

## **SECTION 13 - FLOOD PLAIN**

### **13.1 INTRODUCTION**

Throughout the County there are lands that are subject to flooding from time to time. These lands are associated primarily with the flood plain areas of the Ausable River, Avon River, Bayfield River, Maitland River, Nith River, Thames River, and their associated tributaries. These watercourses fall within the jurisdictions of four different Conservation Authorities - the Ausable-Bayfield Conservation Authority (ABCA), the Grand River Conservation Authority (GRCA), the Maitland Valley Conservation Authority (MVCA), and the Upper Thames River Conservation Authority (UTRCA). The geographic boundaries of these Conservation Authorities are shown on Schedule "A".

In several of these flood prone areas, the applicable Conservation Authority has prepared detailed flood line mapping. For example, the ABCA has prepared a flood line study for the Ausable River tributary that flows through Dublin and the UTRCA has prepared a flood line study for the Avon River tributary that flows through Sebringville. Generally, such areas have been examined and detailed flood lines prepared for same due to the concentration of urban type development in the area. While the specifics of the various studies may differ, they are common in that they identify flood line elevations for the 1:100 year storm and the Regulatory Flood Standard. The Regulatory Flood Standards for the four Conservation Authorities in the County of Perth are as follows:

ABCA - Regional Storm (Hurricane Hazel);  
GRCA - Regional Storm (Hurricane Hazel);  
MVCA - Regional Storm (Hurricane Hazel);  
UTRCA - Regulatory Storm (1937 Observed Flood).

In areas where flooding has been experienced and where detailed regulatory flood line information is available, it is important that the potential hazards associated with such flooding be recognized and that lands subject to the flooding be appropriately designated in municipal planning documents. The subject "Flood Plain" designation has been established for the purpose of addressing flooding concerns and related issues in those areas where detailed regulatory flood line information is available.

### **13.2 GOALS**

The following goals are established for the "Flood Plain" designation.

- (a) To assist in identifying those lands in the County that are subject to flooding and which have been the subject of more detailed flood line information;

- (b) To prevent the needless destruction of property from flooding by prohibiting new development and restricting the redevelopment and expansion of existing development;
- (c) To develop a flood plain management program which will ensure proper land use and prevent or minimize the risk of property damage, loss of life, and disruption from flooding;
- (d) To encourage and promote co-operation between the Ministry of Natural Resources, the Conservation Authorities, the County, local municipalities, and individual property owners in dealing with issues and concerns related to flooding within the identified "Flood Plain" areas; and
- (e) To preserve, conserve, and enhance the natural environment associated with identified "Flood Plain" areas.

13.3

**LAND USE DESIGNATION AND MAPPING**

Policies for the "Flood Plain" designation shall apply to the areas shown as "Flood Plain" on Schedule "A" (Land Use Plan) to this Official Plan.

The areas shown as "Flood Plain" on Schedule "A" are based on information contained in several flood line studies that have been conducted throughout the County (e.g. Glengowan area; Nithburg area; Dublin area; Black Creek study; Trout Creek area). These studies have been prepared by the Conservation Authorities from time to time in order to more accurately identify the extent of flooding under specific storm conditions (e.g. 1:100 year storm and Regional Storm).

13.4

**DEFINITION/PERMITTED USES**

The "Flood Plain" designation as established by this Plan shall apply to those lands and watercourses that make up the regulatory flood plain as identified, regulated, and implemented by the ABCA, GRCA, MVCA, and UTRCA. The regulatory flood plain is based on the Regulatory Flood Standard for the various Conservation Authorities as referred to in Section 13.1. The one-zone flood plain management concept shall apply within the "Flood Plain" designation except for areas where a two-zone or Special Policy Area flood plain management concept consistent with the provincial policy on flood plain management is employed. Within one-zone areas, the entire flood plain is considered as floodway. Within two-zone areas, the flood plain shall consist of floodway and flood fringe. For the purpose of this Plan, the following definitions apply:

One-Zone Concept - means the approach whereby the entire flood plain, as defined by the regulatory flood, is treated as one unit and all development is prohibited or restricted.

Two-Zone Concept - means the approach whereby certain areas of the flood plain (flood fringe) are considered to be less hazardous than others (e.g.

floodway) such that development potentially could safely occur.

Floodway - means that portion of the flood plain where development (or other uses which by their nature must be located within the floodway, flood and/or erosion control works, or where appropriate, minor additions or passive, non-structural uses which do not affect flood flows) and site alteration would cause a danger to public health and safety or property damage. Where the two-zone concept applies, the floodway is the inner portion of the flood plain, representing that area required for the safe passing of flood flow and/or that area where flood depths and/or velocities are considered to be such that they pose a potential threat to life and/or property damage. Where the two-zone concept applies, the outer portion of the flood plain is called the flood fringe.

Flood Fringe - means that the outer portion of the flood plain between the floodway and the flooding hazard limit. Depths and velocities of flooding are generally less severe in the flood fringe than those experienced in the floodway. The flood fringe is the area where development and site alteration may be permitted, subject to appropriate floodproofing to the flooding hazard elevation or another flooding hazard standard approved by the Ministry of Natural Resources.

In general, when considering new development, the One Zone concept shall be applied. When reviewing extensions to existing development or re-development, the Two Zone concept may be applied. In order for the Two Zone concept to be employed, the physical characteristic of the flood plain at the subject site must be such that there is an area where the combination of depth and velocity of flood waters would result in an area of flood fringe.

The permitted uses of land in the floodway portion of the "Flood Plain" designation shall be forestry, conservation uses, agriculture, and outdoor recreation uses. The flood fringe area will function as an "overlay" area and the permitted uses of land in the flood fringe shall be those uses permitted in accordance with the applicable policies of the underlying land use designations established by this Plan.

Construction of any building or structure within the flood fringe portion of the "Flood Plain" designation will require prior written permission/approval of the appropriate Conservation Authority.

13.5 **POLICIES**

13.5.1 **Boundaries**

The boundaries or limits of the "Flood Plain" designation (e.g. floodway and flood fringe) are shown on the attached Schedule "A" and are based on detailed flood line information made available through specific flood line studies conducted by the Conservation Authorities (Dublin Study, Sebringville Study, Thames River/Trout Creek Study, Nithburg Study). More detailed maps showing the extent of flood line mapping for these specific areas are available for review at the County, local municipal, and Conservation Authority offices.

Where additional flood line studies are completed for the purpose of identifying floodway and flood fringe areas in the County, it is intended that this Plan will be amended for the purpose of designating such additional lands as "Flood Plain".

Where additional detailed flood line studies are required and are to be completed by the proponent of a development proposal, the terms of reference and the study must be approved by the Conservation Authority.

13.5.2 **Buildings and Structures**

In accordance with provincial policy, buildings and structures shall not be constructed or erected in the floodway portion of the "Flood Plain" designation, with the exception of those buildings and structures that are necessary for flood or erosion control. Where flood or erosion control buildings and/or structures are proposed, they must be approved in writing by the appropriate Conservation Authority prior to being approved/permitted by the local municipality.

With the two-zone concept, new buildings and structures and/or expanded buildings and structures may be permitted in the flood fringe portion of the "Flood Plain" designation provided that any flood hazard constraint can be overcome to the satisfaction of the appropriate Conservation Authority. Written confirmation from the appropriate Conservation Authority and a permit, if required, stating that it approves of the development and that it is satisfied with the floodproofing measures proposed must be provided to the local municipality before being approved/permitted or issuance of a building permit by the local municipality.

13.5.3 **Fill**

The placing or removal of fill of any kind, whether originating on the site or elsewhere, shall not be permitted in the "Flood Plain" designation unless it is first approved by the appropriate Conservation Authority in accordance with the applicable Fill, Construction, and Alteration to Waterway Regulation. These policies shall apply to all proposals for the establishment of mineral aggregate extraction operations in areas designated "Flood Plain".

13.5.4 **Flood and Erosion Control Works**

Wherever any flood and/or erosion control works are undertaken which result in changes in the boundaries of the areas designated "Flood Plain" and/or its floodway and flood fringe components, such changes will be incorporated into this Plan through the Official Plan Amendment process except where such changes are considered to be "minor adjustments" as permitted under Section 19.2 of this Plan.

13.5.5 **Setbacks**

Where the nature of the hazard and physical characteristics of the site warrant it, setbacks for buildings and structures from areas designated "Flood Plain" and/or its floodway and flood fringe components shall be imposed. The extent of such setbacks shall be determined in consultation with the appropriate Conservation Authority and will be implemented through the local municipality's implementing Zoning By-law, where appropriate.

13.5.6 **Land Dedication for Park or Other Public Recreation Purposes**

Where new development is proposed on a site, part or all of which is designated "Flood Plain" by this Plan, and the owner/developer is required to convey land for park or other public recreation purposes to a local municipality as part of the development approval process, it is a policy of this Plan that lands which are designated as "Flood Plain" shall not necessarily be acceptable as part of the land dedication requirement.

13.5.7 **Woodlots and Forest Areas**

*ADDED BY OPA # 47* The clearing of woodlots and forest areas in areas designated "Flood Plain" shall not be permitted with the exception of any clearing that may be permitted in accordance with the County of Perth Forest Conservation By-law.

13.5.8 **Re-establishment of Vegetation Cover**

It is a policy of this Plan that the County encourages the re-establishment of vegetation cover and buffer areas along the watercourses that are within "Flood Plain" areas. The advice and assistance of the Ministry of Natural Resources and the appropriate Conservation Authority may be sought in regard to such matters.

13.5.9 **Zoning By-law**

The floodway and flood fringe components of the "Flood Plain" designation as shown on Schedule "A" shall also be identified as flood plain areas in the local municipalities implementing Zoning By-law. These by-laws will contain provisions consistent with the "Flood Plain" policies as set forth in this Plan.

13.6 **CONSENT/SEVERANCE POLICIES**

The following specific policies shall apply to consent applications which involve land within the "Flood Plain" designation as shown on Schedule "A" (Land Use Plan). They are intended to implement the foregoing goals and policies and are to be applied in addition to the general consent/severance policies set forth in Section 16.3 of this Plan.

13.6.1 **New Lot Creation**

Except as provided for in Section 13.6.2 below, consents for the purpose of creating new lots for development within the "Flood Plain" designation shall be prohibited.

13.6.2 **Public Purposes**

Consents for the purpose of creating lots for public use such as municipal parks and open space areas or for flood or erosion control may be permitted. When reviewing such applications, input is to be obtained from the appropriate Conservation Authority prior to the consent granting authority making its decision.

13.6.3 **Lot Enlargements**

Consents for the purpose of enlarging lots in abutting land use designations may be permitted provided that the following criteria are satisfied:

- (a) A need for the lot enlargement must be clearly identified and such need must prove satisfactory to the consent granting authority;
- (b) The area being severed for lot enlargement purposes should be minimal in size and related to the demonstrated and accepted need; and
- (c) The area being severed must be united to the abutting lot to create one lot for Planning Act purposes.

13.6.4 **Lot Boundary Adjustments/Corrections**

Consents involving lot boundary adjustments/corrections may be permitted provided that such adjustments/corrections are minor in nature. Consideration shall be given to the provisions of Sections 50(3) and (5) of the Planning Act R.S.O. 1990 and to the provisions of the local municipality's implementing Zoning By-law when dealing with such applications.

13.6.5 **Easements and Rights-of-Way**

Consents to create easements and/or rights-of-way may be permitted provided that no new lots are created and that the need is substantiated and acceptable to the consent granting authority.