

4 SECTION 28 REVIEW & APPROVAL PROCESS

4.1 OVERVIEW

Section 28 of the Conservation Authorities Act provides the UTRCA with the legislative responsibility to regulate activities such as the placing or dumping of fill, the construction of buildings or structures in or on *flood plains*, wetlands, or ponds through a permit process within the Authority's areas of jurisdiction. Through its Permit Process, the Authority regulates development in order to prevent the creation of new hazards or aggravating existing ones. Staff responsible for the review of Section 28 applications must note that the principle of development will be established through prior approval of related planning applications, where necessary, in advance of Section 28 approval from the UTRCA.

4.2 REGULATION LIMIT

Regulation Limits are the result of several components, each of which addresses a specific hazard. These include:

- Riverine Flooding Hazard and Allowance
- Riverine *Erosion* Hazard and Allowance
- *Wetlands* and *Area of Interference*
- *Watercourses*

The final *Regulation Limit* for each system is taken as the greater of the applicable hazard limits. *Regulation Limit* mapping prepared by the Upper Thames River Conservation Authority has been completed in full accordance with guidelines from the Ministry of Natural Resources and Conservation Ontario. The Authority's policies for the *Regulation Limit* have been organized under the following main headings:

1. General Policies for the *Regulation Limit* – applies to all hazard types
2. Riverine Flooding Hazards – the Authority's area of interest is the *flood plain* and its main components including the *floodway*, the *flood fringe* and *special policy areas*
3. Riverine *Erosion* Hazards - the Authority's area of interest includes steep slopes, valley lands, ravines, and the *meander belt*.
4. *Wetlands* - the Authority's area of interest includes swamps, marshes, bogs, fens and ponds as well as organic soils (e.g. peat) and the areas of interference surrounding *wetlands*.

4.2.1 General Policies for Hazard Limit

1. *Development* and *site alteration* shall be directed away from *hazard lands* where there is an unacceptable risk to public health or safety or property damage and shall be directed to areas located outside of the defined limits of the hazard.
2. *Development* and *site alteration* may only be permitted in *hazard lands* 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*.
3. All *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.
4. Any *development* or *site alteration*, permitted in accordance with policies 4.2.1 (1., 2. and 3.), with the exception of watercourse alterations, will maintain a minimum setback of 30 metres from the bank of any coldwater/coolwater *watercourse* and warmwater sportfish *watercourse* and 15 metres from the bank of any warmwater baitfish *watercourse*. Exceptions 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 and where no other alternative exists. Additional setbacks may be required as per other agency guidelines.
5. Fencing – Fencing is normally considered exempt from permission required under the Section 28 regulation. However, the UTRCA generally discourages fencing in natural hazard areas. Where necessary, fencing should be constructed in such a manner that it does not impede conveyance of flow of the *watercourse* and does not require the use of *fill* within flooding hazard limits and *wetlands*.
6. Integration – While this section of the manual is devoted to policies associated with the review and approval of applications made to the UTRCA pursuant to Section 28 of the Conservation Authorities Act, it is imperative that staff integrate natural heritage policies, goals and objectives into the decision-making process. Similarly, staff must be familiar with and have full regard for other environmental legislation which may have a direct bearing on whether development, interference with *wetlands* and alterations to shorelines and *watercourses* may proceed.

4.2.2 Riverine Flooding Hazard Policies

1. *Floodway* – New development is generally not permitted within the *floodway* of any *watercourse*.
2. *Flood Fringe* – Development and site alteration is permitted in identified *flood fringe* areas, subject to satisfying *floodproofing* requirements through the UTRCA's Section 28 Permit Process. Specific policies are provided below.
 - a) Residential – For new development, no building openings are permitted below the *Regulatory Flood* Elevation. Construction drawings with *floodproofing* considerations must be prepared by a qualified professional. If a basement is proposed, *dry, passive floodproofing* measures must be presented on detailed drawings prepared by a qualified professional. Sufficient surveys and inspections will be required to allow for provision of as-built drawings upon completion of the project. Additions will be permitted (including bedrooms and associated increases in density) if access is safe or dry and *floodproofing* is achieved to the level of the *Regulatory Flood* Elevation. If *floodproofing* to the *Regulatory Flood* Elevation is not feasible, additions must be less than 25 per cent of the existing ground floor area and must not include bedrooms or require zoning by-law amendments to increase population density.
 - b) Industrial/Commercial – Access must be at a minimum of the *floodway* elevation and within 0.3 metres of the *Regulatory Flood* Elevation. *Dry, passive floodproofing* is preferred, with no building openings below the *Regulatory Flood* Elevation. If a basement or lower level is proposed, there must be engineering certification that the building is *floodproofed* with design components (i.e. backflow valves, foundation reinforcement) shown on construction drawings. Sufficient surveys and inspections must be undertaken to allow for the provision of as-built drawings following project completion. *Wet floodproofing*, with the same requirements as above will only be deemed acceptable if *dry floodproofing* is not feasible. For additions greater than 50 per cent of the existing floor area, requirements are the same as for new construction.
 - c) Institutional – “Lower risk” uses such as arenas and libraries must satisfy the same requirements as listed for Industrial/Commercial.
3. Special Policy Areas – Development within approved Special Policy Areas shall be consistent with the approved policies. For potential Special Policy Areas such as West London and Ada Street in the City of London, the following interim policies apply:
 - a) Intensification of use, either through the creation of lots or through zoning is not permitted. Conversion of residential uses to commercial uses is encouraged.
 - b) New basements are not permitted
 - c) Permitted activities will include additions less than 100 per cent increase in size, *accessory* buildings to existing uses and other minor works
 - d) *Floodproofing* measures to the *Regulatory Flood* Elevation will be required if feasible or at a minimum to the height of the main floor (first floor) of the higher of adjacent structures
 - e) For new structures, detailed *floodproofing* measures must be submitted on drawings prepared by a qualified professional, with sufficient surveys and

inspections to allow for provision of as-built drawings upon completion of the project

4. Additions to existing buildings and *replacement structures* may be permitted in the *flood plain* subject to satisfying the Authority's requirements.
5. *Accessory* buildings may be permitted in the *flood plain* subject to satisfying the Authority's requirements.
6. *Replacement Structures* in the *Floodway* – *Replacement structures* are structures that replace existing building or structures, including buildings and structures designated as architecturally or historically important and that have (recently) been demolished or destroyed but does not include reconstruction on remnant foundations. *Replacement structures* may be permitted by the UTRCA provided that the *replacement* structure, its construction and any new servicing requirements comply with the following:
 - a) The structure can be *floodproofed* to the level of the *Regulatory Flood*. If *Regulatory Flood* protection is not technically feasible, a lower level of flood risk protection may be permitted and must be provided to the maximum elevation possible as determined on the basis of site-specific evaluation.
 - b) The proposed structure must not exceed the total "footprint" area of the original structure as it existed on (April 25, 2000).
 - c) The flood risk must not exceed the risk associated with the previous/existing structure or development such that:
 - i. The location of the *replacement* structure and services are not susceptible to higher depths and/or velocities of *flooding*;
 - ii. The use associated with the *replacement* structure and development does not increase risk to property damage or public safety (e.g. converting from habitable to non-habitable); and
 - iii. The use within the *replacement* structure and/or the property as a whole is not intensified.
 - d) The proponent agrees to carry out site-specific flood damage reduction measures such that, in order of priority:
 - i. *Dry, passive floodproofing* measures shall be implemented to the extent technically possible to achieve the required level of flood protection: and/or
 - ii. *Wet floodproofing* measures are incorporated as required to achieve and maximize the required level of flood protection.
 - e) Ingress and egress should be "safe" or "dry" pursuant to contemporary *floodproofing* guidelines in addition to Provincial Policy and/or achieve the maximum level of flood protection determined to be feasible and practical based on existing infrastructure.

- f) The proposed *flood* damage reduction measures do not increase flood risk on adjacent, upstream and/or downstream properties.
 - g) All applications for *development* approval must be accompanied by engineering studies, prepared by qualified professionals, detailing such matters as *flood* frequency, depth and velocity of flow, soil conditions, proposed *flood* damage reduction measures including structural design details, stormwater management and other information and studies as may be required by the UTRCA and the local municipality.
 - h) Approval of an application under this policy will be subject to the consent of the UTRCA's Hearings and Personnel Committee.
7. The construction of above-ground and in-ground swimming pools shall not be permitted in the *floodway* of any *watercourse*. Swimming pools will only be considered within the flooding hazard where an alternative outside the *flood plain* does not exist. There must be no loss of flood storage or flood conveyance due to the pool's construction, fencing or associated grading. Electrical servicing must be *floodproofed*. An assessment of potential hydrostatic pressures under both normal and flood conditions may be required for below-ground pools.
8. Golf Courses - Golf course construction shall not be permitted in areas which are affected by *flood* events which occur more frequently than a 1:10 year storm. Associated structures including clubhouse and maintenance buildings must be located above the *Regulatory Flood* Elevation and outside of any erosion hazard. *Watercourse* crossings associated with golf course *development* shall be minimized and be designed by a qualified professional. Designs must take into consideration flood susceptibility, structural integrity in times of flooding, hydraulic capacity, fluvial geomorphic processes, approach ramp fill requirements and the potential for seasonal removal. Golf course will only be approved by the UTRCA upon completion of an *Environmental Impact Study* by qualified professionals which considers, in addition to those items noted above, vegetation communities, buffer requirements, stormwater management opportunities, erosion and sediment control requirements, site drainage and grading, integrated pest management opportunities, water taking requirements and other areas of concern identified through a scoping exercise.
9. Stormwater Management Facilities - Consistent with Policy 4.2.1, stormwater management facilities shall be directed to areas located outside of the defined limits of the natural hazard. Additionally, 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 (on technical/environmental basis). The following principles will be considered when assessing such proposals:
- a) The location of the SWM facilities in the *flood plain* will have no impact on natural hazard management or fluvial processes;
 - b) The location of SWM facilities in the *flood plain* will result in a *net ecological benefit* for the planning and catchment area;

- c) Cultural benefits from the location of SWM facilities in the *flood plain* are accrued but encroachment in the *flood plain* cannot be justified solely on the merit of cultural benefits;
 - d) The SWM facilities must meet design and maintenance performance requirements for the receiving *watercourse*;
 - e) SWM facilities must satisfy the approval requirements of the local municipality, Ministry of the Environment and other affected environmental approval agencies; and
 - f) On-line SWM facilities will only be considered in the context of a current subwatershed plan and where the facility is within a not-apparent valley, where no *fish habitat* exists and no adverse environmental impacts will result from the works.
10. Cut and *fill* activities generally shall not be permitted in the *floodplain* of any *watercourse*.
11. Where the *flood plain* of a *watercourse* has not been calculated, the Authority shall require the applicant to prepare the calculations and mapping in accordance with *flood plain* mapping criteria established by the Ministry of Natural Resources.
12. Parking Lots – Parking lots will only be considered within the flooding hazard limit in cases where the flooding hazard limit is within a not-apparent valley or in areas of existing development within the valley with acceptable access to the site. Parking lots associated with residential development must be located above the *1:100-year flood* elevation, within 0.3 metres of the Regulatory Flood Elevation, be designed to account for access and egress under *Regulatory Flood* conditions and must maintain the stage-storage-discharge relationship for a range of rainfall events.
13. Access – For new *development*, vehicular and pedestrian access must be dry, to an elevation matching or exceeding the Regulatory Flood Elevation. For existing *development* and *infill* proposals, vehicular and pedestrian access must be “safe”, within 0.3 metres of the Regulatory Flood Elevation or as determined through use of the following documents: a) Technical Guide – River and Stream Systems: Erosion Hazard Limit and b) Technical Guide – River and Stream Systems: Flooding Hazard Limit (Ministry of Natural Resources & Watershed Science Centre, 2002)
14. *Minor Works* - will be permitted within the *flood plain* subject to satisfying the Authority’s requirements.
15. Agriculture – The use of the flood hazard limits for ongoing cropland, livestock feeding and grazing, orchards, and nurseries and associated activities such as plowing, and fencing are not considered *site alterations*. The construction of farm buildings (excluding residences, commercial greenhouses and large-scale enclosed livestock facilities) may be considered within the flooding hazard limit, where no site can be reasonably utilized for the proposed works outside of the flooding hazard limit and where the structures will be floodproofed.

4.2.3 Riverine Erosion Hazard Policies

1. *Fill* and grading and related *site alteration* activities shall not be permitted in erosion *hazard lands*, unless associated with measures prescribed and/or approved by a municipality or environmental agency specifically intended to remediate *erosion* concerns.
2. The Authority shall encourage the *conservation of land* through the control of construction and placement of *fill* on existing or potentially unstable slopes.
3. Any *development* or *site alteration* proposal which is in close proximity to an erosion hazard and located within the *Regulation Limit*, must be supported by a favourable geotechnical report and an *Environmental Impact Study (EIS)* prepared by a qualified professional, to the satisfaction of the UTRCA.
4. Any *development* or *site alteration* proposal which is in close proximity to a *meander belt* and that is located within the *Regulation Limit*, must be supported by a favourable geomorphological study and an *EIS*, prepared by a qualified professional, to the satisfaction of the UTRCA.
5. 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.

4.2.4 Wetland Policies

1. 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*.
2. *Development* and *site alteration* within the *area of interference* of a *wetland* shall only be permitted by the Authority if the applicant can demonstrate that such activity will have no impact on the control of *flooding*, *erosion*, *pollution* or the *conservation of land*. This will involve a scoping process where the UTRCA and the proponent (with the help of a qualified professional as required) will assess a proposed undertaking, having regard for the sensitivity of the *wetland* features and functions, the extent of

encroachment and impact of use. This initial assessment will assist with the formulation of the terms of reference for a *scoped EIS* or a *comprehensive EIS*.

3. The following policies shall apply to regulating *development* and *site alteration* on lands located within 120 metres of *Provincially Significant Wetlands* and *wetlands* greater than or equal to 2 hectares in size:

- 4.

A. WITHIN 30 METRES

- a) Where buildings and structures already exist within 30 metres of a Provincially *Significant Wetland* and *wetlands* greater than or equal to 2 hectares in size, any reconstruction, alteration or additions may be permitted subject to the following:
 - i) No new septic systems permitted
 - ii) Existing septic systems may be replaced provided there are no feasible locations available outside of the 30 metre *area of interference* and it does not encroach any closer to the wetland than the existing system
 - iii) Reconstruction, alteration 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 metres to the wetland, no new development is permitted within 15 metres of the wetland
 - v) A hydrologic study may be required to determine whether there would be a negative impact on the hydrologic functions of the wetland as a result of the proposed development
- b) Where there is an existing lot of record and residential dwelling, in existence prior to the adoption of these policies and where no land exists outside of the 30 metre *area of interference*, pools, decks and non-habitable accessory structures may be permitted subject to:
 - i) No *development* or *site alterations* permitted within 15 metres of the wetland
 - ii) 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* or *site alteration*.
- c) Except as provided for in policies 4.2.4 (3.) A(a) and 4.2.4 (3.) A(b.), no new development or site alteration is permitted within 30 metres of a Provincially Significant Wetland or a wetland greater than or equal to 2 hectares in size.

B. BETWEEN 30 & 120 METRES – LETTER OF CLEARANCE

The following uses may be permitted and will only require a letter of clearance, if proposed within 30 to 120 metres from the limit of a Provincially *Significant* Wetland or a wetland greater than or equal to 2 hectares in size:

- i) Single family residential dwelling
- ii) Swimming pools, decks, non-habitable *accessory* structures
- iii) Minor additions to existing residential and agricultural buildings/structures
- iv) Residential septic systems

C. BETWEEN 30 & 120 METRES – PERMIT

Any uses, other than those outlined in Policy 4.2.4 B., proposed within 30 to 120 metres of a wetland will require a permit pursuant to Ontario Regulation 157/06 and will need to be supported by a hydrological assessment, prepared by a qualified professional, that identifies whether the proposed development or site alteration would cause a negative hydrologic impact on the wetland features/functions

4. The following policies apply to regulating *development* and *site alteration* on lands located within 30 metres of *Other Wetlands* less than 2 hectares in size:

A. WITHIN 15 METRES

- a) Where buildings and structures already exist within 15 metres of *Other Wetlands* less than 2 hectares in size, any reconstruction, alteration or additions may be permitted, subject to the following:
 - i) No new septic systems permitted;
 - ii) Existing septic systems may be replaced provided there are no feasible locations available outside of the 15 metre limit and it does not encroach any closer to the wetland than the existing system;
 - iii) The reconstruction, alteration 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 7.5 metres to the wetland, no new development is permitted within 7.5 metres of the wetland; and
 - v) A hydrologic study may be required to determine whether there would be a negative impact on the hydrologic functions of the wetland as a result of the proposed development.

- b) Where there is an existing lot of record and residential dwelling in existence prior to the adoption of these policies, and where no land exists outside of the 15 metres adjacent to a wetland, pools, decks and non-habitable accessory structures may be permitted subject to:
 - i) No development or site alteration permitted within 7.5 metres of the wetland; and
 - ii) A hydrologic study may be required to determine whether there will be a negative impact on the hydrologic functions of the wetland.

- c) Except as provided for in Policies 4.2.4 (5.) A. (a) and 4.2.4 (5.) A. (b), no new *development* or *site alteration* is permitted within 15 metres of *Other Wetlands* less than 2 hectares in size.

B. BETWEEN 15 & 30 METRES – LETTER OF CLEARANCE

The following uses may be permitted, and will only require a letter of clearance, if proposed within 15 to 30 metres from the limit of a *Other Wetlands* less than 2 hectares in size:

- i) Single-family residential dwelling;
- ii) Swimming pools, decks, non-habitable accessory structures;
- iii) Minor additions to existing residential and agricultural buildings/structures;
- iv) Residential septic systems; and
- v) Landscaping and minor grading associated with the above.

C. BETWEEN 15 & 30 METRES – PERMIT

Any uses, other than those outlined in Policy 4.2.4 (4.) B. above, proposed within 15 to 30 metres of a wetland will require a permit pursuant to the Authority's Ontario Regulation 157/06 and will need to be supported by a hydrological assessment, prepared by a qualified professional, that identifies whether the proposed development or site alteration would cause a negative hydrologic impact on the wetland feature and its function.

4.2.5 Watercourse & Flood Plain Alteration Policies

1. Major *flood plain* alterations (including placement of *fill* to create a building lot) and major *watercourse* alterations (including enclosures) are generally not permitted. Such alterations may be considered where justification is provided through a subwatershed study, an *Environmental Assessment* or similar comprehensive study and are subject to conformity with municipal planning documents.
2. Minor *flood plain* and *watercourse* alterations will be evaluated on an individual basis, having consideration for the following:
 - a) No negative impacts on the natural features or on the ecological functions, including fish and wildlife requirements as set out by other federal, provincial or municipal legislation/plans/technical guidelines and a *net environmental benefit* is achieved;
 - b) Maintenance of the natural topography of the *watercourse* system, flood conveyance and flood storage;
 - c) No adverse impacts on fluvial processes (*meander belt*);
 - d) No adverse impacts on *groundwater* recharge/discharge;
 - e) Geotechnical issues are addressed; and
 - f) Implementation of recommendations within UTRCA-endorsed watershed or subwatershed studies or *Environmental Assessment*.

3. The straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or *watercourse* will only be permitted with prior written approval of the UTRCA. An exception is made for activities conducted pursuant to the Drainage Act, where the Conservation Authority has an opportunity to work in cooperation with member municipalities and other approval agencies (including Fisheries and Oceans Canada – DFO) to consider and mitigate the environmental impacts of drain maintenance and new drainage proposals.
4. Notwithstanding policy 4.2.5.3, bridges and other major structures proposed on municipal drains will require prior written approval from the Conservation Authority.
5. The Authority encourages the retention of all *watercourses* and adjacent resource areas in their natural state.
6. *Watercourses* will be protected, improved or restored by minimizing potential negative impacts, having full regard for riparian rights and conditions.
7. Development and site alteration will be restricted in or near *watercourses* so that those features and their related hydrologic functions are protected, improved or restored.
8. Pit Licence Applications – Proposals for aggregate extraction will sometimes involve lands regulated by the Conservation Authority. Class A licence applications will require the preparation of plans showing existing features, operational plans, progressive rehabilitation, final rehabilitation and cross-sections. Accompanying documents will include hydrogeological reports, noise and dust studies, archaeological investigations and natural heritage assessments. The UTRCA will undertake a peer review of pertinent reports, often on behalf of member municipalities but also to ensure that requirements for Section 28 approval are satisfactorily addressed. Conservation Authority considerations will include: stockpiling and berming of soil relative to flood conveyance, site drainage, slope stability, proximity to wetlands, impacts on neighbouring lands (including UTRCA lands), rehabilitation options and extraction relative to the groundwater table. A scoping exercise with the applicant and/or the consultants will help to clarify *Environmental Impact Study* and reporting requirements where Section 28 approval is required by the UTRCA. This will help to ensure that there will no redundancy with report/plan submissions required in support of an application made pursuant to the Aggregate Resources Act.
9. Golf Courses – *Channelization* and/or *watercourse* realignments will not be permitted to facilitate new golf course proposals or for the purpose of protecting future golf course infrastructure. Where site-specific *erosion* control measures are proposed, bioengineering is the preferred method of remediation and must be based on accepted fluvial geomorphic principles. *Fish habitat* and associated riparian areas shall be maintained and enhanced where possible.
10. The Authority does not support the construction of in-stream, by-pass and connected ponds which link directly into a *watercourse*.
11. A minimum setback of 15 m from all *watercourses* is required for all ponds.

12. Ponds will not be permitted within *wetlands*.
13. Dugout ponds and off-line by-pass ponds may be permitted within the *flooding* hazard limit if it can be shown that the following general and specific requirements can be satisfied:
 - a) No negative impact on natural features and ecological functions;
 - b) No negative impacts on water quality, including thermal *pollution*;
 - c) All *fill*, including dredged material is removed from the flooding hazard limit;
 - d) No net loss of *wildlife habitat*;
 - e) No impacts on *flood plain* fluvial processes; and