwelling at its closest point;
ii) The new development or site alteration is located no closer than 15 m from the wetland; and,
iii) A hydrologic study may be required to determine whether there would be a negative impact on the hydrological functions of the wetland as a result of the proposed development and/or site alteration.

4) Where no new development exists within 30m of any wetland:
i) No new septic systems are permitted within 30m of any wetland.
ii) For major development (as determined by the NPCA) including, but not limited to; plans of subdivision; extensions of draft approval for existing plans; and, major commercial, industrial, or intuitional, no new development is permitted within 30m of a PSW.

d. **Development Between 30m and 120m of a Wetland –**

For development proposals not already approved pursuant to an application made under the Planning Act or other public planning or regulatory process, the following policies will apply.

1) Provided major fill placement (>0.3 m in elevation) is not associated with the following development and/or site alteration, the following works may proceed without a permit from the Authority (pursuant to NPCA Regulation 155/06) if the proposed works are located within 30 m to 120 m from the limit of a PSW:

i) A single family residential dwelling;
ii) Swimming pools, decks, accessory structures to a single family residential dwelling;
iii) Minor additions to existing residential buildings/structures provided the addition is located no closer than 30 m from a wetland.
iv) Residential septic systems with the provision that a qualified professional(s) conducts percolation tests and soil description, a site inspection, a licensed septic system installer installs the system, and a mound system or a raised filter bed is utilized. The system must be located as far from the wetland as possible;
v) Existing septic systems may be replaced provided the new septic system does not encroach any closer to the wetland than the existing system and the new septic system is designed and constructed in accordance will all Authority policies;
vi) Agricultural buildings/structures, provided Best Management Practices are implemented and, where applicable, proper manure storage facilities are demonstrated as part of the proposal and the building is equal to or less than 500 m^2 (5382 ft^2) in size;
vii) Minor additions to existing agricultural buildings/structures provided that the total area of the addition and the existing building are equal to or less than 700 m^2 (7535 ft^2) in size; and
viii) Landscaping and minor grading.

Best efforts must be made to locate the above uses as far from the wetland as possible in order to minimize the potential impacts to the hydrologic functions. Cumulative impacts to a wetland will be considered when appropriate.

2) Not withstanding Policy d(1), if, in the opinion of the Authority, any development and/or site

alteration proposed within 120 m of a PSW or wetland greater than 2 hectares in size may have an impact on the hydrological function, hydrological regime or ecological function of a wetland, the NPCA will require a Permit pursuant to Regulation 155/06 be obtained prior to the commencement of any works. Any development or site alteration deemed by the Authority to require a Permit must be supported by an EIS or similar study and/or a hydrological assessment, prepared by qualified professionals, that identifies whether the proposed development and/or site alteration will cause a negative hydrologic or ecological impact to the wetland features/functions.

e. **Wetland Compensation and Reconfiguration –**

1) Where no reasonable alternative exists to locate a proposed development, site alteration or other activity outside of the wetland or adjacent lands, the Authority may require that an area of wetland be created that is equivalent to the area of wetland and adjacent lands disturbed. Any required wetland creation should be located in close proximity to the area disturbed or in an area to be determined by the Authority. All wetlands created under this policy will be added to the Authority regulated area and identified on appropriate screening maps, and,

2) The Authority may permit the reconfiguration of wetland boundaries to maximize a development area provided;

i) The wetland to be reconfigured has not been evaluated as a PSW;
ii) The wetland boundary reconfiguration or the proposed development area will not have an impact on any sensitive species or species at risk;
iii) The wetland boundary reconfiguration or the proposed development will not have a significant impact on the hydrological or ecological function of the wetland;
iv) The wetland boundary reconfiguration will not significantly reduce the area of wetland within the wetland feature or complex; and,
v) Any proposal to reconfigure the boundary of a wetland must be supported by an accepted EIS or similar study which addresses, but is not limited to, the above items. All proposals to reconfigure a wetland boundary will be assessed by NPCA and may require final approval of the NPCA Board of Directors.

f. **Conservation of Wetlands –**

1) The Authority will encourage local municipalities to continue to identify wetlands through the preparation and completion of municipal planning documents (e.g. Official Plans, Zoning By-Laws, neighbourhood plans, and sub-watershed plans) and to develop conservation policies for wetland areas and adjacent lands.

2) The Authority will recommend that municipalities seek the dedication of wetlands to a public agency to protect the wetland and its features when applications for a plan of subdivision are reviewed.

g**. Impacts to Agriculture -**

None of these wetland policies are intended to limit the ability of existing agricultural uses to continue. Where wetlands currently used for agriculture are subject to a proposed change in land use, the Authority will consider them to be wetlands subject to these policies.

3.24.2 Existing Lots of Record - Wetlands

The purpose of this section is to provide guidelines for Conservation Authority staff to evaluate development proposals on existing vacant lots of record located within wetlands where development cannot occur outside of the regulated wetland feature. It is the intent of these policies to provide relief for owners of existing lots of record to enable development without compromising the overall goal of wetland protection and conservation of the wetland feature. This section shall not obligate the NPCA to grant approval for all "existing lot of record" proposals. Each proposal shall be reviewed according to the approved policy and criteria contained herein in combination with evaluation of the impact on the wetland feature.

For the purpose of this section, "*existing lot of record*" shall be defined as a legally conveyable parcel of land described in a deed or shown as a lot or block on a registered plan of subdivision, in either case existing before May 4, 2006 (the date of approval of Ontario Regulation 155/06). Nothing in this policy shall allow for the increase in the number of applicable existing lots of record and as such, this policy will become redundant once these lots of record are either developed in accordance with this section or merged with other lands such that this section no longer applies.

1) Isolated and Infill Lots

i) The provisions of this section shall apply to development in a wetland area on an existing lot of record of a single proposed residential dwelling, where no potential for further development of adjacent parcels and/or cumulative impact to the wetland exists. The property owner shall provide legal proof of the lot status satisfactory to the NPCA. (ie: deed)

ii) An NPCA Permit shall be required for any development under this section in accordance with O. Reg. 155/06 and associated Policies. Conditions may be attached to any approval.

iii) Where permits are to be granted under this section, the area allowed to be developed shall not exceed 1.0ac/0.4ha.

iv) The proposed development shall comply with all municipal zoning designations, by-laws and regulations including Health Services.

v) It shall be a condition of all permits that no Planning Act approvals be necessary to enable the development. (examples of Planning Act approvals include minor variances, severances, zoning bylaw and official plan amendments, subdivision approvals)

vi) The NPCA shall evaluate the building envelope in accordance with the approved "Policies, Procedures and Guidelines for the Administration of Ontario Regulation 155/06 and Land Use Planning Policy Document" (as amended).

vii) The NPCA shall be satisfied that development will not have a significant impact on the hydrologic function of the wetland and may require the proponent to provide an Environmental Impact Study.

2) Other Lots of Record

Where in the sole opinion of NPCA, the potential for multi lot development exists, the NPCA will consider the potential and cumulative impact of any and/or all potential development on the wetland in accordance with the approved "Policies, Procedures and Guidelines for the Administration of Ontario Regulation 155/06 and Land Use Planning Policy Document" (as amended).

Each situation will be assessed individually and the NPCA may require any proponent to provide an Environmental Impact Study addressing any and/or all potential development as NPCA in its sole discretion requires. Development will not be approved where any and/or cumulative impact from development will prove to have a negative impact on the wetland and/or its function.

3.25 Valleylands

Slope failures can cause devastating damage to buildings, roadways and property. In many cases damage is exacerbated by human modification on or near the slope. Almost any modification increases the risk of slope movement. Slope failures can be triggered by atmospheric processes (heavy rainfall), geologic processes (earth tremors, freeze-thaw soil action), human modification or a combination of the above.

The NPCA defines a valley as a natural landform depression that contains a watercourse, has water flowing through, or contains standing water. Water features may be either permanent or intermittent. The boundaries of a valley are defined by the primary top of bank on each side of the landform depression as illustrated in Figure 3. NPCA staff will locate and approve the top of bank through field inspection.

The valleyland resources within the NPCA jurisdiction can be categorized by - steep `V' shaped valleys and broad `U' shaped stream corridors. Generally, the steep valley systems are found north of the Niagara Escarpment in the western portions of Niagara-on-the-Lake and St. Catharines, as well as the eastern portion of the Town of Lincoln. The Niagara Escarpment is considered to be included within the jurisdiction of the NPCA, and will be afforded the protection of the NPCA's Valleyland policies. The broader stream corridors are found south of the Escarpment, in Fort Erie, Port Colborne and Wainfleet and Haldimand County.

Certain valleys in Niagara have, in recent years, exhibited Slope failure problems. These problems have been aggravated by historical Development situated in very close proximity to, or on, the top of valley Slopes. This situation, in combination with varied soil characteristics, groundwater hydraulics/movement and historical Fill placement (for example), has created damaging and dangerous situations. The Twenty Mile Creek Valley in Lincoln and the Twelve Mile Creek Valley in St. Catharines are two such areas. The lack of detailed valleyland policies implemented some 20 to 30 years ago, has created situations where homes and businesses are now experiencing great risk of major damages due to Slope instability problems. Solving these types of problems through 'structural' means can be cost prohibitive and may also impact Fish Habitat. As a result, a comprehensive 'non-structural' approach to deal effectively with Development in these situations is of great importance.

As such, no new Development (with the exception of Structures required for Erosion control purposes) will be permitted within natural valleys where the bank height is equal to, or greater than 3 metres (10 feet). In addition, Development proposed on Adjacent Lands to these Slopes will be subject to the policies of this Section.

The policies that restrict development on the tablelands adjacent to the top of bank are in place in part to protect the valley slope vegetation and its root system from excavation and loading damage/destruction. The root system of the vegetation at the top of bank and along the valley walls helps to bind the soil particles and maintain bank stability. This in turn protects the landowner's property from the potential loss of tableland as a result of bank erosion. Development located at the top of bank can affect drainage patterns, which can result in an increase in soil erosion along the valley slopes. In addition, these policies provide for access to the bank for heavy machinery for construction (should erosion protection works be required in the future), maintenance and emergency access. The buffer/setback may also provide additional protection against unforeseen or unpredicted external conditions, which could have an

adverse effect on the natural conditions or processes acting on or within an erosion prone area. One example of such an unpredicted external condition would be climate change.

Ideally the regulated tablelands adjacent to the top of bank should be left in a natural state (i.e., not manicured lawn) in order to allow for the natural succession of vegetation from the valleylands onto the tableland to provide a buffer to the valleyland vegetation and root system. The tableland adjacent to a valley, if left in a natural state, provides additional habitat, movement corridors and food sources for species that utilize the valleylands and provides some additional stormwater filtration prior to it entering the valley feature/watercourse. No removal of vegetation shall be permitted below the top of slope.

This policy is not intended to prevent the addition or extensions, including new structures, to existing primary agricultural operations which are not likely to incur significant damages, impact the valley system or cause pollution.

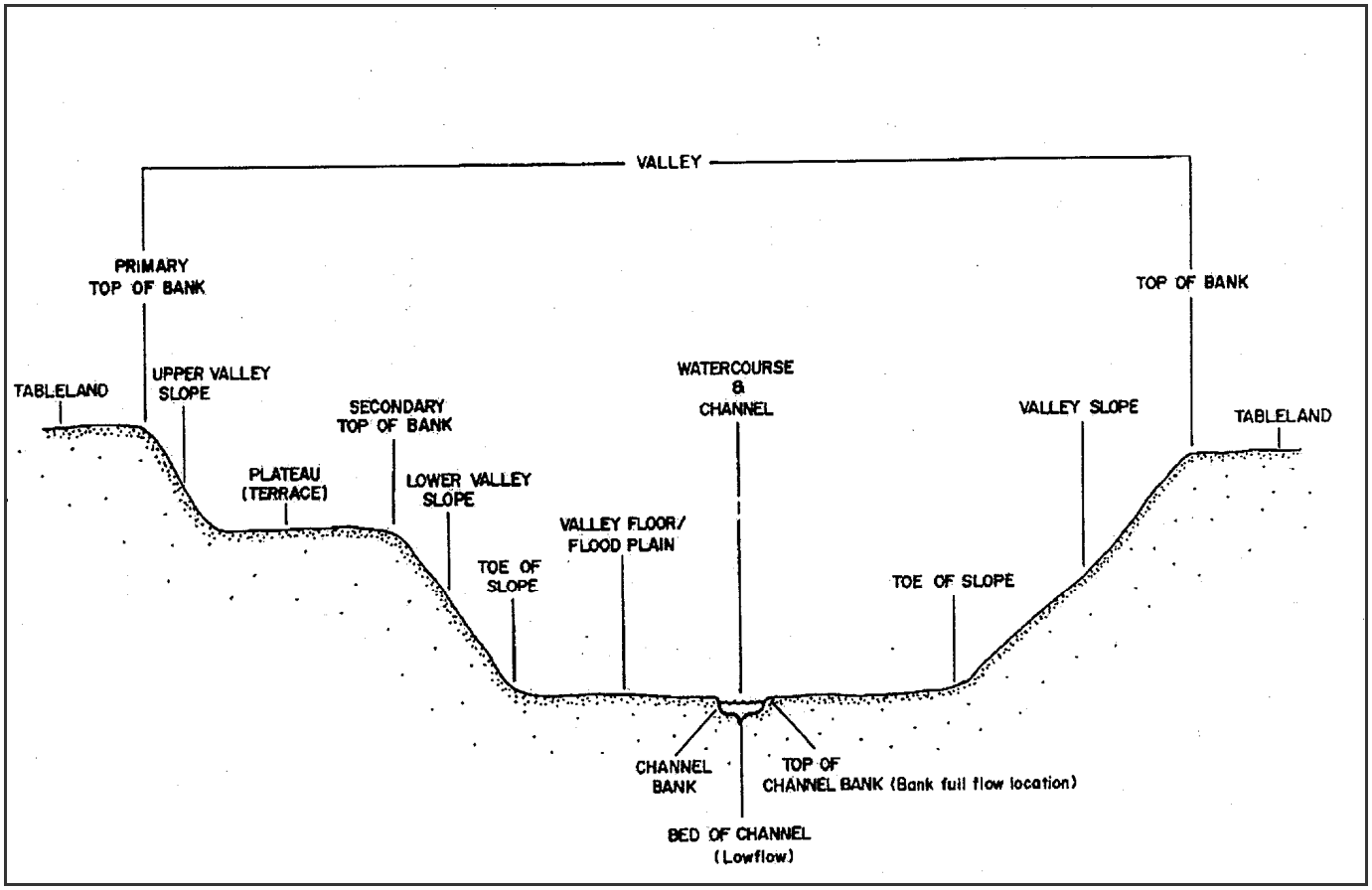


Figure 3: The Physical features of A Typical Valley

The following policies shall apply to all valleylands where slope is greater than or equal to 3 metres in height:

3.25.1 Physical Top of Slope

Where the Physical Top of Slope is required to be established, site inspections with the applicant and Authority staff are to be undertaken. The NPCA Approved Physical Top of Slope shall be marked in the field. The applicant will then submit drawings indicating the surveyed location of the NPCA Approved Physical Top of Slope for NPCA review and approval.

3.25.2 Stable Top of Slope

The Physical Top of Slope and the Stable Top of Slope may be coincident. However, in some cases, due to specific on-site conditions (such as slope inclination, proximity of the watercourse to the toe of slope, soil conditions, erosion, etc.) the Stable Top of Slope may not be located at the Physical Top of Slope, but rather may be located landward from the Physical Top of Slope.

The Stable Top of Slope is to be established by a professional geotechnical engineer utilizing the guidelines and manuals outlined in Section 5, to the satisfaction of NPCA staff. Where no geotechnical assessment has been undertaken, the Stable Top of Slope is based on a line projected upwards from the base of the slope at a 3:1 (horizontal to vertical) angle. In addition to the requirements outlined in Section 5, the geotechnical assessment must take into consideration, and make recommendations pertaining to: construction equipment/access; limit of work area; vegetation protection; sediment and erosion controls; drainage; etc.

3.25.3 Slope Stability

3.25.3.1 Stable Slopes

Where the stability of the slope has been previously confirmed (i.e. the Physical Top of Slope is at the same location as the Stable Top of Slope), or where a natural valley slope which through field inspection of surficial conditions **does not** reveal evidence of:

: outward tilting of trees,
: toe Erosion at the base of the Slope,
: slumping, gullying or other visibly evident Erosion process,
: the addition of Fill material,
: containing an easily eroding soil type (ie. the Short Hills area of Pelham contains soil types which are highly erodible and easily susceptible to gully Erosion), and
: where the angle of the Slope is gentler than 3(H):1(V),

the following policies apply:

A minimum setback of 7.5 metres (25 feet) from the NPCA Approved Physical Top of Slope (surveyed by the applicant in accordance with Policy 3.25.1) will be required, to ensure perpetual stability of the slope and for the purposes of Conservation of Land, for all Development including swimming pools, subsurface sewage disposal system and the placement of Fill. The valley shall be maintained in a natural state and there shall be no disturbance of grades or vegetation below the Physical Top of Slope or within the 7.5m setback.

For newly created lots through plan of subdivision or NPCA approved consent applications which are being developed in greenfield or brownfield situations, the rear lot lines or side lot lines (as the case may be) shall be set back 7.5m from the NPCA Approved Physical Top of Slope. The NPCA will consult with the local municipality in "infilling" situations to discuss site specific constraints to this policy.

3.25.3.2 Unstable Slopes

Where the instability of the slope has been previously confirmed (i.e. the Physical Top of Slope is not at the same location as the Stable Top of Slope), or where a natural valley Slope which through field inspection of surficial conditions reveals evidence of:

: outward tilting of trees,
: toe Erosion at the base of the Slope,
: slumping, gullying or other visibly evident Erosion process,
: the addition of Fill material,
: containing an easily eroding soil type (ie. the Short Hills area of Pelham contains soil types which are highly erodible and easily susceptible to gully Erosion), or
: where the angle of the Slope is steeper than 3(H):1(V),

the following policies shall apply:

A Geotechnical Investigation, undertaken by a qualified geotechnical engineer, shall be required by Authority staff in all cases of Development, where the Slope characteristics identified above are found. A minimum setback of 7.5 metres (25 feet) from the NPCA Approved Stable Top of Slope (as indicated by the commissioned Geotechnical Investigation) will be required for stability purposes and the Conservation of Land, for all Development including swimming pools, Subsurface sewage disposal systems, and the placement of Fill.

For newly created lots (i.e. severance and plans of subdivision), the rear lot lines or side lot lines (as the case may be) shall be set back 7.5m from the NPCA Approved Stable Top of Slope. The valley shall be maintained in a natural state and there shall be no disturbance of grades or vegetation below the Physical Top of Slope.

The Geotechnical Investigation may determine that setbacks greater than 7.5 metres are required to address the site specific Slope characteristics.

At the discretion of the Conservation Authority, applicants may be required to update geotechnical reports, should the recommendations of these reports not be implemented within one year of the original analysis that has been approved by the appropriate agencies.

3.25.4 Existing Development Within and Adjacent to Valleylands

1) Where buildings and structures already exist within 15 metres of the Stable Top of Slope and a 7.5 metre publicly owned access is not provided adjacent to the Stable Top of Slope the following policies will apply:

Any replacement (same size and use) or additions to the existing buildings and structures may be permitted subject to the following:

i) the replacement or addition does not encroach any closer to the Stable Top of Slope than the existing development at its closest point;
ii) even if existing development is closer than 7.5 metres to the Stable Top of Slope, no new development is permitted within 7.5 metres of the Stable Top of Slope in order to provide for an erosion access allowance as per the Provincial Policy Statement;

iii) a geotechnical assessment by a qualified engineer (at the expense of the applicant), may be required to determine the location of the Stable Top of Slope and to determine if the proposed development would have a negative impact on slope stability. See Section 5 for study requirements; and,

iv) In cases where the building or structure can be reasonably relocated outside of the setback the applicant will be encouraged to do so.

2) For Existing Lots adjacent to Slopes (bank height equal to or greater than 3 metres), a minimum setback of 7.5 metres (25 feet) from the NPCA Approved Physical Top of Slope as surveyed by the applicant shall be required for stability purposes and the Conservation of Land, for all Development, Buildings, and Structures (including swimming pools).

A reduction in this setback will only be considered in cases of unusual circumstances where an Existing Lot of Record contains insufficient depth to accommodate required setbacks and a Geotechnical Investigation reveals that some infringement within the setback area, together with mitigative measures can be accommodated on-site while maintaining bank stability and will result in no adverse long term environmental impacts. In no case shall the setback reduction be such that Development is allowed beyond the Physical Top of Slope.

3) In specific cases where Buildings, Structures or private *access* roads already exist on a valley wall, Reconstruction or alteration may be permitted subject to the following:

a) Best efforts must be undertaken to relocate the existing Structure outside of the valley and associated tableland Regulation Limit.

b) A qualified professional must complete a geotechnical study to determine the risk of the proposed work. The study will include an assessment of the stability of the valley wall, rate of Erosion or recession of the valley wall, access issues and an assessment of the construction technique on the valley wall. The design of any works must ensure that the long-term stability of the valley wall is maintained and that no risk to life or property damage is anticipated.

c) No adverse environmental impacts to existing natural features and functions.

3.25.5 Required Valleyland Construction Practices

The Authority shall require that overland drainage be directed away from valley Slopes, in the review of lot grading and drainage plans for new Development, in areas located immediately adjacent to a natural valley system.

The Authority shall require that an appropriate limit-of-work fence be located a minimum of 3.0 metres (10 feet) from the surveyed Top of Slope or at the drip line of trees within a setback area, whichever is greater and be maintained during construction to discourage dumping of Fill material and disturbance of the vegetation on the valley Slope, itself and limit the amount of soil compaction that could damage or suffocate the tree root systems.

The Authority shall require the re-establishment of vegetation on disturbed valley Slopes to minimize soil loss during and after construction.

3.26 Shoreline

The overall position of the Province of Ontario with respect to shorelines which are susceptible to flooding, erosion and dynamic beach hazards is that development will be directed to areas outside of the hazardous lands. In establishing provincial standards for defining and delineating shoreline hazards, the Province recognizes that there may be some situations where development may be considered within the less hazardous portions of the hazardous lands. A combination of three hazards is used to define hazardous lands related to the shoreline. The farthest combined landward extent of flooding hazards, erosion hazards and dynamic beach hazards delineates shoreline hazardous lands. Flooding hazards are based on the combined influence of lake levels, shoreline protection works, wave uprush and other water related hazards. Erosion hazards are based on the combined influence of stable slope and shoreline protection works, recession and/or an erosion allowance. Dynamic beach hazards are based on the combined influence of flooding and a dynamic beach allowance. The following policies reflect the Provincial Policy Statement requirements related to development within hazardous lands associated with the shoreline.

NPCA's waterfront jurisdiction includes shorelines associated with Lake Ontario and Lake Erie. The general and specific shoreline policies within this document restrict *development* within the shoreline hazardous lands that are impacted by flooding, erosion and dynamic beach hazards. The basic objectives of the shoreline policies are to minimize risk to life, property damage, social disruption and adverse environmental impacts.

The limits outlined in this section will apply in all instances unless it can be shown to the satisfaction of the Authority and through valid engineering studies (by a qualified professional), at the expense of the proponent, that other allowance limits will maintain the integrity of the feature in question. The need for greater hazard land limits may be demonstrated through the completion of these studies. The shoreline hazard limit is the furthest landward extent of the aggregate of the flooding hazard limit plus the erosion hazard limit plus the dynamic beach hazard limit.

In 1997 Conservation Authorities were delegated natural hazard responsibilities by the Province of Ontario under the Provincial Policy Statement (PPS). In this role, Conservation Authorities are responsible for reviewing policy documents and Development proposals processed under the Planning Act to ensure that they have appropriate regard to Hazard Lands. Along the Great Lakes shoreline, Hazard Lands can be defined as areas that are prone to flooding, Erosion and areas with dynamic beaches (shorelines that are constantly changing). The Natural Hazards Policies (section 3.1 of the PPS) are in place to prevent Development from occurring within these Hazard Lands. These policies are administered in conjunction with the Department of Fisheries and Ocean's Fisheries Act and the Ministry of Natural Resource's Lakes and Rivers Improvement Act and the Public Land Act.

The Niagara Peninsula Conservation Authority has approved these shoreline management guidelines to assist in ensuring that Development is not adversely affected by flood, Erosion and dynamic beach

problems along the shores of the Great Lakes. These guidelines are based on the PPS Natural Hazards training manual and the Lake Erie & Lake Ontario Shoreline Management Plans.

The Lake Erie and Lake Ontario Shoreline Management Plans were completed in 1992 and 1994 respectively by the NPCA in co-operation with the MNR and the shoreline municipalities. These comprehensive studies were completed in response to the 1988 delegation of shoreline hazards by the Province to local Conservation Authorities. The NPCA uses shoreline mapping generated from the two studies, to assist in identifying hazards and implementing the recommendations of each study.

The area of jurisdiction for the Authority's Shoreline Management Program includes the Lake Erie and Lake Ontario Shoreline and the Niagara River within the Authority's jurisdiction. It is recognized that the Niagara River represents a unique shoreline management interest relative to the potential impact on the Great lakes resulting from new Development along the shoreline. In light of this, the Conservation Authority, Department of Fisheries and Oceans, and Ministry of Natural Resources – Niagara District will liaise closely to ensure shoreline management principles are addressed adequately in any new Development proposals in these areas.

3.26.1 Erosion Hazard and Slope Stability

The shorelines undergo a continuous change of form and configuration under the action of the natural processes of erosion and sedimentation. Erosion and slope stability are two different processes, which are often associated together. Erosion is the loss of soil at the ground surface, while slope failures consist of a large mass of soil sliding along a planar surface. The erosion process gradually washes away the soils by water movement that commonly occurs in the form of wave action, rainfall, surface runoff, internal seepage and piping and surface water flow. Other processes such as wind and frost may assist in the weathering and transport of soil particles. Water action and erosion are integral to slope stability. Along Great Lakes shoreline slopes, sustained storms or high lake levels may produce more slopes failures influenced by toe erosion. Slope movement or instability can occur in many ways but is generally the result of:

- changes in slope configuration (steepness or inclination);
- increases in loading on slope (structures or filling near the crest);
- changes in drainage of the soil (heavy rainfall);
- loss of vegetation; and
- erosion of slope toe.

In certain situations, the location of the physical top of bank may differ from the location of the stable top of bank. The physical top of bank is defined as the location of the apparent brow of the slope (as approved by NPCA staff). The stable top of bank along the shoreline is based on a 3:1 slope projected upwards from the base of the slope. In cases where the slope of the existing bank has an inclination steeper than 3:1 (horizontal to vertical), the stable top of bank may be located landward from the physical top of bank.

The location of the stable top of bank must then be established by a professional, geotechnical engineer utilizing the guidelines and manuals outlined in Section 5, to the satisfaction of NPCA staff. The geotechnical assessment must take into consideration, and make recommendations pertaining to: development setbacks, construction equipment/access; limit of work area, vegetation protection; toe protection, sediment and erosion controls; drainage; etc.

As such, the Stable Slope Allowance shall be defined as the horizontal distance measured from the base of the slope, landward to the location of the stable top of bank. Development will generally be directed outside of the Stable Slope Allowance in order to ensure safety should a slope failure occur. Depending on the scope, nature, and location of the development, the NPCA may require additional landward horizontal setbacks from the Stable Slope Allowance in order to provide for maintenance equipment access.

The shoreline policies restrict (except as permitted in accordance with Policies 3.27) development within the erosion hazard.

3.26.2 Flooding Hazard

Flooding has historically and repeatedly caused considerable damage along shorelines. Shorelines may experience various magnitudes and durations of shoreline flooding as the result of a combination of:

- higher, lake wide, static water levels due to abnormally high levels of precipitation and runoff and the annual lake level fluctuations;
- short-term, storm induced wind setups;
- wave action which rushes up the shore and other water related hazards, including wave overtopping, ice jamming and piling.

Table 1: **100 Year Flood** Levels for Lake Erie

LOCATION (from the west limit of the NPCA watershed jurisdiction, east to the Niagara River)	**100 Year Flood LEVEL** (METRES GSC*)
Mohawk Bay to Mohawk Point	176.65
Mohawk Point to Cassidy Point	176.77
Cassidy Point to Point Abino	176.89
Point Abino to Windmill Point	176.97
Windmill Point to Niagara River	177.11
*These levels have been derived from the Shoreline Management Plan for Lake Erie Shoreline (June, 1992)	

Table 2: **100 Year Flood** Levels for Lake Ontario

LOCATION	**100 Year Flood** LEVEL (METRES GSC*)
Fifty Point to Cherry Avenue (Grimsby)	76.01
Cherry Avenue to Mississauga Point (NOTL)	76.15

*These levels have been derived from the Lake Ontario Shoreline Management Plan (January, 1994)

The shoreline policies restrict (except as permitted in accordance with Policy 3.26.4 *Shoreline Development*) development within the flooding hazard. The flooding hazard is determined by the influence of the 100 year flood level plus a 15 metre horizontal setback for wave uprush and other water related hazards. A reduction to this setback shall only be considered if an engineering analysis (completed by the applicant and approved by the NPCA) justifies the reduction.

3.26.3 Dynamic Beach Hazard

A shoreline beach is simply an accumulation of detritus material or sediment along lake shorelines that has been transported and deposited by waves and by currents generated by waves and winds. The sediment composition of a beach may vary from sand gravel, cobbles or boulder. Shoreline beach profiles are physical features experiencing constant change. Nearshore beach sediment readily visible during low wave conditions often may be transported offshore during storm events, only to be returned during periods of calmer weather and deposited by wind and wave action landward, nearshore on the sub-aerial part of the beach and above the water on the beach, or in the form of sand dune complexes. As such, shoreline beach profiles are very "dynamic" in nature, being shaped and reshaped on a range of timescales that extend from either hours or days to years and decades in response to changing wave, wind and water level conditions and to changes in the rate of sediment supply to a particular stretch of shoreline.

The factors controlling the dynamic nature of a beach environment are numerous and their interaction produces a highly complex set of processes and responses. In general terms, beach dynamics reflect the operation of processes such as wave-generated and wind-generated currents in the lake, transport of beach building materials (i.e., sand, gravel) by wind on the sub-aerial part of the beach and dune, and the direct action of ice.

The shoreline policies restrict (except as permitted in accordance with Policies 3.26.4) development within the dynamic beach hazard, which is delineated by the landward limit of the flooding hazard plus a 30 metre dynamic beach horizontal setback. The dynamic beach hazard policy is generally not applied where beach or dune deposits overlying bedrock are generally less than 0.3 metres in thickness, 10 metres in width or extend for less than 100 metres along the shoreline.

3.26.4 Shoreline Development Policies

3.26.4.1 Repairs/Maintenance and Interior Alterations to Existing Buildings and Structures

a) No restrictions within the flooding hazard. Staff will advise the applicant of the flood risk and potential for damage.
b) No restrictions within the Stable Slope Allowance. Staff will advise the applicant of the imminent risk.
c) No restrictions within the erosion allowance. Staff will advise of the long-term erosion hazard.
d) Within the dynamic beach hazard staff will encourage the goals for no development within this hazard.

3.26.4.2 New Habitable Buildings/Structures, Redevelopment and Additions

a) Not permitted within the Stable Slope Allowance or the dynamic beach hazard.
b) May be permitted within the flooding hazard provided:
   i) Means are provided to mitigate the wave uprush hazard (i.e. shutters installed on windows).
   ii) Means are provided to mitigate the 100 year lake level flood hazard (i.e. no openings are constructed within the structure below the regulatory 100 year flood elevation).
   iii) The NPCA is satisfied that no practical alternative exists to locate the proposed structure outside of the flooding hazard.

c) May be permitted within the erosion allowance provided:
   i) It meets the requirements of the shore protection work standard to the maximum extent and level possible based on site-specific conditions;
   ii) It utilizes maximum lot depth and width;
   iii) As a minimum, uses a setback from the Stable Slope Allowance of 7.5 metres.
   iv) The NPCA is satisfied that no practical alternative exists to locate the proposed structure outside of the erosion hazard.

3.26.4.3 Replacement of Habitable Buildings/Structures

a) Buildings destroyed by flood and/or erosion forces will not be permitted to be reconstructed at the same location unless it can be conclusively demonstrated that the Great Lakes Hazards can be adequately mitigated to the satisfaction of the NPCA. This section shall be subject to both the policies of Section 3.26.4.2. and the discretion of the NPCA.
b) Buildings destroyed by forces other than flood and erosion may be reconstructed/relocated subject to the policies of Section 3.26.4.2 with the following exceptions:
   1) Within the Stable Slope Allowance reconstruction at the same location may be permitted provided:
   i) the building/structure is of the same use, the same size or smaller than the original building/structure and contains the same number of dwelling units.
   ii) the NPCA is satisfied that no practical alternative exists to locate the proposed structure outside of the stable slope allowance.

   2) Within the dynamic beach hazard reconstruction at the same location may be permitted provided:
      i) the proposed building/structure is of the same use, the same size or smaller than the original building/structure that was destroyed and contains the same number of dwelling units;
      ii) the design minimizes impact on the dynamic beach (to the satisfaction of the NPCA); and,
      iii) the NPCA is satisfied that no practical alternative exists to locate the proposed structure outside of the dynamic beach hazard.

3.26.4.4 Major Structures– Non-Habitable

Major structures involve non-habitable buildings and structures that do not meet the criteria of minor structures as outlined in Policy 3.26.4.5.

a) Not permitted within the stable slope allowance or the dynamic beach hazard.
b) May be permitted within the flooding hazard provided it incorporates floodproofing to the full flood protection standard.

c) May be permitted within the erosion allowance provided:
   i) It meets the requirements of the protection work standard;
   ii) It utilizes the maximum lot depth and width; and,
   iii) The setback is based on a planning horizon of not less than 70 years (21 metres) or a minimum setback from the stable slope allowance of 15 metres.

3.26.4.5 Minor Structures – Non-Habitable

Minor structures involve non-habitable, moveable structures (sheds, gazebos), with no utilities and a maximum size of 10 square metres.

a) Not permitted within the stable slope allowance or the dynamic beach hazard.
b) May be permitted within the flooding hazard provided safety concerns due to flood hazards are addressed.
c) May be permitted within the erosion allowance provided:
   i) Safety concerns due to erosion hazards are addressed;
   ii) The location of the structure does not obstruct maintenance access to and along existing shoreline protection works.

3.26.4.6 Swimming Pools

a) Not permitted within the flooding hazard, stable slope allowance or dynamic beach hazard.
b) May be permitted within the erosion allowance provided:
   i) The pool will not be at risk to erosion hazards for 30 years (9 metres) for inground pools or 10 years (3 metres) for above ground pools;
   ii) Drainage is addressed;
   iii) The location of the pool does not obstruct maintenance access to and along existing shoreline protection works.

3.26.4.7 Decks/Boardwalks

a) Not permitted within the dynamic beach hazard except as dune cross-overs at selected points.
b) Not permitted along the shore within the stable slope allowance. Only perpendicular access to the shoreline is permitted.
c) May be permitted within the flooding hazard provided safety concerns due to flood hazards are addressed.
d) May be permitted within the erosion allowance provided the structure is not at risk to erosion hazard for 10 years (3 metres).

3.26.4.8 New Septic Systems

a) New septic systems will not be permitted within the hazardous lands associated with the shoreline.

3.26.4.9 Buildings or Structure

a) Buildings or Structures, which by the nature of their use are located in close proximity to water (e.g., docks, boathouses), may be permitted. Detailed site-specific evaluations with respect to erosion, flooding and dynamic beach hazards will be required to be undertaken to the satisfaction of the NPCA.

3.26.4.10 Shoreline Protection Works

Shoreline protection works are generally defined as a combination of structural works with landform modifications designed, and constructed, to address the impacts of flooding and other water related hazards and to arrest the landward retreat of shorelines subject to erosion. The shoreline zone is characterized by a complex interaction of short-term and long-term water level variations, waves and currents, morphology, sediments and protection structures. An ecosystem approach should be incorporated into any shoreline treatment design. Shoreline protection works should consider natural coastal processes and be effective against long-term erosion, preserve cobble/shingle beaches, protect/regenerate aquatic and terrestrial habitat, and not negatively impact neighbouring shoreline.

The design and installation of the protection works should be such that access to the shoreline protection works by heavy machinery for regular maintenance purposes and/or to repair the protection works, should failure occur, should not be prevented. The shoreline policy requires a minimum 5 metre wide access to, and along, the shoreline protection works.

The following outlines the requirements for applicants proposing shoreline protection works:

1. The purpose or objective of the proposed works must be clearly defined;
2. The shoreline works must be designed according to accepted scientific coastal engineering principles, and shall conform to the recommendations of the appropriate Shoreline Management Plans.
3. The works may be required to be designed and the installation supervised by a professional engineer with experience and qualifications in coastal engineering;
4. Slope stability may be required to be assessed by a professional engineer;
5. The ownership of land, where the protection works are proposed, must be clearly established by the applicant;
6. The design and installation of protection works must allow for a 5.0m wide access corridor to and along the protection works for equipment and machinery in order to undertake maintenance and repair of the protection works should failure occur;
7. The protection works should be environmentally sound;
8. The works should not aggravate existing hazards and/or create new hazards at updrift /downdrift properties; and
9. In areas of existing development, protection works should be coordinated with adjacent properties.
10. All works should be located above the 80th percentile of the High Water Mark as defined by Fisheries and Oceans Canada: Lake Erie 174.62m and Lake Ontario 75.32m (IGLD 1985)

3.27 Niagara River

The NPCA does not regulate Flooding Hazard on the Niagara River except for 350 metres from the mouth of the Niagara River at Lake Ontario and an area at the head of the Niagara River within the 100 year flood elevation of 177.11 m GSC of Lake Erie (area includes lands around the Peace Bridge and

within the urban area of the Town of Fort Erie). These areas are regulated under the Shoreline Hazard for Lake Ontario and Lake Erie. "The Boundary Waters Treaty of 1909 requires that the United States and Canada, together, approve projects that affect the levels and flows of water along their common boundary, including the Niagara River. Water diversions in the Niagara River for hydroelectric power projects in both countries were approved by the 1950 Niagara Treaty. Water diverted from the river above Niagara Falls is returned to the river below the Falls." (IJC Fact Sheet, no date).

The International Joint Commission (IJC), a bi-national body created under the 1909 Boundary Waters Treaty, has jurisdiction over certain works in the boundary waters between Canada and the United States including the Niagara River. The Commission's International Niagara Board of Directors of Control was established in 1953 to monitor activities concerning the levels and flows of the Niagara River, as well as intensively monitoring the ice situation each spring to determine when conditions are acceptable for removal of the Lake Erie - Niagara River Ice Boom. "In 1964 the IJC approved an application by Ontario Power Generation and the New York Power Authority to install a floating ice boom in Lake Erie near the entrance to the Niagara River. The purpose of the ice boom is to reduce the frequency and duration of heavy ice runs into the river. Ice runs may cause ice jams that can damage shoreline property and significantly reduce power diversions. The ice boom speeds formation of and stabilizes the natural ice arch near the head of the Niagara River every winter. The boom is owned, operated and maintained by the power entities." (IJC Fact Sheet, no date).

Planning Act applications and building permit applications along the Niagara River will be reviewed by the NPCA to address erosion hazards associated with steep slopes (slope height greater than or equal to 3m) and flooding hazards where the Niagara River meets Lake Erie and Lake Ontario. Consideration will be given to the International Joint Commission Study on the Great Lakes water levels and any international agreements which govern the watercourse. Ontario Power Generation (OPG) highwater levels have been provided to the NPCA for certain sections of the Niagara River.

3.28 NPCA Land Acquisition Policies

Authority staff shall encourage the maintenance of Natural heritage and Natural Hazard lands as one contiguous unit through the subdivision of land (i.e. consent; subdivision/condominium plans) and the dedication of those lands to the respective municipality or other appropriate public agency for conservation purposes.

The NPCA has developed a Land Acquisition Strategy to target significant lands. In a situation where the municipality does not have an interest in obtaining Natural Heritage and Natural Hazard lands for public open space purposes, the Authority will assume the dedicated lands under the following conditions:

(a) if possible, the lands are to be contiguous with lands currently owned by the Conservation Authority or another public body or adjacent to another natural area,
(b) the lands are accessible from a public right of way, and,
(c) a Phase I Environmental Site Assessment is completed for the lands.

Notwithstanding the Regulation policies outlined in Section 3.24 the Authority shall encourage maintenance of the Natural Heritage and Natural Hazard lands in as natural a state as possible and shall support all municipalities in their efforts to acquire these lands for public open space purposes.

Section 4

Guidelines for the Administration of Ontario Regulation 155/06 and Land Use Planning Review

The following information describes the basis for NPCA's program of plan input and review. It explains NPCA's role at the Provincial and Local levels, and provides a description of the policies, procedures, technical analysis and standards that apply to the planning functions. The policies contained within this document should not be read in isolation of one another. Rather, they should be read in their entirety and the appropriate range of policies should be applied to each situation.

The Authority shall incorporate the general and specific requirements (whichever is applicable) under the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation 155/06 through responses to all land use planning proposals.

The NPCA's Role in Planning

Municipalities circulate Planning Act applications to the NPCA for review in accordance with circulation procedures established under the Planning Act. NPCA comments consider the following factors:

1. **Delegated Responsibility** - The Minister of Natural Resources has delegated responsibility for reviewing and commenting on hazard planning issues to the Conservation Authorities in those areas where Conservation Authorities have been established. This delegation includes interpretation of hazard policies contained in the Provincial Policy Statement. The Minister's delegation letter to the NPCA is dated April 19,1995 (Appendix 2).

2. **Watershed Agency** - The NPCA provides comments to municipalities on the implications of *Development* proposals from a watershed perspective. These comments pertain to natural hazard planning, natural heritage planning or groundwater and surface water management. In addition to reflecting the requirements of Provincial Policy, the Authority's comments reflect the Authority's goals and objectives for the management of the Niagara Peninsula watershed. This manual consolidates the Authority's policies for commenting as a *watershed* based agency.

3. **Municipal Planning Advisory Service** - The NPCA has an arrangement with its watershed municipalities to provide access to planning and technical expertise on a fee for service basis. Within the City of Hamilton and County of Haldimand the NPCA provides comments on all natural hazards and natural heritage matters. In the Region of Niagara, the NPCA has a Memorandum of Understanding that Regional Council has adopted whereby the NPCA would review all "water related issues". The NPCA provides expertise in the following areas:

    - advisory services related to all natural hazard matters;
    - advisory services related to the all natural heritage matters; and,
    - advisory services related to surface water quantity and quality.

It is noted that while the NPCA provides advice to municipalities on natural heritage, this advice is not provided on behalf of the Province and does not necessarily reflect the position of the Ministry of Natural Resources or the Ministry of Municipal Affairs and Housing.

4. **Regulatory Agency -** NPCA comments identify the Authority's regulatory role and the potential need for permits.

5. **Landowner –** The Authority is occasionally involved in the review of a Planning Act application as a proponent or an adjacent landowner. In these rare cases, the Authority must ensure that the

comments provided as a landowner are clearly identified and treated separately from comments as a regulatory and technical agency provided under other roles.

The objectives of the NPCA's municipal Plan Review process include:

1. To minimize the potential for loss of life, property damage and social disruption and to create a safer and healthier environment for everyone who lives in the Watershed;
2. To reduce the need for public and private expenditures for emergency operations, evacuation, and restoration of properties which may be impacted by flooding and Erosion;
3. To increase public awareness about the potential risks to Development as a result of the physical conditions associated with hazardous areas;
4. To use an Ecosystem planning approach for identifying the environmental implications of Development applications in order to maintain, protect, preserve and enhance natural heritage resources and natural resources;
5. To screen Development applications and proposals to identify where a Provincial or watershed interest may be impacted;
6. To specify conditions of approval which satisfy the afore noted objectives;
7. To serve as an information centre for inquiries from landowners, potential landowners, lawyers, municipalities, and community groups interested in environmental legislation, approvals and stewardship;
8. To advise and inform potential applicants (and/or their consultants) to consult with NPCA Staff prior to submitting their Development proposals in order to identify potential concerns that could result in delays to the planning process, as well as for the need to prepare and submit technical reports and supporting information required to undertake the review and approval of applications;
9. To provide responses to site specific inquiries in a timely manner through the continued expansion of data bases (e.g. natural heritage data bases and inventories) and other information management systems; and
10. To continue to liaise with other agencies, county and municipal governments and departments, consultants, developers and watershed residents to ensure continued co-operation in achieving effective management of natural resources.

4.1 General

Complete planning applications submitted to a municipality prior to May 4, 2006 will be reviewed pursuant to the regulation in existence at that time (Ontario Regulation 99/91) and its associated policy document (Policies, Procedures and Guidelines for the Administration of Ontario Regulation 99/91 – Fill, Construction and Alteration to Watercourses – June 1991, revised August 1996).

Complete planning applications submitted to a municipality after May 4, 2006 will be reviewed pursuant to the Regulation 155/06.

If a planning file has been inactive for five years or more and is reactivated by the applicant after the May 4, 2006, staff will review the application based on the current regulation and policy document.

NPCA staff will work with municipal watershed partners to include natural heritage features and natural hazard areas within appropriate Official Plan and zoning by-law designations to ensure no new development or site alteration occurs that would be contrary to Provincial or NPCA policy.

Lot line setbacks adjacent to natural heritage features and natural hazard limits have not historically been achieved in rural areas due to the lack of connectivity of public agency ownership. Staff will continue to recommend that the natural features/hazards and the appropriate lot line setbacks be placed in public ownership as part of any development application. In those cases where the natural feature(s)/hazard will remain in private ownership (in rural areas) it is important to limit the number of lots which have ownership of the natural feature(s)/hazard and to ensure that the proper Official Plan and zoning designations are applied by the municipality to protect the features and functions of the area. Restrictive easements, on-title agreements and landowner information brochures may also be recommended to ensure the landowners are aware of the protected area(s) on their property.

An Environmental Impact Study (EIS) will be required to confirm that the proposed development and/or site alteration will not have a negative impact on the natural heritage features and functions and that the minimum setbacks identified in this document are adequate to protect the natural heritage features and functions. This is a requirement of the Provincial Policy Statement (2005), Policy 2.1 Natural Heritage, and many of the local municipal Official Plans. Section 4.11 of this document identifies various situations in which an EIS may be required. Staff strongly recommend that the applicant consult with NPCA as early in the process as possible as Environmental Impact Studies may require four season inventories of the natural heritage feature/function.

As part of NPCA's conditions of approval for planning applications on-going monitoring of stormwater management facilities or natural heritage features and functions may be required.

Where the respective municipality or other appropriate public agency is not willing to assume ownership for natural heritage or natural hazard lands through dedication, an exception to the aforementioned policy may be granted, provided that the lands are zoned in an appropriately restrictive land use category (e.g. "Open Space", "Hazard Land" or "Greenbelt"). An appropriate clause should be included in the subdivider's agreement requiring future owners to properly care for the valleyland, stream corridor and/or Floodplain.

The Authority requires that subdivision applicants confirm, prior to Draft Approval, that a Suitable Building Envelope (as defined by the Conservation Authority) exists on each of the lots and/or blocks to be created while maintaining the required setbacks.

An appropriate clause should be included in the subdivider's agreement requiring municipalities to consult Authority staff prior to the issuance of a Building permit on all lots and blocks bordering valley Slopes and stream corridors.

Should NPCA staff recommend denial of a planning application or building permit the applicant will be informed in writing and advised that the NPCA Board of Directors will consider the recommendation at their next scheduled meeting. The applicant will be given an opportunity to address the Board of Directors.

Should NPCA staff wish to formally appeal a decision made by a Municipal Council or a Committee of Adjustment to the Ontario Municipal Board based on the requirements of the Provincial Policy Statement and these policies, that appeal should be taken to the next NPCA meeting to seek the formal endorsement of the Board of Directors.

4.2 Flooding and Erosion Hazard Limits

The following guidelines shall apply to Hazard Lands:

a) Regional and local municipalities shall be encouraged to designate, and include appropriate policies for, all Hazard Lands in their Policy/Official Plans in a manner which recognizes their inherent risks to life and property. (Permitted uses could include agriculture; low intensity recreational activities; public/private parks; pathways; forestry; nursery gardening; wildlife management).

b) Local municipalities shall be encouraged to zone all Hazard Lands in their Comprehensive Zoning By-laws in a manner which recognizes their inherent risks to life and property, and which shall be in conformity with their Official Plans.

c) The Authority shall discourage Development within Hazard Land areas, unless effective works can be implemented that would overcome the effects of the hazards.

d) In areas where new Development is proposed within, or in close proximity to, lands having susceptibility to flooding, Authority staff may request that the limits of the 100 Year Flood be determined on-site, in order to ensure that any Development complies with Provincial Floodplain Planning Policy and Niagara Peninsula Conservation Authority policies and procedures in this regard. This engineering study is to be undertaken by a qualified water resources engineer and shall be in conformity with current Provincial technical specifications for Floodplain Mapping studies.

e) In areas where new Development is proposed within, or in close proximity to, lands having susceptibility to Erosion due to rolling hills, sand dunes, highly erodible soil conditions, Authority staff may request that the landowner submit to the Conservation Authority a Geotechnical Investigation, undertaken by a qualified soils engineer, to ensure that the Development is protected against Slope instability problems in the long term.

f) NPCA Planning staff shall liaise closely with the Land Management Division of the Authority to ensure that all new Development adjacent to, or in close proximity to, Authority Hazard Land properties occurs in such a manner as to not adversely impact the conservation, recreation and/or overall resource management objectives of this agency.

Development and Site Alteration may only be permitted in Hazard Land*s* provided that all of the following conditions can be implemented to the satisfaction of the Authority:

a) Appropriate Floodproofing measures, *protection works* and safe and dry *access* during times of *flooding*, Erosion and other emergencies are provided.
b) No new hazards will be created and existing hazards will not be aggravated.
c) No adverse environmental impacts will result.
d) The Development does not include Institutional Uses or essential emergency services or the disposal, manufacture, treatment or storage of hazardous substances.

*A*ll Development and Site Alteration proposed within the Regulation Limit shall require prior written approval from the Authority in accordance with Section 28 of the Conservation Authorities Act and be consistent with policies contained herein.

NPCA's flooding and erosion hazard policies are described within Section 3 of this document. These reflect the policies contained in the Provincial Policy Statement and Ontario Regulation 155/06 related to hazardous lands adjacent to river and stream systems and the Lake Ontario shoreline.

With the exception of Policies 3.22, NPCA utilizes the One Zone Concept for flood plain management wherein the entire flood plain is considered the floodway.

Through the review of planning applications staff will work with the applicant and watershed municipalities to ensure no new development, including lot creation, or site alteration is permitted within the flooding and erosion hazard limits, that would be contrary to the Provincial Policy Statement and/or NPCA policies. This will involve keeping new lots outside of the floodplain. NPCA will recommend to municipalities, through the provision of conditions of draft plan approval, that applications for a plan of subdivision adjacent to flooding and erosion hazards, be required to include protection of the flooding and erosion hazards and adjacent tableland in perpetuity. It is NPCA's preference that this be done through dedication to the municipality however there may be other acceptable methods to ensure that these areas are protected by a public agency.

The creation of new lots that contain the flooding and erosion hazard limit is not supported by NPCA or the Provincial Policy Statement. There may be instances where an applicant wishes to have a lot addition to add property from a neighbouring lot onto their own which contains a flooding hazard. Staff will generally not object to such a lot addition provided the following criteria are met:

a) both existing lots currently contain a portion of the flooding and erosion hazard limit;
b) the lot addition will not necessitate or encourage any new or upgraded crossings of the flooding and erosion hazard limit for access/egress purposes; and,
c) existing crossings are sufficient for the intended land use.

<u>Great Lakes Shoreline Hazard Limit:</u>

Development shall generally be directed to areas outside of Hazardous Lands adjacent to shorelines which are impacted by flooding hazards, Erosion hazards and/or dynamic beach hazards. Subject to the provisions of the Provincial Policy Statement, Development and Site Alteration within areas designated as hazard areas may be permitted where the effects and risk to public safety are minor so as to be managed or mitigated in accordance with provincial standards as determined by the provisions of section 3.1.6 of the Provincial Policy Statement. The dynamic beach hazard limit is the combined flooding hazard limit (the 100 Year Flood level plus an allowance for wave uprush and other water related hazards), plus the dynamic beach allowance of 30m on the great Lakes-St. Lawrence system.

1. Protective measures must not create:
   (a) new hazards;
   (b) aggravation to existing hazards; or,
   (c) adverse environmental impacts.

2. All protective measures and proposals to alter the shoreline must be approved by the Ministry of Natural Resources (or designate) and the Niagara Peninsula Conservation Authority (on behalf of

the Department of Fisheries and Oceans). The NPCA will utilize the Great Lakes High Water Mark when evaluating projects which have the potential to impact Fish Habitat.

4.3 Valleylands

NPCA's regulatory valleylands policies are described within Section 3 of this document. These reflect the policies contained in the Provincial Policy Statement and Ontario Regulation 155/06 related to the conservation of land and hazardous lands adjacent to river and stream systems.

Through the review of planning applications, staff will work with the applicant and watershed municipalities to ensure no new development, including lot creation, or site alteration is permitted within valleylands and the associated erosion hazard limits that would be contrary to the Provincial Policy Statement and/or NPCA policies. Where the flooding hazard limit is contained within the valley, the lot line setbacks are a minimum of 7.5 metres from the stable top of bank adjacent to a valley system. NPCA will recommend to municipalities, through the provision of conditions of draft plan approval, that applications for a plan of subdivision adjacent to valleylands be required to include protection of the valleyland and adjacent tableland in perpetuity. It is NPCA's preference that this be done through dedication to the municipality however there may be other acceptable methods to ensure that these areas are protected by a public agency.

Where the planning process allows, all valley and stream corridors should be brought into public ownership to ensure public safety; protection of ecological integrity of these systems and the quality of life for present and future residents of the watershed. Local municipalities shall be encouraged to zone all valleylands and stream corridors in their Comprehensive Zoning By-laws in a manner which recognizes their inherent environmental characteristics and limitations to Development and which incorporates a minimum setback from the Top of Slope of 7.5 metres (25 feet) and up to 30 metres to protect Type 1 Fish Habitat. The zoning shall be in conformity with the Official Plans.

Where there are Watercourses without defined valley Slopes the NPCA relies on the recommendations of the Ministry of Natural Resources guidelines for the protection of Fish Habitat and advice from the Federal Department of Fisheries and Oceans (with whom the NPCA has a partnership to implement sections of the Fisheries Act as they relate to Fish Habitat). This approach recognizes that the Fish Habitat, or potential Fish Habitat, is an indicator of the current health of the Watercourse environment. Protecting the health of the Fish Habitat will result in the protection of the health of the Watercourse. Setback requirements are the greater of the Floodplain or the Fish Habitat setback.

The Authority shall recognize Erosion as a natural process, and that in part, it reflects the 'dynamic equilibrium' associated with the continuing physical evolution of Watercourses and their associated valley systems and stream corridors. In this regard, the Authority does not support, in principal, the provision of Structural Erosion Control Measures under circumstances where future on-site or off-site impacts are probable, where the environmental impacts would be Significant, or where the maintenance of such measures may pose an unacceptable financial burden on the public in the future.

All lands located within the setback area defined above shall be surveyed and zoned in the appropriate "Open Space", "Hazard" or "Greenspace" category. Wherever possible, existing vegetation should be maintained in the setback areas. Any works within a setback area will be reviewed and approved by the Conservation Authority. In some situations, enhancement by natural landscaping and additional native planting to create a Vegetative Buffer Area may be required. The native vegetation in the setback area develops an extensive root network which binds and stabilizes the bank and protects it from erosive forces of rainfall and runoff. Bioengineering may be used to stabilize Erosion prone areas.

In addition to the above, the Authority may require, if appropriate, that a warning clause be included in the Agreements of Purchase and Sale and registered on the title of all affected lots and/or blocks by the applicant, indicating that those lands within the setback area shall be maintained in a natural condition, or enhanced, to promote the environmental integrity of the adjacent valleyland and that the construction of any new Buildings or Structures including swimming pools, decks, patios and tennis courts shall not be permitted within the setback area.

The Authority shall require that consent applications identify a Suitable Building Envelope (as defined by the Conservation Authority) within the lot to be created and the lot that is retained, while maintaining the required setbacks from the Regulatory Floodplain, valleyland and/or stream corridor.

Where the respective municipality or other appropriate public agency is not willing to assume ownership for these lands through dedication, an exception to the aforementioned policy may be granted, provided that the lands are zoned in an appropriately restrictive land use category (e.g. "Open Space", "Hazard" or "Greenbelt").

Where the municipality or other appropriate agency is not willing to assume ownership of the Regulatory Floodplain, valleyland and/or stream corridor through dedication, then the Authority shall request a detailed site and grading plan for the subject lot prior to the issuance of a Building permit by the respective municipality.

The policies regarding dedication of lands do not apply to consent applications where the consent is for the purpose of a boundary adjustment, lot addition or correction of title.

To assist in achieving municipal “Smart Growth” initiatives a reduction in valleyland setback will be considered where new lots are created in urban areas where the lot(s) do not require the construction of new public or private roads, adequate municipal water and sewer capacity is available on the existing road frontage and the subject land does not result in the creation of more than 2 lots and a Geotechnical Investigation reveals that some infringement within the setback area, together with mitigative measures can be accommodated on-site while maintaining bank stability and no adverse environmental impacts, in the long term. In no case shall the setback reduction be such that Development is allowed beyond the top of bank down the Slope.

Valley Slopes where bank height is less than 3 metres (10 feet)

For valley Slopes where bank height is less than 3 metres, the setback is based upon the following:
- the need to protect against potential impacts related to stream bank Erosion; and
- the need to protect riparian and Fish Habitat and water quality.

The setback shall be represented by the greater of the following:
- the limit of the Floodplain; or
- 15 metres Vegetative Buffer Area measured from the Channel bank for a Type 2 or Type 3 Fish Habitat or 30 metres Vegetative Buffer Area measured from the Channel bank for a Type 1 Fish Habitat.

A reduction in the 15 metre and 30 metre Vegetative Buffer Area setbacks may be considered if the applicant can demonstrate, through field investigations and the preparation of an Environmental Impact Assessment Study, that such setbacks will not detrimentally affect the ecological integrity of the watercourse, water quality, fish and Fish Habitat.

Additional setbacks may be required as per Ontario Ministry of Natural Resources and Fisheries and Oceans Canada guidelines, the Greenbelt Plan and/or when endangered, threatened or special concern species habitat is involved.

The Authority shall require the maintenance of valleylands and stream corridors as one contiguous unit, through the subdivision of land (i.e. consent; subdivision/condominium plan) and the dedication of those lands to the respective municipality or other appropriate public agency for conservation purposes.

The Authority shall require that newly created lots through plan of subdivision (except for "Open Space", "Hazard" or "Greenspace" blocks that will be dedicated to a public agency) which are being developed in greenfield or brownfield situations, the rear lot lines or side lot lines (as the case may be) shall be set back 7.5m from the Authority approved top of slope. The NPCA will consult with the local municipality in "infilling" situations to discuss site specific constraints to this policy. New lots created through consent and new lots and blocks created through subdivision or condominium be setback a minimum of 7.5 metres from the Authority approved top of bank.

In a situation where the municipality does not have an interest in obtaining valleylands, stream corridors and/or Floodplains for public open space purposes the Authority will consider assuming the dedicated lands when they meet at least one of the following criteria:

(a) the valleylands, stream corridor and/or Floodplain are contiguous with lands currently owned by the Conservation Authority or another public body;
(b) the valleylands, stream corridor and/or Floodplain are within an area that is eligible for tax incentive programs; or,
(c) the valleylands, stream corridors and/or Floodplain are adjacent to another natural area.

4.4 Wetlands

4.4.1 NPCA's wetlands policies are described within Section 3 of this document. These reflect the policies contained in the Provincial Policy Statement and Ontario Regulation 155/06 related to wetlands and interference with wetlands.

4.4.2 Policies 3.24 within Section 3 of this document outline the requirements for development adjacent to wetlands. It is important to note that Policy 3.24 is specific to the impact that a proposed development may have on the hydrologic function of the wetland. There may be instances where proposed development or site alteration adjacent to a wetland may be permitted under NPCA's regulations (as a result of no impact to the hydrologic function of the wetland) however; there may be other natural heritage impacts that would cause NPCA to recommend denial of a Planning Act or Niagara Escarpment Plan application.

4.4.3 Except as provided in Section 3.24, a minimum vegetation protection zone of 30 metres from the limit of a Provincially Significant Wetland or any wetland greater than or equal to 2 hectares in size and 15 metres from the limit of any wetland less than 2 hectares in size is required. In addition to the hydrologic evaluation that may be required as part of a Permit application, an Environmental Impact Study (EIS) may also be required to determine whether the minimum setback is sufficient. No buildings, structures or septic systems are permitted within this setback, except as outlined in Policy 3.24. It is the intention that this setback be left in a natural self-sustaining vegetated state, in public ownership wherever possible, in order to achieve the greatest benefit to the natural heritage system. Through the review of planning applications staff will work with the applicant and watershed municipalities to ensure

no new development, including lot creation, or site alteration is permitted within or adjacent to wetlands that would be contrary to the Provincial Policy Statement and/or NPCA's policies.

4.4.4 NPCA will recommend to municipalities, through the provision of conditions of draft plan approval, that applications for a plan of subdivision adjacent to wetland areas be required to include protection of the wetland and adjacent lands. It is the NPCA's preference that this be done through dedication to the municipality however there may be other acceptable methods to ensure that these areas are protected by a public agency.

4.5 Fish Habitat

Policy 2.1.5 of the Provincial Policy Statement states that development and site alteration shall not be permitted in fish habitat except in accordance with Provincial and Federal requirements. The Ministry of Natural Resources Natural Heritage Reference Manual (1999) does not recommend a specific width for adjacent lands. Rather, it states that the extent of adjacent lands on which development or site alteration may affect fish habitat depends on numerous factors including the nature of development or site alterations, the sensitivity of fish habitat potentially affected and local site conditions (e.g., vegetative cover, slope, soils).

Policy 2.1.6 of the Provincial Policy Statement states that development and site alteration shall not be permitted on lands adjacent to fish habitat unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions. As such, an Environmental Impact Study will be required for development and site alteration within (as permitted by provincial and federal requirements) and adjacent to fish habitat.

Refer to Section 1 for details pertaining to NPCA's Level II agreement with Fisheries and Oceans Canada (DFO). Staff will endeavour to advise applicants to contact the Ontario Ministry of Natural Resources (MNR) for requirements as they pertain to the Lakes and Rivers Improvement Act and/or the Public Lands Act however, it is ultimately the applicant's responsibility to consult with all appropriate government agencies. Although some existing subwatershed studies within NPCA's watershed recommend the construction of on-line stormwater management facilities, staff will not recommend approval of any further subwatershed studies that incorporate on-line stormwater management facilities due to their impact to fish and fish habitat unless it is in accordance with Provincial and Federal requirements, as per Policy 2.1.5 of the Provincial Policy Statement, and meets the criteria in Policy 3.6 of NPCA's policy document.

4.6 Significant Wildlife Habitat

Policies 2.1.4 (d) and 2.1.6 of the Provincial Policy Statement state that development and site alteration shall not be permitted within or adjacent to significant wildlife habitat unless it has been demonstrated there will be no negative impacts on the natural features or their ecological functions. The Ministry of Natural Resources has prepared a guide entitled Significant Wildlife Habitat Technical Guide (October 2000) that provides parameters for identifying significant wildlife habitat and adjacent lands. As such, an Environmental Impact Study will be required for planning applications within or adjacent to significant wildlife habitat as specified within the technical guidelines. In keeping with the Provincial Policy Statement, staff will work with watershed municipalities to ensure significant wildlife habitat is identified in Official Plans and zoning by-laws and designated in appropriate Greenlands and Conservation Management zones.

4.7 Significant Areas of Natural and Scientific Interest

Policies 2.1.4 (e) and 2.1.6 of the Provincial Policy Statement state that development and site alteration shall not be permitted within or adjacent to areas of natural and scientific interest (ANSI) unless it has been demonstrated there will be no negative impacts on the natural features or their ecological functions. The Ministry of Natural Resources Natural Heritage Reference Manual (1999) considers adjacent lands to be within 50 metres. As such, an Environmental Impact Study will be required for planning applications within or adjacent to ANSIs. The Ministry of Natural Resources identifies ANSIs. Staff will work with watershed municipalities to ensure Areas of Natural and Scientific Interest are identified in Official Plans and zoning bylaws and designated in appropriate Greenlands and Conservation Management zones.

4.8 Diversity and Connectivity

Policy 2.1.2 of the Provincial Policy Statement states that the diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features. Through the preparation of Watershed and Subwatershed Studies and through the review of land use planning applications, NPCA strives to ensure that those linkages necessary to the functioning of the natural heritage system are identified for protection and enhancement.

4.9 Sensitive Ground Water Features

Policy 2.2 of the Provincial Policy Statement provides direction with respect to groundwater features. Specifically, Policy 2.2.2 states that development and site alteration shall be restricted in or near sensitive surface water features and sensitive ground water features such that these features and their related hydrologic functions will be protected, improved or restored. Staff of NPCA review relevant Watershed/Subwatershed Studies and Aquifer Management Plans when determining whether an application has been made in or near sensitive ground water features. If information is not available, the applicant may be required to prepare a hydrologic/hydrogeological study.

4.10 Hazardous Sites

NPCA provides peer review to the City of Hamilton, under the Memorandum of Understanding, for hazardous geology. Policy 3.1 of the Provincial Policy Statement provides direction with respect to natural hazards (hazardous lands and hazardous sites). Hazardous geology is included within “hazardous sites” and includes unstable soils (sensitive marine clays [leda], organic soils) or unstable bedrock (karst topography). Karst topography has been found in the City of Hamilton along the Niagara Escarpment within NPCA’s watershed. The Ministry of Natural Resources’ Understanding Natural Hazards (2001) guide provides direction with respect to these policies within the Provincial Policy Statement and NPCA will utilize these guidelines when reviewing applications that may be proposed within or near hazardous sites.

4.11 Environmental Impact Studies

a) Where a watershed municipality has Environmental Impact Study guidelines approved by their respective Council, the NPCA will work with the municipality and the applicant to determine the site specific requirements for the EIS.

b) Where there is no planning application and the policies of Section 3 requires an EIS, it will be prepared to the satisfaction of the NPCA.

c) An Environmental Impact Study shall generally include the following:

i) A description of the existing environment including: an assessment of its setting in the broader landscape and the identification, analysis and evaluation of significant natural features and ecological functions, of significant surface and ground water features and hydrologic functions, and of the linkages among them; and;
ii) A description of the proposed development;
iii) A description of measures to avoid or, if avoidance is not possible, to minimize or mitigate negative impacts on the Natural Heritage System, including impacts on significant natural features and ecological functions, and on significant surface and ground water features and hydrologic functions;
iv) An assessment, of the significance of the cumulative net environmental impacts expected over the long term after these measures have been implemented; and
v) Recommendations on the advisability of proceeding with the development as proposed or modified.

Where the EIS deals with development or site alteration on adjacent lands as specified in Table 3 it shall include an evaluation of the ecological functions of the adjacent lands and of expected impacts on those functions.

The Terms of Reference for an EIS shall be submitted for review to the appropriate municipality and the Conservation Authority prior to preparation of the study.

The required scope and/or content of an EIS may be reduced, in consultation with appropriate planning authorities, where:

a) The environmental impacts of a development application are thought to be limited; or

b) Other environmental studies fulfilling some or all requirements of an EIS have been accepted by the Conservation Authority and the municipality.

Table 3: When is an Environmental Impact Study Required?	
Natural Heritage System Component	**Adjacent Lands Where an EIS Shall Be Required**
• Provincially Significant Life Science Area of Natural and Scientific Interest	All lands within 50 metres.
• Wetlands greater than 2 ha	All lands within 120 metres.
• Habitat of Threatened and Endangered Species	All lands within 50 metres.
• Valleylands	All lands within 15 metres
• Fish Habitat	All lands within 30 metres of the top of channel bank of a Type 1 watercourse. All lands within 15 metres of the top of channel bank of a Type 2 or 3 watercourse.
Where a component of the Natural Heritage System lies within the Provincial Greenbelt Plan Natural Heritage System adjacent lands mean all lands within 120 metres of the natural heritage component.	

Section 5

Additional Reference for the Administration of Regulation 155/06 and Land Use Planning Review

Watershed management is constantly evolving and from time to time guidelines are adopted for use by the NPCA. In addition, reference is made to other legislation that must be considered in the review of any works proposed for permission under Ontario Regulation 155/06. The following are the current guidelines commonly used by the NPCA and additional information requirements frequently requested by staff when reviewing applications.

Additional Guidelines

5.1 Natural Hazards

The assessment of flooding, floodproofing, erosion and slope stability impacts, hydrology and hydraulic analysis and various technical review criteria are set out in the following provincial documents:

- Understanding Natural Hazards, Ministry of Natural Resources, 2001
- Technical Guide – River & Stream Systems: Flooding Hazard Limit, Ministry of Natural Resources & Watershed Science Centre, 2002
- Technical Guide – River & Stream Systems: Erosion Hazard Limit, Ministry of Natural Resources & Watershed Science Centre, 2002
- Belt Width Delineation Procedures, Prent & Parish, 2001
- Geotechnical Principles for Stable Slopes, Terraprobe Limited & Aqua Solutions, 1998
- Ministry Directive B-100, Ministry of Transportation, 1980
- Great Lakes – St. Lawrence System and Large Inland Lakes, Technical Guides for Flooding, Erosion and Dynamic Beaches in Support of Natural Hazards Policies 3.1 of the Provincial Policy Statement, Ministry of Natural Resources
- How Natural Hazards Policies Govern Development on the Waterfront, NPCA

5.2 Hydrological Evaluations

Where the policies identify a need for a hydrologic evaluation, the evaluation shall include, at a minimum:
(a) demonstrate that the development or site alteration will have no adverse effects on the hydrologically sensitive feature or on the related hydrological functions;
(b) identify planning, design and construction practices that will maintain and, where possible, improve or restore the health, diversity and size of the hydrologically sensitive feature; and,
(c) determine whether the minimum vegetation protection zone is sufficient, and if it is not sufficient, specify the dimensions of the required minimum vegetation protection zone and provide for the maintenance and, where possible, improvement or restoration of natural self-sustaining vegetation within it.

5.3 Natural Heritage

The Natural Heritage Reference Manual, Ministry of Natural Resources, June 1999, is a guide for those who require additional information, including interpretation and various technical review criteria, relative

to the application of Section 2.1 of the Provincial Policy Statement. In addition, the following documents are also referenced when reviewing applications:

- Significant Wildlife Habitat Technical Guide, Ontario Ministry of Natural Resources, 2000.
- Significant Wildlife Habitat Decision Support System, Ontario Ministry of Natural Resources Southern Science and Information Section, 2002.
- How Much Habitat is Enough: A Framework for Guiding Habitat Rehabilitation in Great Lakes Areas of Concern, Second Edition, Environment Canada, 2004.
- Ontario Centre for Soil Resource Evaluation. 1993. Field Manual for Describing Soils in Ontario. 4th Edition. Ontario Centre for Soil Resource Evaluation. Publication No. 93-1 62pp.

The science related to natural heritage protection is constantly evolving and, as a result, applicants are encouraged to reference recent literature.

5.4 Sediment and Erosion Control

All applications must include a plan to ensure fish habitat and water quality is not affected by sediment leaving a property during or after site development. Erosion and Sediment Control Guideline for Urban Construction, March 2006 (available from NPCA) is a general guideline that can be used to prepare sediment and erosion control plans. However, as this is an evolving science, applicants are encouraged to consult other sources of information to supplement their plans.

5.5 Stormwater Management Practices

Storm water management (SWM) plans are required to meet the standards and criteria set out in the Stormwater Management Planning and Design Manual, Ministry of Environment, March 2003, as may be revised, in addition to requirements/recommendations of any relevant watershed or subwatershed study. Stormwater management facilities normally require a permit under Ontario Regulation 155/06 as part of approval of their outlet to a watercourse.

5.6 Natural Channel Design

Where a watercourse is to be altered, the use of state of the art natural channel design will be encouraged. Adaptive Management of Stream Corridors in Ontario, Ministry of Natural Resources & Watershed Science Centre, 2002, is the primary document presently utilized by NPCA in conjunction with the documents outlined in Section 5.1. Ontario's Stream Rehabilitation Manual, M. Heaton, R. Grillmayer, and J. Imhof, 2002, is also utilized.

5.7 Watershed and Subwatershed Plans

Watershed and subwatershed plans provide specific direction for the overall water and resource management of specific creek systems. All applications will be reviewed to ensure their conformity with the applicable watershed and subwatershed plans.

5.8 Municipal Storm Drainage Policy and Criteria Manuals

Most municipalities utilize specific manuals for the design of various municipal infrastructures. It is the responsibility of any applicant to ensure that designs submitted for approval to NPCA are in conformity with local municipal drainage requirements and engineering standards manuals.

5.9 Other Related Legislation

Fisheries Act: All applications are screened by NPCA for section 35(1) of the Fisheries Act as part of an agreement with Fisheries and Oceans Canada. Measures to mitigate impacts or compensate loss of fish habitat may result in changes to designs, construction methods or timing of construction. NPCA strives to satisfy Fisheries and Oceans Canada's "no net loss" policy regarding fish habitat. Lakes and Rivers Improvement Act & Public Lands Act: The applicant should contact the Ontario Ministry of Natural Resources if any instream works are proposed to determine approval requirements under the Lakes and Rivers Improvement Act and the Public Lands Act. Ontario Water Resources Act: The applicant should contact the Ontario Ministry of Environment for applicable policies and guidelines. Navigable Waters Protection Act: The applicant should contact the Canadian Coast Guard for any works associated with a navigable waterway.
Building Code & Municipal Site Alteration and Tree Cutting By-laws: The applicant should contact their local municipality to determine additional approvals that may be required.

The above was not intended as a comprehensive listing of all legislation that could potentially affect the design or construction of an application.

Additional Information

Through the review of planning and building permit applications, staff often require supplementary information. Stormwater management plans, sediment and erosion control plans, Environmental Impact Assessments/Environmental Impact Studies, tree preservation plans, revegetation/rehabilitation plans and geotechnical assessments are frequently requested prior to providing approval, or as conditions of approval. Please note that the Region/County and local municipalities may have their own additional information requirements to facilitate their review of the documents. It is recommended that the applicant meet with all review agencies prior to initiating any studies to develop an agreed upon Terms of Reference.

Environmental Impact Assessments (EIA)/Environmental Impact Studies (EIS)

Environmental Impact Assessments/Studies must be prepared by a qualified professional in the field related to the natural heritage assessment that is being undertaken. The Region of Niagara and the City of Hamilton also have guidelines for the preparation of Environmental Impact Studies for those applications within or adjacent to an Environmentally Significant/Sensitive Area (as designated in their Official Plans). These guidelines, in conjunction with the Natural Heritage Reference Manual (MNR, June 1999) and other associated guidelines, will be used when establishing terms of reference for an EIA/EIS and when reviewing the report.

Revegetation/Rehabilitation/Landscape Plans

The applicant may be required to prepare a revegetation/landscape plan. NPCA requires that only species native to the Region be utilized when proposing vegetation within or near a natural feature. Invasive species, such as Norway Maple (Acer platenoides) and its cultivars, will not be permitted within NPCA's watershed. A net gain principle will be applied when providing comments on revegetation/rehabilitation plans to ensure a net environmental benefit for the proposal. These plans should be prepared by a qualified landscaped architect/arborist and consist of the following:

- location of site, project name, address, applicant and owner's name, file number;
- botanical names and quantities for all species;
- native species adjacent to natural areas;
- non-invasive species;
- ground cover species list including botanical names and % composition;
- nursery crop species – if required due to timing;
- minimum caliper for tree is 60 mm;
- minimum height for conifer tree is 150 cm;
- minimum height for shrub is 60 cm;
- location of existing vegetation;
- top soil details – depth and composition;
- rodent protection details;
- extent of disturbed area; and,
- existing watercourses.

Section 6
Definitions

Access Standards means methods or procedures to ensure safe vehicular and pedestrian movement, and access for the maintenance and repair of protection works, during times of flooding hazards, Erosion hazards and/or other water-related hazards. (PPS)

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. The extent of the Adjacent Lands may be recommended by the Province or based on municipal approaches which achieve the same objectives. The extent of Adjacent Lands is based on information on the effectiveness of setbacks, landforms and sustainable natural vegetation in preventing or mitigating any *negative impacts* that might be expected to occur adjacent to a feature or area. Adjacent Lands are not synonymous with *buffer* areas, nor are they necessarily no-Development zones. [PPS & OMNR Natural Heritage Reference Manual]

Alteration to a Waterway means the act whereby the Channel of a Watercourse is altered in some manner. Examples of an alteration include, but are not limited to the following: Channelizations, full or partial Diversions, retaining walls, revetments, bridges, culverts, pipeline under and over crossings, docks, Erosion protection measures and construction of storm sewer outlets.

Area of Interference means the area located outside of the Wetland that could impact the Wetland if Development were to be permitted.

Balanced Cut-and-Fill means an engineering technique used to balance flood storage losses resulting from Filling or Development activities within Floodplains. An equivalent volume of earth is removed from the Floodplain at appropriate elevations and locations to offset areas within Floodplains that are Filled or developed.

Best Management Practices (BMPs) means methods, facilities and Structures which are designed to protect or improve the environment and natural heritage features from the effects of land Development activities. BMPs can include, but are not limited to, land use restrictions, source control of pollutants, stormwater management ponds, grassed swales, underground storage facilities, woodlot management, soil Erosion control, crop rotation, tree windbreaks and natural fencerows.

Building means dwellings, commercial, industrial and agricultural Buildings, partial Buildings, accessory Buildings (ie. garages, sheds, barns).

Channel means the area of a Watercourse carrying normal flows within the banks.

Comprehensive EIS means a landscape scale study which identifies natural heritage features for protection, potential Development areas and Development setbacks that are ecologically sustainable.

Conservation of Land means the protection, preservation, management, or restoration of lands within the watershed ecosystem including natural heritage features such as wetlands, woodlands, and wildlife habitat as well as natural resources including surface and ground water for the purpose of maintaining or enhancing the natural features and ecological functions within the watershed.

Critical Habitat: means those Fish Habitat*s* which have high productive capacity, are rare, highly sensitive to Development, or have a critical role in sustaining fisheries (e.g., spawning and nursery areas for some species, and ground water discharge areas). The *Authority* requires that a minimum *buffer* of 30 m be maintained on both sides of a Watercourse that has been identified as Critical Habitat, although

this may be adjusted upwards if indicated appropriate through fisheries assessments. Critical Habitat corresponds with the older OMNR classification for Type 1 Watercourses. Also see Important and Marginal Habitat.

Detention Facility means a natural or man-made stormwater storage area which is normally dry or flow-through and serves to only detain/delay water during significant runoffs/storm events for quantity (flood) control.

Development means in the PPS means the creation of a new lot, a change in land use or the construction of Buildings and Structures which require approval under the Planning Act but does not include:

1. activities that create or maintain infrastructure authorized under an Environmental Assessment Process;
2. works subject to the Drainage Act; or
3. for the purposes of policy 2.1.3 (b), underground or surface mining of minerals or advanced exploration on mining lands in Significant areas of mineral potential in EcoRegion 5E, where advanced exploration has the same meaning as under the Mining Act. Instead those matters shall be subject to policy 2.1.4(a)

Development: under the Conservation Authorities Act means;

- the construction, Reconstruction, erection or placing of a Building or Structure of any kind; or
- any change to a Building or Structure that would have the effect of altering the use or potential use of the Building or Structure, increasing the size of the Building or Structure, or increasing the number of dwelling units in the Building or Structure; or
- site grading; or
- the temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere.

Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation 155/06 means a regulation passed pursuant to Section 28 of the Conservation Authorities Act, R.S.O. 1980, or its successors, whereby a Conservation Authority may, among other matters, regulate:

- Restrict and regulate the use of water in or from rivers, streams, inland lakes, *ponds*, Wetland*s* and natural or artificially constructed depressions in rivers or streams;
- Prohibit, regulate, or require the permission of the authority to straighten, change, divert, or interfere in any way with the existing Channel of a river, creek, stream or Watercourse, or change or interfere in any way with a Wetland; and
- Prohibit, regulate or require the permission of the authority for Development if, in the opinion of the authority, the control of flooding, Erosion, dynamic beaches or Pollution or the Conservation of Land may be affected by the Development.

Diversion means the process whereby streamflow is directed from the original Channel of the Watercourse and returned to the original Channel at another point on the Watercourse. Diversions may be a full or partial re-direction of the streamflow.

Dynamic Beach means an area of inherently unstable accumulations of shoreline sediment along the Great Lakes-St. Lawrence River system and large inland lakes. The dynamic beach hazard limit includes the flooding hazard limit plus a 30 m dynamic beach allowance. (PPS definition).

Ecological function (as defined in the PPS) means the natural processes, products or services that living and non-living environments provide or perform within or between species, ecosystems and landscapes. These may include biological, physical and socio-economic interactions.

Ecosystem means systems of plants, animals and micro-organisms together with non-living components of their environment, related ecological processes and humans.

Ecosystem Approach: means the linkages and relationships involving air, land, water and living organisms. The approach is adaptive and recognizes the dynamic nature of watersheds and Watercourses and their respective landforms. It is intended to restore and maintain the integrity, quality, productivity and well being of the watershed and subwatersheds.

Environmental Assessment Process: means a process that is used to predict the environmental effects of proposed initiatives before they are carried out. It is used to identify measures to mitigate adverse effects on the environment and can predict whether there will be significant adverse environmental effects, even after the mitigation is implemented.

Environmental Impact Study (EIS): means a report prepared by qualified professionals (engineers, biologists) to address the potential impacts of Development on natural heritage features and areas. The types of Environmental Impact Studies include

Scoped EIS means an area specific study that addresses issues of particular concern not previously addressed in sufficient detail in a comprehensive study. The factors which may be considered for a Scoped EIS include:

- The extent of the encroachment;
- The potential impact of the use; and
- The sensitivity of the feature.

Environmentally Significant Areas (ESAs): means natural areas including Wetlands or ANSIs which have been, designated for protection by a regional or local municipality.

Erosion means the process of gradual washing away of soil by water movement or seepage which may occur in one of the following ways:

- Rainfall or snowmelt and surface runoff (sheet, rill or gully Erosion);
- Internal seepage and piping;
- Water flow (banks or base of river, creek Channel); and
- Wave Action (shorelines of ponds, lakes bays)

Erosion impacts soil at the particle level by dislodging and removing the particles from the parent mass (with water being the transporting agent). Wind and frost may also weather and transport soil particles.

Existing Lot of Record means a lot created under The Planning Act prior to the adoption of these policies by the Board of Directors of the Niagara Peninsula Conservation Authority on September 15, 1993 for the purposes of the top of bank setback. For the purposes of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation 155/06 regulation, the effective date for an Existing Lot of Record is the date of the adoption of this Manual by the NPCA Board of Directors (December 12, 2007).

Essential Emergency Services means services such as those provided by fire, police and ambulance stations and electrical substations, which would be impaired during an emergency as a result of flooding, the failure of Floodproofing measures and/or protection works, and/or Erosion.

Fill means Earth, sand, gravel, rubble, rubbish, garbage or any other material, whether similar to or different from any of the aforementioned materials, and whether originating on the site or elsewhere.

Fish Habitat means spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes (Fisheries Act, Section 31 (5))

Flood means a temporary inundation of lands adjacent to the normal low flow Channel of a Watercourse.

Flood Fringe means that portion of the Floodplain, beyond the Floodway, where flow depths and velocities are generally low.

Flood Line means an engineered line delineating the potential extent of flooding, by elevation, as a result of a specific flood event.

Floodplain means the land adjacent to a waterbody which will be inundated in the event of a flood.

Floodplain Mapping means the process whereby floodlines are produced and plotted on suitable base maps using procedures approved by the Province of Ontario. The use of computers allows for the detailed identification and consideration of local watershed features, such as drainage areas, soils, land use, flow constrictions, and topography when determining flows and flood levels.

Floodproofing means any combination of structural and non-structural additions, changes or adjustments to Structures, which reduce or eliminate flood damage to real estate, improved real property, water and sanitary facilities, Structures and their contents.

Floodway means the Channel of a Watercourse, and those portions of the Floodplain adjoining the Channel, which are required to discharge flood water from a flood. The extent of a Floodway is dependent on the characteristics of the Floodplain and can be identified through a two-zone study.

Geotechnical Investigation means the process whereby the suitability of new Development in relation to pre and post Development Slope stability is determined. This analysis involves subsurface soil and groundwater investigations through published material, field work (visual and auguring assessments) and/or the analysis of borehole information to determine bearing capacity of soils and appropriate mitigative works.

Habitable Structure means any Building or Structure used, or intended to be used, for living and sleeping.

Hazard Land means all lands having inherent environmental hazards, such as flood susceptibility, Erosion susceptibility or any other physical condition which is severe enough to cause property damage and/or potential loss of life, if these lands were to be developed or built upon.

Hazardous Land means land that could be unsafe for Development because naturally occurring processes associated with flooding, Erosion, dynamic beach or unstable soil or bedrock.

Hazardous Substances means substances which, individually, or in combination with other substances, are normally considered to pose a danger to public health, safety and the environment. These substances generally include a wide array of materials that are toxic, ignitable, corrosive, reactive, radioactive or pathological.

High water mark (HWM) means the guideline elevation that is used by DFO-Ontario Great Lakes Area staff in the review of development projects in or near water to determine the minimum elevation that will be considered as the boundary for fish habitat. For each of the Great Lakes, the HWM corresponds to the 80th percentile for the month in which the highest annual water level occurs. This means that 80% of the time the water level is at or below this elevation. It must be noted that a site-specific conditions may warrant a higher HWM determination (e.g. coast wetland, natural beaches, lagoons). For Lake Ontario the figure is 75.32 metres above Sea level (IGLD 1985). For Lake Erie the figure is 174.62 metres above Sea level (IGLD 1985).

Hydrologic Function means, the functions of the hydrologic cycle that include the occurrence, circulation, distribution and chemical and physical properties of water on the surface of the land, in the soil and underlying rocks, and in the atmosphere, and water's interaction with the environment including its relation to living things.

Inert Fill – means earth or rock fill or material of a similar nature that contains no putrescible materials or soluble or decomposable chemical substances.

Ingress/Egress means entrance/exit to a Structure within the Regulatory Floodplain.

Important Habitat means those Fish Habitat*s* which are moderately sensitive to Development and, although important to the *fish* population, are not considered critical (e.g. feeding areas, open water habitats of lakes). The *Authority* requires that a minimum *buffer* of 15 m be maintained on both sides of a *Watercourse* that has been identified as Important Habitat. Important Habitat corresponds with the older OMNR classification for Type 2 Watercourse*s*. Also see *Critical* and Marginal Habitat.

Institutional Use means those uses, associated with hospitals, nursing homes, pre-school, school nurseries, day care and schools, where there is a threat to the safe evacuation of the sick, the elderly, the physically challenged or the young during an emergency as a result of flooding, failure of Floodproofing measures or protection works, or Erosion.

Interference (in relation to wetlands) means any activity, including but not limited to development, filling, excavating, draining, grading, site alteration or removal of vegetation, that may adversely affect the hydrologic function or ecological function of a wetland.

Major System comprises natural streams and valleys and man-made streets, swales, Channels and ponds. This drainage system is to be designed to accommodate runoff from less frequent storm events (i.e. Regulatory Flood) and when properly designed and constructed, will "essentially eliminate" the risk of loss of life and property damage due to flooding.

Marginal Habitat means those Fish Habitat*s* which have low productive capacity or are highly degraded, and do not currently contribute directly to *fish* productivity. They often have the potential to be improved significantly (e.g. a portion of a waterbody, such as a Channelized stream, that has been highly altered physically). The *Authority* requires that a minimum *buffer* of 15 m be maintained on both sides of a Watercourse that has been identified as Marginal Habitat. Marginal Habitat corresponds with the older

OMNR classification for Type 3 Watercourses. Also see *Critical* and Important Habitat.

Minor System comprises roof gutters, rainwater leaders, service connections, swales, catchbasins and storm sewers. This drainage system is to be designed to accommodate the runoff from more frequent storm events (i.e. 2 year or 5 year flood) and when properly designed and constructed, will minimize the incidence of inconvenience to both pedestrians and motorists.

Minor Works means a category of Development within the flood plain which has relatively small economic value and will not lead to significant economic hardship if lost in times of severe flooding. The construction of Minor Works does not require detailed Floodproofing measures and therefore there is an assumption of risk associated with the Development.

Natural Environmental Integrity means the inherent and unimpaired condition of an Ecosystem which is self sustaining and able to accommodate stress and change. Such integrity includes the Structure, composition and natural processes of its physical environment and living communities.

100 Year Erosion Limit means the average annual rate of recession extended over a 100 year time span. The Erosion limit is determined using the 100 year Erosion rate, an allowance for Slope stability, and an Erosion allowance. Erosion limits are depicted on the Shoreline Mapping available at the Niagara Peninsula Conservation Authority's office. More detailed, technical reference to Erosion limits is contained in the text and appendices of the relevant Shoreline Management Plan study.

100 Year Flood limit(for the shorelines of the Great Lakes) means the peak instantaneous stillwater level , resulting from combinations of mean monthly lake levels and wind setups that have a 1% chance of being equaled or exceeded in any given year.

100 Year Flood means a flood which has a one percent probability of occurring or being exceeded in any given year. This flood is likely to occur or be exceeded on an average of once every one hundred years. It is the flood used for regulatory purposes in the Niagara Peninsula with the exception of three watersheds located within the City of Niagara Falls.

One Zone Concept - An approach whereby the entire Floodplain, as defined by the Regulatory Flood, is treated as one unit, and all Development is prohibited or restricted.

Original Ground Floor Area means the ground floor area of a Building at current grade, measured by the total dimensions of the exterior face of the Structure. For purposes of the Authority's cumulative exceedence requirements), original floor area of Building would be the floor area of a Building that existed on or after December 8, 1988 for the purposes of Buildings in the Floodplain. For Buildings in Wetlands, the effective date is the adoption of the Environmental Planning Manual.

Plan Input means the participation in the planning activities of others in a co-ordinated manner by promoting an early awareness of the conservation and management of natural resources.

Plan Review means the provision of a co-ordinated response in reaction to planning and Development proposals of others to advise of the impact on the conservation and management of natural resources.

Passive Floodproofing means Floodproofing techniques which are permanently in place and do not require advance warning and action in order to make the Floodproofing and/or flood protection measure effective.

Pollution means any deleterious physical substance or other contaminant that has the potential to be generated by Development in area to which a regulation is made under Section 28 of the Conservation Authorities Act.

Provincially Significant Wetland - A Class I, II and III Wetland or Wetland identified as Provincially Significant as defined in "An Evaluation System for Wetlands of Southern Ontario, South of the Precambrian Shield, Third Edition," as amended from time to time.

Reconstruction – The restoration of a Building or Structure to its original form (i.e. same dimensions, square footage and Building footprint).

Regional Storm - The Regional Storm used for this part of Ontario is the Hurricane Hazel storm. This storm occurred over the Humber River watershed in October, 1954. This storm is used for regulatory purposes for three watersheds located within the City of Niagara Falls. A more technical definition of the Regional Storm is outlined in Ontario Regulation 99/91, which is appended to this document.

Regulatory Flood means the Regulatory Flood is the 100 Year Flood for the entire Niagara Peninsula Conservation Authority with the exception of three watersheds located within the City of Niagara Falls. The Regional Storm is the Regulatory Flood for the watersheds associated with Shriner's Creek, Ten Mile Creek and Beaverdam's Creek (including Tributary W-6-5).

Restricted Uses: means

- Conservation uses or activities such as wildlife or fisheries management, forestry or passive recreation;
- flood and/or Erosion control Structures;
- facilities which by their nature must locate near water or traverse water;
- ancillary facilities of an adjacent land use which are of a passive, non-structural nature and do not adversely affect the natural hazard or natural heritage feature or function; and
- municipal infrastructure including roads and utilities/servicing (i.e. sewer lines, gas pipelines, hydro facilities.

The establishment of Restricted Uses must be supported by an EIS or an Environmental Assessment.

Retention Facility means a natural or man-made stormwater storage area which is usually wet (containing ponded water) and serves to retain water during Significant runoffs/storm events for quality control, groundwater recharge, aesthetics and/or recreation.

Significant: as defined in the PPS -

a) In the case of Wetlands means an area identified as provincially Significant by the MNR using evaluation procedures established by the Province as amended from time to time.

b) In the case of endangered species and threatened species, means the habitat as approved by the MNR that is necessary for the maintenance, survival, and/or recovery of naturally occurring or reintroduced populations of endangered species or threatened species, and where those areas of occurrence are occupied or habitually occupied by the species during all or any part(s) of its life cycle.

c) In the case of woodlands, means an area which is ecologically important in terms of features such as species composition, age of trees and stand history; functionally important due to its contribution to the broader landscape because of its location, size or due to the amount of forest

cover in the planning area; or economically important due to site quality, species composition, or past management history.

d) In the case of other features and areas including valleylands and wildlife habitat, it means ecologically important in terms of features and linkages, function representations or amount, and contributing to the quality and diversity of an identifiable geographic area or natural heritage system.

Site Alteration in the PPS means activities such as grading, excavation and the placement of Fill that would change the landform and natural vegetative characteristics of a site.

Slope means the upward or downward inclination in the topography of the land.

Special Policy Area (SPA) means an area in a community that has historically existed in the flood plain and where strict adherence to certain Province-wide policies pertaining to new Development would result in social and economic hardship for the community. As a result, site specific policies are formulated and applied within the defined limits of the Special Policy Area.

Structural Erosion Control Measure means any works that require or cause an alteration to the existing grade (i.e. regrading of Slope to a stable angle) and/or the installation of any works for Slope stabilization (e.g. rip rap, retaining walls, armourstone etc.)

Structure means that which is built and can include, but is not limited to, dwellings or other Buildings or partial Building, all of which require footings or foundation support, as well as retaining walls, septic systems, access roads, parking lots, berms, swimming pools and decks.

Suitable Building Envelope means an area suitable for Development which will allow for a Building(s), accessory Structures, swimming pools, Fill, driveway access and Subsurface sewage disposal system outside of the identified Slope setback and stream corridor setback. It must also be able to incorporate other appropriate municipal and/or provincial setback requirements. The most restrictive setback policies shall apply.

Sound Engineering Standards - Practices and standards which are currently accepted and customarily implemented in the field of engineering for flood and Erosion control, and, can include both `soft' (bioengineering) and `hard' (structural) engineering methods.

Subsurface sewage disposal system means a septic system which contains the entire sewage envelope, including both primary and secondary beds, mantle, septic tanks, pump chamber**,** and reserve areas, as per the requirements of the local Health Unit or the Ministry of the Environment.

Toe of Slope (base of Slope) means the point of the Slope where the downward inclination of the land levels off, or the upward inclination of the land begins. This point is situated at a lower geodetic/topographic elevation of the land than the remainder of the Slope.

Top of Slope (top of bank; crest of Slope) means the point of the Slope where the downward inclination of the land begins, or the upward inclination of the land levels off. This point is situated at a higher geodetic/topographic elevation of the land than the remainder of the Slope. There may be situations where there are interruptions in the valley Slope by plateau areas. In these cases there may be a primary and secondary top of bank (see Figure 1). The primary top of bank will be used to define Top of Slope for the purposes of these policies.

Valley means a natural landform depression that contains a watercourse, has water flowing through, or contains standing water. Water features may be either permanent or intermittent. The boundaries of a valley are defined by the primary top of bank on each side of the landform depression as illustrated in Figure 3 in Section 3.25 of this policy document.

Vegetative Buffer Area means a permanent setback established along the shoreline or streambank which remains or is to be returned to a self sustaining vegetated state.

Vegetation Protection Zone – for the purpose of this policy means a minimum area adjacent to a natural heritage feature, hydrologically sensitive feature or Area of Natural or Scientific Interest which is required to preserve the hydrologic function or ecological function or ecological integrity of the feature. The term "Vegetation Protection Zone" is not necessarily synonymous with "Buffer".

Watercourse means an identifiable depression in the ground in which a flow of water regularly or continuously occurs.

Water Pollution - The addition of foreign matter into a stream or body of water.

Watershed / SubWatershed Plan means a plan conducted on a natural watershed basis which allows water-related environmental objectives and targets to be set at a time when they can be effectively incorporated into land use planning documents. These plans will:

: Identify the location, areal extent, present status, significance and sensitivity if the existing natural environment within the watershed;

: Establish goals and objectives for management of the watershed/subwatershed;

: Identify lands not suitable for Development and recommend, with reasons, appropriate environmental management practices which will protect, conserve, rehabilitate and/or enhance natural features within the plan;

: Provide directions for the screening and selection of Best Management Practices for the watershed/subwatershed;

: Address cumulative impacts of changes to watershed/subwatershed on the natural environment;

: Integrate disciplines, policies, mandates, requirements of all agencies and interests;

: Provide direction, consistency and uniformity of conditions of approval;

: Promote public participation in, and support for, watershed/subwatershed Planning;

: Establish an implementation strategy that identifies the roles and responsibilities of all involved parties and timing of works and programs;

: Outline requirements for monitoring programs and information updates, as well as facilities recommended by the plan; and,

: Provide technical information to assist in the design of Community Plans and the design of

subdivisions.

Wave uprush means the rush of water up onto the beach or shore following the breaking of a wave. The wave uprush limit is shown on the shoreline mapping available through the NPCA. Wave uprush limits are added to the 100 Year Flood level to determine the shoreline hazard limit (for flooding). Wave uprush limits can vary with the physical shoreline topography; however a 15 metre setback from the 100 year flood level shall generally be utilized to mitigate the impacts of wave uprush. A reduction to this setback shall only be considered is an engineering analysis (completed by the applicant and approved by the NPCA) justifies the reduction.

Wetland 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).

Section 7
Appendices

Appendix 1

Section 28(3) Conservation Authorities Act Hearing Guidelines, October 2005

SECTION 28 (3)

CONSERVATION AUTHORITIES ACT

HEARING GUIDELINES

October 2005

Amended for use by NPCA, October, 2011

Conservation ONTARIO
Natural Champions

ONTARIO

Ministry of Natural Resources
Ministère des Richesses naturelles

SECTION 28 (3)

CONSERVATION AUTHORITIES ACT

HEARING GUIDELINES

October 2005

Peter Krause, Chairman Conservation Ontario	Gail L. Beggs, Deputy Minister Ministry of Natural Resources

Section 28 (12), Conservation Authorities Act - Hearing Guidelines

Table of Contents

1.0 PURPOSE OF HEARING GUIDELINES:

The purpose of the Hearing Guidelines is to reflect the changes to the 1998 Conservation Authorities Act. The Act requires that the applicant be party to a hearing by the local Conservation Authority Board, or Executive Committee (sitting as a Hearing Board) as the case may be, for an application to be refused or approved with contentious conditions. Further, a permit may be refused if in the opinion of the Authority the proposal adversely affects the control of flooding, pollution or conservation of land, and additional erosion and dynamic beaches. The Hearing Board is empowered by law to make a decision, governed by the Statutory Powers Procedures Act. It is the purpose of the Hearing Board to evaluate the information presented at the hearing by both the Conservation Authority staff and the applicant and to decide whether the application will be approved with or without conditions or refused.

These guidelines have been prepared as an update to the October 1992 hearing guidelines and are intended to provide a step-by-step process to conducting hearings required under Section 28 (12), (13), (14) of the Conservation Authorities Act. Similar to the 1992 guidelines, it is hoped that the guidelines will promote the necessary consistency across the Province and ensure that hearings meet the legal requirements of the Statutory Powers Procedures Act without being unduly legalistic or intimidating to the participants.

2.0 PREHEARING PROCEDURES

2.1 Apprehension of Bias

In considering the application, the Hearing Board is acting as a decision-making tribunal. The tribunal is to act fairly. Under general principles of administrative law relating to the duty of fairness, the tribunal is obliged not only to avoid any bias but also to avoid the appearance or apprehension of bias. The following are three examples of steps to be taken to avoid apprehension of bias where it is likely to arise.

(a) No member of the Authority taking part in the hearing should be involved, either through participation in committee or intervention on behalf of the applicant or other interested parties with the matter, prior to the hearing. Otherwise, there is a danger of an apprehension of bias which could jeopardize the hearing.

(b) If material relating to the merits of an application that is the subject of a hearing is distributed to Board members before the hearing, the material shall be distributed to the applicant at the same time. The applicant may be afforded an opportunity to distribute similar pre-hearing material.

(c) In instances where the Authority (or Executive Committee) requires a hearing to help it reach a determination as to whether to give permission with or without conditions or refuse a permit application, a final decision shall not be made until such time as a hearing is held. The applicant will be given an opportunity to attend the hearing before a decision is made; however, the applicant does not have to be present for a decision to be made.

Individual Conservation Authorities shall develop a document outlining their own practices and procedures relating to the review and reporting of Section 28 applications, including the role of staff, the applicant and the Authority or Executive Committee as well as, the procedures for the hearing itself. Such policy and procedures manual shall be available to the members of the public upon request. These procedures shall have regard for the above information and should be approved by the Conservation Authority Board of Directors.

2.2 Application

The right to a hearing is required where staff is recommending refusal of an application or where there is some indication that the Authority or Executive Committee may not follow staff's recommendation to approve a permit or the applicant objects to the conditions of approval. The applicant is entitled to reasonable notice of the hearing pursuant to the Statutory Powers Procedures Act.

2.3 Notice of Hearing

The Notice of Hearing shall be sent to the applicant within sufficient time to allow the applicant to prepare for the hearing. To ensure that reasonable notice is given, it is recommended that prior to sending the Notice of Hearing, the applicant be consulted to determine an agreeable date and time based on the local Conservation Authority's regular meeting schedule.

The Notice of Hearing must contain the following:

(a) Reference to the applicable legislation under which the hearing is to be held (i.e., the Conservation Authorities Act).

(b) The time, place and the purpose of the hearing.

(c) Particulars to identify the applicant, property and the nature of the application which are the subject of the hearing.

Note: If the applicant is not the landowner but the prospective owner, the applicant must have written authorization from the registered landowner.

(d) The reasons for the proposed refusal or conditions of approval shall be specifically stated. This should contain sufficient detail to enable the applicant to understand the issues so he or she can be adequately prepared for the hearing.

It is sufficient to reference in the Notice of Hearing that the recommendation for refusal or conditions of approval is based on the reasons outlined in previous correspondence or a hearing report that will follow.

(e) A statement notifying the applicant that the hearing may proceed in the applicant's absence and that the applicant will not be entitled to any further notice of the proceedings.

Except in extreme circumstances, it is recommended that the hearing not proceed in the absence of the applicant.

(f) Reminder that the applicant is entitled to be represented at the hearing by counsel, if desired.

It is recommended that the Notice of Hearing be directed to the applicant and/or landowner by registered mail. Please refer to **Appendix A** for an example Notice of Hearing.

2.4 Presubmission of Reports

If it is the practice of the local Conservation Authority to submit reports to the Board members in advance of the hearing (i.e., inclusion on an Authority/Executive Committee agenda), the applicant shall be provided with the same opportunity. The applicant shall be given two weeks to prepare a report once the reasons for the staff recommendations have been received. Subsequently, this may affect the timing and scheduling of the staff hearing reports.

2.5 Hearing Information

Prior to the hearing, the applicant shall be advised of the local Conservation Authority's hearing procedures upon request.

3.0 HEARING

3.1 Public Hearing

Pursuant to the Statutory Powers Procedure Act, hearings are required to be held in public. The exception is in very rare cases where public interest in public hearings is outweighed by the fact that intimate financial, personal or other matters would be disclosed at hearings.

3.2 Hearing Participants

The Conservation Authorities Act does not provide for third party status at the local hearing. While others may be advised of the local hearing, any information that they provide should be incorporated within the presentation of information by, or on behalf of, the applicant or Authority staff.

3.3 Attendance of Hearing Board Members

In accordance with case law relating to the conduct of hearings, those members of the Authority who will decide whether to grant or refuse the application must be present during the full course of the hearing. If it is necessary for a member to leave, the hearing must be adjourned and resumed when either the member returns or if the hearing proceeds, even in the event of an adjournment, only those members who were present after the member left can sit to the conclusion of the hearing.

3.4 Adjournments

The Board may adjourn a hearing on its own motion or that of the applicant or Authority staff where it is satisfied that an adjournment is necessary for an adequate hearing to be held.

Any adjournments form part of the hearing record.

3.5 Orders and Directions

The Authority is entitled to make orders or directions to maintain order and prevent the abuse of its hearing processes. A hearing procedures example has been included as **Appendix B**.

3.6 Information Presented at Hearings

(a) The Statutory Powers Procedure Act, requires that a witness be informed of his right to object pursuant to the Canada Evidence Act. The Canada Evidence Act indicates that a witness shall be excused from answering questions on the basis that the answer may be incriminating. Further, answers provided during the hearing are not admissible against the witness in any criminal trial or proceeding. This information should be provided to the applicant as part of the Notice of Hearing.

(b) It is the decision of the hearing members as to whether information is presented under oath or affirmation. It is not a legal requirement. The applicant must be informed of the above, prior to or at the start of the hearing.

(c) The Board may authorize receiving a copy rather than the original document. However, the Board can request certified copies of the document if required.

(d) Privileged information, such as solicitor/client correspondence, cannot be heard. Information that is not directly within the knowledge of the speaker (hearsay), if relevant to the issues of the hearing, can be heard.

(e) The Board may take into account matters of common knowledge such as geographic or historic facts, times measures, weights, etc or generally recognized scientific or technical facts, information or opinions within its specialized knowledge without hearing specific information to establish their truth.

3.7 Conduct of Hearing

3.7.1 Record of Attending Hearing Board Members

A record shall be made of the members of the Hearing Board.

3.7.2 Opening Remarks

The Chairman shall convene the hearing with opening remarks which generally; identify the applicant, the nature of the application, and the property location; outline the hearing procedures; and advise on requirements of the Canada Evidence Act. Please reference **Appendix C** for the Opening Remarks model.

3.7.3 Presentation of Authority Staff Information

Staff of the Authority presents the reasons supporting the recommendation for the refusal or conditions of approval of the application. Any reports, documents or plans that form part of the presentation shall be properly indexed and received.

Staff of the Authority should not submit new information at the hearing as the applicant will not have had time to review and provide a professional opinion to the Hearing Board.

Consideration should be given to the designation of one staff member or legal counsel who coordinates the presentation of information on behalf of Authority staff and who asks questions on behalf of Authority staff.

3.7.4 Presentation of Applicant Information

The applicant has the opportunity to present information at the conclusion of the Authority staff presentation. Any reports, documents or plans which form part of the submission should be properly indexed and received.

The applicant shall present information as it applies to the permit application in question. For instance, does the requested activity affect the control of flooding, erosion, dynamic beach or conservation of land or pollution? The hearing does not address the merits of the activity or appropriateness of such a use in terms of planning.

- The applicant may be represented by legal counsel or agent, if desired
- The applicant may present information to the Board and/or have invited advisors to present information to the Board
- The applicant(s) presentation may include technical witnesses, such as an engineer, ecologist, hydrogeologist etc.

The applicant should not submit new information at the hearing as the Staff of the Authority will not have had time to review and provide a professional opinion to the Hearing Board.

3.7.5 Questions

Members of the Hearing Board may direct questions to each speaker as the information is being heard. The applicant and /or agent can make any comments or questions on the staff report.

Pursuant to the Statutory Powers Procedure Act, the Board can limit questioning where it is satisfied that there has been full and fair disclosure of the facts presented. Please note that the

courts have been particularly sensitive to the issue of limiting questions and there is a tendency to allow limiting of questions only where it has clearly gone beyond reasonable or proper bounds.

3.7.6 Deliberation

After all the information is presented, the Board may adjourn the hearing and retire in private to confer. The Board may reconvene on the same date or at some later date to advise of the Board's decision. If the hearing is adjourned to another date, only members present during the previous hearing(s) may participate in discussion and/or decision. The Board members shall not discuss the hearing with others prior to the decision of the Board being finalized.

4.0. DECISION

The applicant must receive written notice of the decision. The applicant shall be informed of the right to appeal the decision within 30 days upon receipt of the written decision to the Minister of Natural Resources.

It is important that the hearing participants have a clear understanding of why the application was refused or approved. The Board shall itemize and record information of particular significance which led to their decision.

4.1 Notice of Decision

The decision notice should include the following information:

(a) The identification of the applicant, property and the nature of the application that was the subject of the hearing.

(b) The decision to refuse or approve the application. A copy of the Hearing Board resolution should be attached.

It is recommended that the written Notice of Decision be forwarded to the applicant by registered mail. A sample Notice of Decision and cover letter has been included as **Appendix D**.

4.2 Adoption

A resolution advising of the Board's decision and particulars of the decision should be adopted.

5.0 RECORD

The Authority shall compile a record of the hearing. In the event of an appeal, a copy of the record should be forwarded to the Minister of Natural Resources/Mining and Lands Commissioner. The record must include the following:

(a) The application for the permit.

(b) The Notice of Hearing.

(c) Any orders made by the Board (e.g., for adjournments).

(d) All information received by the Board.

(e) The minutes of the meeting made at the hearing.

(f) The decision and reasons for decision of the Board.

(g) The Notice of Decision sent to the applicant

Appendix A

NOTICE OF HEARING

IN THE MATTER OF
The Conservation Authorities Act,
R.S.O. 1990, Chapter 27

AND IN THE MATTER OF an application by

FOR THE PERMISSION OF THE CONSERVATION AUTHORITY
Pursuant to Regulations made under
Section 28, Subsection 12 of the said Act

TAKE NOTICE THAT a Hearing before the Executive Committee of the Conservation Authority will be held under Section 28, Subsection 12 of the Conservation Authorities Act at the offices of the said Authority (ADDRESS), at the hour of **, on the day of , 2001**, with respect to the application by (***NAME***) to permit development within an area regulated by the Authority in order to ensure no adverse affect on (***the control of flooding, erosion, dynamic beaches or pollution or conservation of land./alter or interfere with a watercourse, shoreline or wetland***) on Lot , Plan/Lot , Concession , (***Street***) in the City of , Regional Municipality of , River Watershed.

TAKE NOTICE THAT you are invited to make a delegation and submit supporting written material to the Executive Committee for the meeting of (***meeting number***). If you intend to appear, please contact (***name***) . Written material will be required by (***date***), to enable the Committee members to review the material prior to the meeting.

TAKE NOTICE THAT this hearing is governed by the provisions of the Statutory Powers Procedure Act. Under the Act, a witness is automatically afforded a protection that is similar to the protection of the Ontario Evidence Act. This means that the evidence that a witness gives may not be used in subsequent civil proceedings or in prosecutions against the witness under a Provincial Statute. It does not relieve the witness of the obligation of this oath since matters of perjury are not affected by the automatic affording of the protection. The significance is that the legislation is Provincial and cannot affect Federal matters. If a witness requires the protection of the Canada Evidence Act that protection must be obtained in the usual manner. The Ontario Statute requires the tribunal to draw this matter to the attention of the witness, as this tribunal has no knowledge of the affect of any evidence that a witness may give.

AND FURTHER TAKE NOTICE that if you do not attend at this Hearing, the Executive Committee of the Conservation Authority may proceed in your absence, and you will not be entitled to any further notice in the proceedings.

DATED the ___ day of , _____200X

The Executive Committee of the
Conservation Authority

Per:
Chief Administrative Officer/Secretary-Treasurer

Appendix B

HEARING PROCEDURES

1. Motion to sit as Hearing Board.

2. Roll Call followed by the Chair's opening remarks.

3. Staff will introduce to the Hearing Board the applicant/owner, his/her agent and others wishing to speak.

4. Staff will indicate the nature and location of the subject application and the conclusions.

5. Staff will present the staff report included in the Authority/Executive Committee agenda.

6. The applicant and/or his/her agent will speak and also make any comments on the staff report, if he/she so desires.

7. The Hearing Board is open to the public and therefore, the Hearing Board will allow others to speak, and, if necessary, the applicant in rebuttal.

8. The Hearing Board will question, if necessary, both the staff and the applicant/agent.

9. The Hearing Board may move into camera.

10. Members of the Hearing Board will move and second a motion.

11. A motion will be carried which will culminate in the decision.

12. The Hearing Board will move out of camera.

13. The Chairman or Acting Chairman will advise the owner/applicant of the Hearing Board decision.

14. If decision is "to refuse", the Chairman or Acting Chairman shall notify the owner/applicant of his/her right to appeal the decision to the Minister of Natural Resources within 30 days of receipt of the reasons for the decision.

15. Motion to move out of Hearing Board and sit as Executive Committee.

Appendix C

CHAIR'S REMARKS WHEN DEALING WITH HEARINGS WITH RESPECT TO ONTARIO REGULATION 158

We are now going to conduct a hearing under section 28 of the Conservation Authorities Act in respect of an application by _____: , for permission to:_____

The Authority has adopted regulations under section 28 of the Conservation Authorities Act which requires the permission of the Authority for development within an area regulated by the Authority in order to ensure no adverse affect on (the control of flooding, erosion, dynamic beaches or pollution or conservation of land) or to permit alteration to a shoreline or watercourse or interference with a wetland.

The Staff has reviewed this proposed work and a copy of the staff report has been given to the applicant.

The Conservation Authorities Act (Section 28 [12]) provides that:

"Permission required under a regulation made under clause (1) (b) or 8) shall not be refused or granted subject to conditions unless the person requesting permission has been given the opportunity to require a hearing before the authority or, if the authority so directs, before the authority's executive committee."

In holding this hearing, the Authority Board/Executive Committee is to determine whether or not a permit is to be issued. In doing so, we can only consider the application in the form that is before us, the staff report, such evidence as may be given and the submissions to be made on behalf of the applicant.

The proceedings will be conducted according to the Statutory Powers Procedure Act. Under Section 5 of the Canada Evidence Act, a witness may refuse to answer any question on the ground that the answer may tend to criminate the person, or may tend to establish his/her liability to a civil proceeding at the instance of the Crown or of any person.

The procedure in general shall be informal without the evidence before it being given under oath or affirmation unless decided by the hearing members.

If the applicant has any questions to ask of the Hearing Board or of the Authority representative, they must be directed to the Chair of the board.

Appendix D

(Date)
BY REGISTERED MAIL
(name)
(address)

Dear:

RE: NOTICE OF DECISION
Hearing Pursuant to Section 28(12) of the Conservation Authorities Act
Proposed Residential Development
Lot , Plan ; ?? Drive City of
(Application #)

In accordance with the requirements of the Conservation Authorities Act, the (***name***) Conservation Authority provides the following Notice of Decision:

On (***meeting date and number***), the Hearing Board/Authority/Executive Committee refused/approved your application/approved your application with conditions. A copy the Boards/Committee's resolution # has been attached for your records. Please note that this decision is based on the following reasons: (***the proposed development/alteration to a watercourse or shoreline adversely affects the control of flooding, erosion, dynamic beaches or pollution or interference with a wetland or conservation of land***).

In accordance with Section 28 (15) of the Conservation Authorities Act, An applicant who has been refused permission or who objects to conditions imposed on a permission may, within 30 days of receiving the reasons under subsection (14), appeal to the Minister who may refuse the permission; or grant permission, with or without conditions. For your information, should you wish to exercise your right to appeal the decision, a letter by you or your agent/counsel setting out your appeal must be sent within 30 days of receiving this decision addressed to:

The Honourable David Ramsay
Minister of Natural Resources
Queen's Park, Whitney Block
99 Wellesley Street West, 6th Floor, Room 6630
Toronto, Ontario M7A 1W3
TEL: (416) 314-2301 FAX: (416) 314-2216

Should you require any further information, please do not hesitate to contact (***staff contact***) or the undersigned.

Yours truly,

Chief Administrative Officer/Secretary Treasurer

Enclosure

Appendix 2

MNR Delegation of Natural Hazards to Conservation Authorities

Ministry of Natural Resources
Minister
Ministere des Richesses naturelles
Ministre
Queen's Park
Toronto, Ontario
M7A 1W3
416 / 314-2301

95-01252-MIN

Mr. Charles Ort
Niagara Peninsula Conservation Authority
2358 Centre Street
Allanburg, Ontario
L0S 1A0

Dear Mr. Ort:

This letter is with regard to the responsibilities of Conservation Authorities in commenting on development proposals.

The Government of Ontario is continuing to move forward on reforms promoting greater local involvement in decision-making, streamlining of municipal planning and other approval processes, and improved environmental protection. Ontario's Conservation Authorities continue to be important partners in this process.

In 1983, Conservation Authorities were delegated commenting responsibility on flood plain management matters. This was followed in 1988 by a similar delegation of commenting responsibility for matters related to flooding, erosion, and dynamic beaches along the shorelines of the Great Lakes-St. Lawrence River system.

At present, the Ministry and Conservation Authorities continue to independently review and provide input to municipalities and the Ministry of Municipal Affairs on development matters related to riverine erosion, slope, and soil instability. Although Authorities and the Ministry share similar objectives, this overlap and duplication of efforts have occasionally led to differences in comments which, in turn, have sometimes resulted in confusion, delays and expense for development proponents. As part of the current Planning Reform initiative, there is an opportunity to clarify the roles and responsibilities related to these important hazard management issues.

... 2

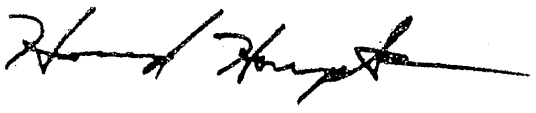
Through their flood plain, watershed and Great Lakes-St. Lawrence River shoreline management planning initiatives, Conservation Authorities have made good progress in streamlining approval processes and strengthening provincial-municipal partnerships. By extension, I believe that it would be appropriate to recognize the well-developed expertise and capabilities of Conservation Authorities in the evaluation of riverine erosion, slope and soil instability matters and to formally confirm Conservation Authorities as the lead commenting agency. This would result in further streamlining of approval processes, the promotion of environmentally sound development, and the provision of an economic stimulus for the province.

As of March 29, 1995, Conservation Authorities, where they exist, will have sole commenting responsibilities on development proposed in areas subject to riverine erosion, slope instability and soil instability, such as in areas of high water tables, organic or peat soils, and leda, or sensitive marine clay, soils. Implementation of this policy by authorities would continue to be eligible for provincial grant. Where Conservation Authorities exist, I have asked Ministry staff to focus their comments on all other matters of direct interest and concern to the Ministry. Where Conservation Authorities do not exist, the Ministry will continue its commenting role on these matters.

The Ministry of Natural Resources will continue as lead administrative Ministry having overall Government responsibility for hazard management policies and programs. In this regard, the Ministry will continue to provide leadership, policy direction and advisory assistance to the Conservation Authorities.

Your continued participation in the delivery of this important component of the overall provincial hazard management program will serve to strengthen the partnership between the Ministry and the Conservation Authorities.

Yours sincerely,



Howard Hampton
Minister

CONSERVATION ONTARIO,
MINISTRY OF NATURAL RESOURCES &
MINISTRY OF MUNICIPAL AFFAIRS AND HOUSING

MEMORANDUM OF UNDERSTANDING ON PROCEDURES TO ADDRESS CONSERVATION AUTHORITY DELEGATED RESPONSIBILITY

1. PURPOSE OF THE MOU

The MOU defines the roles and relationships between Conservation Authorities (CAs), the Ministry of Natural Resources (MNR), and the Ministry of Municipal Affairs and Housing (MMAH) in planning for implementation of CA delegated responsibilities under the Provincial One Window Planning System.

BENEFITS TO SIGNATORY PARTIES

It is beneficial for all parties to enter into this agreement because it clarifies the roles of CAs and the unique status of CAs in relationship to the Provincial One Window Planning System.

DELEGATED RESPONSIBILITY FOR NATURAL HAZARDS

CAs were delegated natural hazard responsibilities by the Minister of Natural Resources. A copy of the delegation letter is attached. This letter (dated April 1995) went to all CAs and summarizes delegations from the MNR including flood plain management, hazardous slopes, Great Lakes shorelines, unstable soils and erosion which are now encompassed by Section 3.1 "Natural Hazards" of the Provincial Policy Statement (1997). In this delegated role, the CA is responsible for representing the "Provincial Interest" on these matters in planning exercises where the Province is not involved. This role does not extend to other portions of the PPS unless specifically delegated or assigned in writing by the Province.

2. ROLES AND RESPONSIBILITIES

Ministry of Natural Resources

a) MNR retains the provincial responsibility for the development of flood, erosion and hazard land management policies, programs and standards on behalf of the province pursuant to the *Ministry of Natural Resources Act*.

b) Where no conservation authorities exist, MNR provides technical support to the Ministry of Municipal Affairs and Housing on matters related to Section 3.1 of the Provincial Policy Statement in accordance with the "Protocol Framework – One Window Plan Input, Review and Appeals".

c) MNR, in conjunction with MMAH, co-ordinates the provincial review of applications for Special Policy Area approval under Section 3.1 of the PPS.

Ministry of Municipal Affairs and Housing

a) MMAH coordinates provincial input, review and approval of policy documents, and development proposals and appeals to the Ontario Municipal Board in accordance with the "Protocol Framework One Window Plan Input Review and Appeals".
b) Where appropriate, MMAH will consult conservation authorities as part of its review of policy documents and development proposals to seek input on whether there was "regard to" Section 3.1 of the PPS.
c) Where there may be a potential conflict regarding a Conservation Authority's comments on a planning application with respect to Section 3.1 of the PPS and comments from provincial ministries regarding other Sections of the PPS, the Ministry of Municipal Affairs and Housing will facilitate discussions amongst the affected ministries and the Conservation Authority so that a single integrated position can be reached.
d) Where appropriate, MMAH will initiate or support appeals to the OMB on planning matters where there is an issue as to whether there was "regard to" Section 3.1 of the PPS.
e) MMAH, in conjunction with MNR, coordinates the provincial review of application for Special Policy Area approval under Section 3.1 of the PPS.

Conservation Authorities (CAs)
a) The CAs will review policy documents and development proposals processed under the *Planning Act* to ensure that the application has appropriate regard to Section 3.1 of the PPS.
b) Upon request from MMAH, CAs will provide comments directly to MMAH on planning matters related to Section 3.1 of the PPS as part of the provincial one window review process.
c) Where there may be a potential conflict regarding a Conservation Authority's comments on a planning application with respect to Section 3.1 of the PPS and comments from provincial ministries regarding other Sections of the PPS, the Ministry of Municipal Affairs and Housing will facilitate discussions amongst the affected ministries and the Conservation Authority so that a single integrated position can be reached.
d) CAs will apprise MMAH of planning matters where there is an issue as to whether there has been "regard to" Section 3.1 of the PPS to determine whether or not direct involvement by the province is required.
e) Where appropriate, CAs will initiate an appeal to the OMB to address planning matters where there is an issue as to whether there has been "regard to" Section 3.1 of the PPS is at issue. CAs may request MMAH to support the appeal.
f) CAs will participate in provincial review of applications for Special Policy Area approval.
g) CAs will work with MMAH, to develop screening and streamlining procedures that eliminate unnecessary delays and duplication of effort.

4. FURTHER CA ROLES IN PLAN INPUT, PLAN REVIEW AND APPEALS

CAs also undertake further roles in planning under which they may provide plan input or plan review comments or make appeals.

1. Watershed Based Resource Management Agency
CAs are corporate bodies created by the province at the request of two or more municipalities in accordance with the requirements of the *Conservation Authorities Act (CA Act)*. Section 20 of the *CA Act* provides the mandate for an Authority to offer a broad resources management program. Section 21 of the *CA Act* provides the mandate to have watershed-based resource

management programs and/or policies that are approved by the Board of Directors. CAs operating under the authority of the *CA Act*, and in conjunction with municipalities, develop business plans, watershed plans and natural resource management plans within their jurisdictions (watersheds). These plans may recommend specific approaches to land use and resource planning and management that should be incorporated into municipal planning documents and related development applications in order to be implemented.

CAs may become involved in the review of municipal planning documents (e.g., Official Plans (OPs), zoning by-laws) and development applications under the *Planning Act* to ensure that program interests developed and defined under Section 20 and 21 of the *CA Act* are addressed in land use decisions made by municipal planning authorities. In this role, the CA is responsible to represent its program and policy interests as a watershed based resource management agency.

2. Planning Advisory Service to Municipalities

The provision of planning advisory services to municipalities is implemented through a service agreement with participating municipalities or as part of a CAs approved program activity (i.e., service provided through existing levy). Under a service agreement, a Board approved fee schedule is used and these fee schedules are coordinated between CAs that "share" a participating municipality. The "Policies and Procedures for the Charging of CA Fees" (MNR, June 13, 1997) identifies "plan review" activities as being eligible for charging CA administrative fees.

The CA is essentially set up as a technical advisor to municipalities. The agreements cover the Authority's areas of technical expertise, e.g., natural hazards and other resource management programs. The provision of planning advisory services for the review of *Planning Act* applications is a means of implementing a comprehensive resource management program on a watershed basis. In this role, the CA is responsible to provide advice on the interpretation of the Provincial Policy Statement (PPS) under the terms of its planning advisory service agreement with the municipality. Beyond those for Section 3.1 "Natural Hazards" where CAs have delegated responsibility, these comments should not be construed by any party as representing the provincial position.

3. CAs as Landowner

CAs are landowners and as such, may become involved in the planning process as a proponent or adjacent landowner. Planning Service Agreements with municipalities have anticipated that this may lead to a conflict with advisory role and this is addressed by establishing a mechanism for either party to identify a conflict and implement an alternative review mechanism.

4. Regulatory Responsibilities

a) *CA Act* Regulations

In participating in the review of development applications under the *Planning Act*, CAs will (i) ensure that the applicant and municipal planning authority are aware of the Section 28 regulations and requirements under the *CA Act*, and, (ii) assist in the coordination of applications under the *Planning Act* and the *CA Act* to eliminate unnecessary delay or duplication in the process.

b) Other Delegated or Assigned Regulatory/Approval Responsibility
Federal and provincial ministries and municipalities often enter agreements to transfer regulatory/approval responsibilities to individual CAs (e.g., Section 35 Fisheries Act/DFO; Ontario Building Code/septic tank approvals). In carrying out these responsibilities and in participating in the review of development applications under the *Planning Act*, CAs will (i) ensure that the applicant and municipality are aware of the requirements under these other pieces of legislation and how they may affect the application; and, (ii) assist in the coordination of applications under the *Planning Act* and those other Acts to eliminate unnecessary delays or duplication in the process.

5. CANCELLATION OR REVIEW OF THE MOU

The terms and conditions of this MOU can be cancelled within 90 days upon written notice from any of the signing parties. In any event, this document should be reviewed at least once every two years to assess its effectiveness, its relevance and its appropriateness in the context the needs of the affected parties. “Ed. Note: 90 days is to provide time for the parties to reach a resolution other than cancellation”.

6. MEMORANDUM OF UNDERSTANDING ON PROCEDURES TO ADDRESS CONSERVATION AUTHORITY DELEGATED RESPONSIBILITY

I hereby agree to support the provisions contained in this Memorandum of Understanding as an appropriate statement of the roles and responsibilities of relevant Ministries and Conservation Authorities in the implementation of the Provincial Policy Statement.

Jan 19, 2001: Original signed by

_____ _____

David de Launay Date
Director
Lands and Waters Branch
Ministry of Natural Resources

Feb 12, 2001: Original signed by

_____ _____

Audrey Bennett Date
A/Director
Provincial Planning and Environmental Services Branch
Ministry of Municipal Affairs and Housing

Jan 01, 2001: Original signed by

_____ _____

R.D. Hunter Date
General Manager
Conservation Ontario