

3 MUNICIPAL PLAN REVIEW

3.1 OVERVIEW

The following policies are designed to assist UTRCA staff with providing their input on comprehensive planning documents such as Official Plans and Area Studies as well as with their review of Planning Act applications. These policies must be read in conjunction with the information provided in Section 2. Consistent with the format established in Section 2, the policies are presented in the following order:

1. Natural Hazards
2. Natural Heritage
3. Natural Resources
4. Servicing & Mitigation
5. Integrated Systems Planning

3.2 NATURAL HAZARDS

3.2.1 Overview

The Authority's Municipal Plan Review policies for *natural hazards* have been organized under the following main headings:

1. General Policies for *Natural Hazards* – applies to all hazard types and *allowances*.
2. Riverine Flooding Hazards – applies to the *flood plain* and its components including the *floodway*, the *flood fringe* and *special policy areas* and *allowances*.
3. Riverine Erosion Hazards – applies to steep slopes, *valleylands*, ravines, the *meander belt* and *allowances*.
4. *Wetlands* – applies to all wetlands (including ponds and organic soils such as peat or muck) and the areas of interference surrounding *wetlands*.

3.2.2 General Natural Hazard Policies

1. New *development* and *site alteration* generally will be directed away from *hazard lands*.
2. Any *development* and *site alteration* which is permitted in *hazard lands* must meet the following conditions to the satisfaction of the UTRCA:
 - a) Appropriate *floodproofing* measures, *protection works* and safe or 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 impact will result.
3. *Development* will not be permitted to locate in *hazard lands* where the use is:
- 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 emergency as a result of *flooding*, failure of *floodproofing* measures or *protection works*;
 - b) an essential emergency service such as that 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
 - c) uses associated with the disposal, manufacture, treatment or storage of *hazardous substances*
4. The Authority may require the submission of an Environmental Impact Study (EIS) to assist with the characterization of a natural hazard feature. An EIS prepared for this purpose must integrate any relevant natural heritage or natural resource features or processes.
5. The Authority does not support the *fragmentation* of *hazard lands* through lot creation. It is recognized that it is not practical to avoid *fragmentation* in all cases. Exceptions to this policy may include, but are not limited to the following:
- a) Large agricultural parcels of sufficient size to accommodate a farming operation;
 - b) The remaining *hazard lands* would be inaccessible for practical management due to division by a watercourse or slope;
 - c) The *hazard lands* are *flood fringe* and are being planned for incorporation into the development.

3.2.3 Riverine Flooding Hazard Policies

1. In cases where detailed *flood plain* mapping is not available, the Authority may require that the *Regulatory Flood Plain* be mapped as part of an *EIS*, prepared by a qualified professional, to the satisfaction of the UTRCA.
2. Uses which may be established in the *flood plain*, subject to satisfying UTRCA Permit requirements, include:
 - a) open space/recreation uses, including golf courses and playing fields, which do not require permanent structures or any major alteration of the landscape;
 - b) uses which by their nature must locate within the *floodway*, such as flood and erosion control works, outlets, fish habitat improvements. See *restricted uses* in the Glossary.
 - c) *accessory* buildings;
 - d) non-structural uses such as forestry, wildlife management, gardens, nurseries and arboretums; and
 - e) *replacement structures* or *minor works*.

3. The Authority, in cooperation with watershed municipalities, implements a *One Zone Policy Approach* for rural areas and un-serviced settlement areas. Where this approach is applied, the entire flood plain is considered to be *floodway*.
4. The Authority, in cooperation with watershed municipalities, may apply a *Two Zone Policy Approach* in serviced settlement areas. In areas where the Two Zone Policy Approach is applied, the *flood plain* consists of a *Floodway* area and a *Flood Fringe* area. Any extension of the Two Zone Policy Approach beyond serviced settlement areas must be approved by the Authority and must be supported by the municipality.
5. In very unique situations, the Province may identify specific areas as *Special Policy Areas*.

3.2.3.1 Floodway Policies

1. *Floodway* policies apply to all land within the *Regulatory Flood Plain* except for specifically identified *flood fringe* areas and specifically identified *Special Policy Areas*.
2. *Development* and *site alteration* is generally prohibited within the *floodway* of any *watercourse* regardless of whether the area of inundation contains high points of land not subject to *flooding*.
3. Parking is considered to be a component of *development*. The expansion of parking in a *floodway* to service new *development* that is not located in the *floodway* is not permitted. Parking must be located in the same zone as the use (e.g. parking for a residential use must be zoned residential).
4. For new *development*, vehicular and pedestrian *access* must be dry (at or above the Regulatory Flood Elevation).
5. For existing legal non-conforming uses, the Authority will encourage improvements to parking, *access* and *floodproofing*.
6. Where a *development* proposal which contains *flood plain* lands is submitted in a municipality that has a *flood plain* assembly scheme, the Authority shall recommend that those lands be dedicated to the Authority and/or the municipality.

3.2.3.2 Flood Fringe Policies

1. *Flood fringe* policies are applied in those specific cases where a Two Zone Policy Approach is implemented.
2. *Development* and *site alteration* is permitted in *flood fringe* areas subject to satisfying the Authority's *floodproofing* requirements. These requirements are implemented through the Section 28 Permit process.
3. Parking for existing, *infill* and re-development as a minimum must be provided at the 1:100 Year Flood elevation and this elevation must be within 0.3 metres of the *Regulatory Flood Elevation*.
4. Parking for new *development* must be at the *Regulatory Flood Elevation*.
5. For new *development*, vehicular and pedestrian *access* must be dry (at or above the *Regulatory Flood Elevation*).
6. For *infill development* and re-development, vehicular and pedestrian *access* must be safe, within 0.3 metres of the *Regulatory Flood Elevation* or determined using the *Technical Guide - River & Stream Systems: Flooding Hazard Limit* (OMNR and Watershed Science Centre, 2002).

3.2.3.3 Special Policy Areas

1. The following *Special Policy Areas* have been approved by the Province:
 - St. Marys SPA, Town of St. Marys
 - Coves SPA, City of London

Development in these areas will be consistent with the specifically approved SPA policies.
2. Potential *Special Policy Areas* which are currently under consideration for the City of London include:
 - West London
 - Ada Street.
3. The following interim policies are applied in the potential *Special Policy Areas*:
 - a) Intensification of use, either through the creation of lots or through zoning, is not permitted;
 - b) New basements are not permitted;
 - c) The conversion of non-residential use to residential is not permitted. Conversion of residential uses to commercial uses is encouraged;
 - d) Specific construction requirements, including maximizing flood proofing, are implemented through the Section 28 Permit process.

3.2.4 Riverine Erosion Hazard Policies

1. Where *development* or *site alteration* is proposed within the limit of the riverine erosion hazard or an *allowance* from the riverine erosion hazard, the Authority may require that the erosion hazard be mapped as part of an *EIS*, prepared by a qualified professional.
2. *Development* and *site alteration* is generally not permitted in *meander belt* areas or on the face of steep slopes, ravines and distinct valley walls.
3. The establishment of the limit of the *hazard land* and safe setbacks must be based on the natural state of the slope, and not through re-grading or the use of structures or devices to stabilize the slope.
4. For new development adjacent to riverine erosion hazards, the development limit will be:
 - a) For the meander belt: the meander belt limit plus an *erosion access allowance* of 6 metres;
 - b) For *stable slopes* with no toe erosion: the top of slope plus an *erosion access allowance* of 6 metres
 - c) For *stable slopes* with toe erosion: the top of slope plus an allowance for toe erosion plus an *erosion access allowance* of 6 metres
 - d) For unstable slopes with no toe erosion: the point where the calculated stable angle of repose intersects the table land plus an *erosion access allowance* of 6 metres;
 - e) For unstable slopes with toe erosion: the point where the calculated stable angle of repose intersects the table land plus a *Toe Erosion Allowance* plus an *erosion access allowance* of 6 metres.
5. Subject to Section 28 Permit requirements, erosion and sediment control structures and other associated structures may be permitted within the riverine erosion hazard limit.

3.2.5 Watercourse Policies

1. The conversion of open surface *watercourses* and open drains to closed surface drains is generally discouraged.
2. Subject to satisfying UTRCA and other agency requirements, alterations to watercourses may be permitted provided:
 - a) Stream flow is not impeded;
 - b) Flood conveyance and flood control are not compromised;
 - c) Erosion processes are not aggravated and transferred to other areas; and
 - d) The alteration addresses other natural hazard, natural heritage and natural resource policies of this manual.

3.2.6 Wetland Policies

The following policies relate to the natural hazard characteristics and functions of *wetlands* (whereas Section 3.3.2 sets out the policies applied to *wetlands* as *natural heritage features*).

1. Where *development* or *site alteration* is proposed within the limit or the area of interference of a wetland, the Authority may require that the wetland boundary be mapped as part of an *EIS*, prepared by a qualified professional. The wetland boundary may need to be approved by the Ministry of Natural Resources.
2. *New development* and site alteration is not permitted in *wetlands*. Some *restricted uses* may be permitted provided that they are supported by an *EIS* or an Environmental Assessment.
3. Development and site alteration may be permitted within the *area of interference* of a *wetland* provided that there is no impact on the hydrological function of the *wetland* and no potential hazard impact on the development. The potential for *development* and *site alteration* within the *area of interference* of a *wetland* shall be determined through the completion of an *EIS*, prepared by a qualified professional, to the satisfaction of the UTRCA.

3.3 NATURAL HERITAGE FEATURES & AREAS

3.3.1 Overview

Natural heritage features and *adjacent lands* are described in Section 2.3 of the manual. The policies for *natural heritage features and areas* are organized under the same headings.

3.3.2 Wetland Policies

The following policies pertain to *wetlands* as *natural heritage features* (whereas the policies in Section 3.2.5 pertain to *wetlands* as natural hazard features).

1. *New development* and *site alteration* is not permitted in Provincially *Significant* or *other wetlands*. Some *restricted uses* may be permitted provided that they are supported by an *EIS* or an Environmental Assessment.
2. *New development* and *site alteration* is not permitted in *adjacent lands* associated with *wetlands* unless an *EIS* has been completed, to the satisfaction of the UTRCA, with no negative impact on the feature or its ecological function

3.3.3 Woodland Policies

3.3.3.1 Significant Woodlands

1. New *development* and *site alteration* is not permitted in *Woodlands* considered to be *significant*.
2. New *development* and *site alteration* is not permitted on *adjacent lands* to *Significant Woodlands* (within 50 metres) unless an *EIS* has been completed, to the satisfaction of the UTRCA, with no negative impact on the feature and its ecological function.

3.3.3.2 Other Woodlands

1. *Development* and *site alteration* is not permitted in other *Woodlands*, or the 50 metre *adjacent lands*, unless an *EIS* has been completed, to the satisfaction of the UTRCA, which demonstrates that there will be no negative impact on the feature and its ecological function. The creation of strategically placed new habitat, linkages or restoration of other *ecosystem* functions may be considered as mitigation measures.
2. Municipalities will be encouraged to include *woodlands* in parkland and other open space dedications and to use other measures to secure the long term protection of other *woodlands*.

3.3.4 Valleyland Policies

1. The Authority will strive to maintain all existing *valleylands* in their natural state by prohibiting and/or minimizing *development* and *site alteration* within these areas.
2. New *development* and *site alteration* is not permitted in natural *Valleylands*.
3. New *development* and *site alteration* is not permitted on *adjacent lands* to *Valleylands* (within 50 metres) unless an *EIS* has been completed, to the satisfaction of the UTRCA, which demonstrates that there will be no negative impact on the feature and its ecological function.
4. For complex slopes, where benches of developable land are located mid-slope, development may be permitted only when a detailed *EIS* demonstrates that there will be no negative impact on the feature or the ecological function of the overall *valleyland* system.
5. Increased *fragmentation* of ownership, through lot creation, within natural *valleylands* is discouraged.

3.3.5 Policies for Wildlife Habitat

1. *Development and site alteration* is not permitted in *Wildlife Habitat* unless an *EIS* has been completed which demonstrates that there will be no negative impact on the feature and its ecological function.
2. *Development and site alteration* is not permitted on *adjacent lands* to *Wildlife Habitats* (within 50 metres) unless an *EIS* demonstrates that there will be no negative impact on the feature and its ecological function.
3. The Authority encourages the maintenance and enhancement of wildlife movement corridors.

3.3.6 Policies for the Habitat of Endangered Species, Threatened Species, Species of Special Concern & Locally Rare Species.

1. *Development and site alteration* is not permitted in the *habitat of endangered species and threatened species*.
2. *Development and site alteration* may only be permitted in *habitats* where the presence of species of *Special Concern* or locally rare species is known when an *EIS*, completed by a qualified professional and approved by the UTRCA, demonstrates that the habitat can be avoided or the impacts of the *development* on the habitat can be mitigated.
3. *Development* is not permitted on lands adjacent to (within 50 metres) the habitat of *endangered species, threatened species, species of special concern* or locally rare species unless an *EIS* has been completed which demonstrates that there will be no negative impact on the feature and its ecological function. The size of the *adjacent lands* may be increased based on the significance and/or needs of the species.

3.3.7 Policies for Aquatic Ecosystems & Fish Habitat

1. *Development and site alteration* is not permitted in *fish habitat* except in accordance with provincial and federal requirements and where the habitat to provide for the life requirements of aquatic systems will not be reduced.
2. *Development and site alteration* is not permitted on *adjacent lands* (30 metres) unless an *EIS*, completed by a qualified professional to the satisfaction of the UTRCA, demonstrates that there will be no negative impacts on the feature or on its ecological functions. The size of the *adjacent lands* may be increased based on the significance and/or necessity of the species.
3. When reviewing *development* applications which are likely to result in a harmful alteration, destruction or disruption to *fish habitat*, the proposal will be referred to the

Federal Department of Fisheries and Oceans (DFO) as specified in the Authority's Level II agreement with DFO.

4. The rehabilitation or restoration of aquatic *ecosystems* including habitat, rehabilitation and fish recruitment is encouraged.
5. The conversion of open surface *watercourses* and open drains to closed sub-surface drains is discouraged.

3.3.8 Policies for Areas of Natural & Scientific Interest (Life Science)

1. *Areas of Natural & Scientific Interest* (Life Science) will be protected over the long-term.
2. *Development and site alteration* is not permitted in *Areas of Natural & Scientific Interest* (Life Science) unless an *EIS*, completed by a qualified professional to the satisfaction of the UTRCA, demonstrates that there will be no negative impact on the natural feature and its ecological functions.
3. *Development and site alteration* is not permitted on *adjacent lands* to *Areas of Natural & Scientific Interest* (within 50 metres) unless an *EIS*, completed by a qualified professional to the satisfaction of the UTRCA, demonstrates that there will be no negative impact on the feature and its ecological function.

3.4 NATURAL RESOURCES

3.4.1 Overview

The Authority promotes the conservation and wise use of natural resources over the long term.

3.4.2 Groundwater Policies

The following policies on groundwater are general in nature and are intended to be used in the interim until a *Source Water Protection* Plan is developed. It is anticipated that the Source Water Protection Plan will provide updated information on groundwater processes, threats and strategies for protection. The following policies will be reviewed and updated once the source water protection planning process is completed.

1. Where comprehensive *groundwater* studies have been undertaken, protection of identified *groundwater* wellhead protection areas, areas that contribute to recharge (recharge zones), areas of *groundwater* susceptibility and discharge areas will be encouraged.

2. *Development and site alteration* will be limited in or near sensitive *groundwater* features in order to protect, improve and restore these features and their related hydrologic functions.
3. The decommissioning of abandoned wells to protect *groundwater* sources and to ensure public safety in accordance with Ministry of the Environment standards is encouraged.

3.4.3 Aggregate Resources Policies

1. The Authority will provide watershed municipalities and MNR with natural heritage, natural hazard and natural resource information related to aggregate proposals. The Authority will also provide technical review assistance to watershed municipalities to assist with their decision making responsibilities.

3.4.4 Agricultural Lands Policies

1. The Authority will provide natural heritage, natural hazard and natural resource information and technical review assistance to municipalities to assist with their decision making responsibilities.

3.5 SERVICING & MITIGATION

3.5.1 Overview

Changes in land use associated with urban development may temporarily or permanently alter the quality and quantity of water transferred between the various components of the hydrologic cycle. Unmitigated alterations to the hydrologic cycle could potentially have a negative impact on the *watershed ecosystem*. The Authority advocates for the protection and enhancement of natural hazard, natural heritage and other natural resources from the indirect impacts of development.

3.5.2 Policies for Stormwater Management and Erosion & Sediment Control Measures

The Authority provides stormwater management (SWM) and sediment and erosion control commenting and technical review services to all municipalities in the watershed. In those cases where the municipality has the required expert staff available to undertake detailed reviews, the Authority may limit its review to catchment level plan preparation and defer the review of detailed projects to the municipality. Where the review is deferred to the municipality, the Authority may still comment on natural heritage and natural resource matters.

1. The Authority advocates for the planning and implementation of SWM facilities on a catchment area basis through the completion of Subwatershed Plans, Master Drainage Plans or Catchment Strategies. Catchment planning is required for proposals where there is development potential for properties located beyond the subject property. Exceptions to this policy are limited to minor *infill* developments or cases where the coordination of stormwater management for the catchment cannot be practically achieved.
2. The Authority generally does not support:
 - a) on-line SWM ponds designed to enhance water quality;
 - b) the use of natural *wetlands* for SWM;
 - c) SWM facilities within *natural hazards*; and
 - d) SWM facilities within *significant* natural heritage features.
3. Consistent with Section 3.5.2.3, SWM facilities, with the exception of outlets, will be directed to areas located outside of the defined limits of the *natural hazard*. SWM facilities and associated measures may only be permitted in the *flood plain* if it can be demonstrated that there is a net public benefit in selecting the *flood plain* location and if all other potentially viable locations have been dismissed. Encroachment of SWM facilities into the *flood plain* must be justified with a catchment scale assessment as part of a Catchment Strategy, Area Plan, Subwatershed Plan, Master Drainage Plan or *Environmental Assessment Act* process. This type of assessment provides the opportunity to evaluate the location and function of SWM facilities based on technical, environmental, economic, and social factors. The following principles will be considered when assessing proposals to locate SWM facilities in the flood plain:
 - a) The impact of the SWM facility on *flood plain* function (conveyance, flood storage etc) and implications for other *natural hazards*;
 - b) The *net ecological benefit* of locating the SWM facility in the *flood plain*; and
 - c) Cultural benefits of locating the SWM facility in the *flood plain*. While cultural benefits are considered, the natural hazard and natural heritage implications are paramount.
4. A SWM report for a site must address the following:
 - a) The characteristics of the catchment area including physical characteristics, existing or approved development and the opportunities or constraints for stormwater management at the specific property within the context of the catchment;
 - b) Identify and integrate the findings of any previous reports for the site or the catchment;
 - c) Water balance must be addressed. Requirements are based on maintaining the existing hydrologic cycle in and surrounding a development area to the extent technically, physically and economically practicable:
 - (i) Water quality requirements are to be established based on characteristics of the receiving waterbody and/or natural heritage feature, including but not

limited to aquatic habitat, local and/or regional significance, human and wildlife water use.

- (ii) Water quantity control requirements will be based on both flooding and downstream erosion considerations. Quantity control typically ensures that post-development flow rates approximate pre-development rates for all return period increments from the 2 year to the 250 year. Any modifications to pre-development hydrology must be justified on the basis that they enhance the pre-development condition and must consider factors such as flood severity, flood timing and in-stream erosion potential of the receiving *watercourse*.
 - (iii) Monitoring and maintenance plans are required.
- d) The Authority requires that a conceptual SWM report be submitted for review and approval prior to supporting development proposals to create multiple lots (multi lot severances, draft plans of subdivision or condominium). The report must be prepared by a qualified professional and must address the areas of concern previously outlined. The report must be completed at a sufficient level of detail to establish the type, size and location of stormwater facilities.
 - e) The Authority requires that *erosion* control at the source be implemented along with supplementary treatment between the source and receiving watercourse..
 - f) Sediment and *erosion* control measures are to be used on all construction sites to limit the effects of the proposed development on the surrounding natural environment and receiving drainage network.

3.5.3 Policies for Servicing

1. Private services are considered to be part of *development* and are subject to the policy requirements of this manual.
2. New servicing corridors or extensions to existing corridors will be reviewed by the Authority with regard for the policies in this manual. Authority comments will be provided through the appropriate mechanism, typically, through the Class Environmental Assessment Act process.

3.6 INTEGRATED RESOURCES & SYSTEMS PLANNING

The Authority advocates an integrated approach for planning and managing the watershed ecosystem. The following policies are intended to support this approach.

3.6.1 Policies for Integrated Resources & Systems Planning

1. All *development* and *site alteration* will be assessed with regard for the potential impacts on natural hazard, natural heritage and natural resource systems. The assessment of the resource, the identification of the development limit and mitigation measures must be undertaken through the completion of a comprehensive EIS.

2. The Authority recommends that studies to support development consider the implications for the affected planning area and should be based on logical natural boundaries or planning area boundaries. Studies completed at this scale are capable of characterizing the cumulative effects of development.
3. Notwithstanding Section 3.6.1.2, an EIS for a specific property or group of properties may be acceptable due to the scale of the development or the limited development area available. Although the EIS has a narrower scope, it must address the broader natural hazard, natural heritage or natural resource systems of the area. It should be noted that due to its narrower scope, the site a specific EIS is less capable of assessing cumulative impacts on the system and as a result, the Authority will take a more precautionary approach when assessing the acceptability of impacts.
4. The Authority will work with watershed municipalities to identify the need for comprehensive studies on priority issues. Comprehensive studies based on logical management boundaries are required to support large scale urban expansions.