

Appendix E: Guidelines for Environmental Impact Assessment

# 1.0 PURPOSE

The purpose of this document is to assist environmental professionals with the preparation of site-specific environmental impact assessments (EIA). These assessments may also be referred to as environmental impact studies. These guidelines outline considerations for the scope of assessments and the content of reports. The guidelines reflect provincial technical guidelines (e.g., Natural Heritage Reference Manual). They may or may not satisfy the specific requirements of other agencies.

This document is Appendix E to the CRCA Environmental Planning Policies (2015), and should be read in conjunction with policies. These guidelines will be updated from time to time.

# 2.0 BACKGROUND

Much of the landscape of the Cataraqui Region is covered by a connected system of natural areas. This natural heritage system is one of the Region's greatest assets, as it provides the basis for our quality of life, including the economic cornerstones of cottaging and tourism. It is also important for biodiversity, and plays a role in mitigating effects of climate change. Areas such as wetlands, woodlands, alvars, and lakes provide habitat for a diversity of flora and fauna, protect the quality and quantity of water, and provide opportunities for outdoor recreation. Natural heritage systems play a role in mitigating the effects of climate change. Ongoing research by the CRCA, the Ontario Ministry of Natural Resources (MNR), and others is helping to improve local knowledge of the extent of the natural heritage system, as well as its ecological function.

# 3.0 PURPOSES OF ASSESSMENT

Development for human needs is an ongoing process in the Region, as new residents and visitors come to the area and as infrastructure is improved. The Provincial Policy Statement 2014 (PPS) provides for the protection of natural heritage by:

- 1. requiring the identification of natural heritage systems;
- 2. prohibiting development and site alteration in significant wetlands and significant coastal wetlands;

- 3. prohibiting development and site alteration in other specific natural heritage features and areas unless it has been demonstrated that there will be no negative impacts on the features or their ecological functions; and
- 4. prohibiting development and site alteration on adjacent lands to the natural features listed above 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 features or their ecological functions.

The Natural Heritage Reference Manual (MNR, 2010) provides detailed information on the identification, evaluation and assessment of natural features and adjacent lands in support of the PPS. Where natural heritage features have not been identified in background studies such as regional natural heritage studies, the proponent may need to have an ecological site assessment performed to determine if there are any natural features on or adjacent to the property that would need to be evaluated, and the impact assessed, before a decision can be made on a planning application.

The demonstration of no negative impacts is normally done through an environmental impact assessment (EIA), which is prepared by an environmental professional at the expense of the proponent. The EIA may also include the identification and evaluation of natural features and adjacent lands.

The CRCA and its member municipalities rely upon the technical expertise and independent professional judgment of environmental professionals. It is therefore crucial that EIA documents be prepared using the best available information and scientific methods, and that authors provide an open and unbiased assessment of development proposals.

Environmental impact assessments are best prepared early in the site design process, when the subject site can be assessed in an undisturbed state. Consultants are encouraged to contact the CRCA and municipality prior to the commencement of their assessment to confirm the required scope of work. The completed EIA is reviewed by municipal and CRCA staff, and sometimes by MNR or others, and is then either endorsed or refuted by a planning approval authority (e.g., a municipal council).

### 4.0 REPORT CONTENT

The required scale and content of the EIA will vary with the scale and type of the development or site alteration that is proposed. In some situations, EIAs may be scoped to a more defined assessment of selected features and impacts. The scale and content of the EIA should be determined in pre-consultation with the Conservation Authority and the municipality, prior to the commencement of work on the document.

### The CRCA will recommend that the EIA document:

- 1. be prepared by a professional who has been educated in, and has current knowledge of, biology, ecology, landscape ecology and any other relevant fields of study, as required. The professional should also have an understanding of the natural heritage system of the Cataragui Region;
- 2. be consistent with the intent of the Provincial Policy Statement and provincial technical guidelines (e.g., Natural Heritage Reference Manual), municipal official plans and the CRCA Environmental Planning Policies;
- 3. include descriptions and clearly legible, scaled maps of the existing land uses for areas on and immediately adjacent to the site, and the proposed development and site alteration, including, but not limited to, all proposed buildings, structures, driveways and parking areas, and sources of human intrusion, light, noise, dust, and shadow;
- 4. illustrate the precise location of all of the natural features/areas on, or adjacent (as defined by the PPS and supporting documents) to the site on clearly legible, scaled maps;
- 5. provide a thorough field inventory of flora and fauna and related habitat, including species at risk screening (This is to be completed during the growing season, and preferably in more than one of spring, summer, and fall. Additional field work may be required during the winter for specific attributes such as deer wintering yards.), as well as relevant information on soils and geology, slope, hydrology, and hydrogeology;
- 6. include the best information available from others (as recorded in reports and databases, or as identified via personal communication) regarding the items listed in 4 and 5 above;
- 7. review the ecological functions of the natural features identified above, including the habitat needs of species that utilize adjacent lands (as defined by the PPS and supporting documents), and an assessment of how the site contributes to the natural heritage system of the area (e.g., subwatershed) and the Cataraqui Region;
- 8. discuss the significance, as defined in the PPS, municipal official plans, and local natural heritage studies, of the natural features/areas and functions identified in 4, 5, 6, and 7 above, and assess any apparent trends in the ecological health of same;
- 9. predict the positive and negative impacts of the proposed development and/or site alteration on the various attributes of the environment on and adjacent to the site, such as habitat, vegetation, soil, surface and ground water, air, and any other relevant attributes, taking into consideration the sensitivity of the attributes, impacts both

- during and after construction, and where appropriate, the role of flooding and erosion hazards;
- 10. predict the cumulative impacts of the proposal and any other existing or known future proposals in the vicinity;
- 11. evaluate the implications of all predicted positive and negative impacts on the environment;
- 12. recommend extents of land where: (1) disturbance is to be avoided, and (2) disturbance is to be limited, in order to maintain the natural features and ecological functions of the area, supported by a detailed rationale;
- 13. explore opportunities for restoration or improvement of the natural heritage system;
- 14. discuss the merits of alternative development options, and recommend feasible and cost-effective measures that could be implemented to avoid or mitigate the predicted negative impacts of the selected option (including, but not limited to, buffer width, timing of work, fencing, erosion and sediment control, pathway routing);
- 15. outline a program through which the mitigation measures and the long-term impacts associated with the proposal can be monitored and assessed, where appropriate; and
- 16. conclude with an independent professional opinion as to whether or not the proposed development and/or site alteration is appropriate, will have a negative impact, and is consistent with the intent of the Provincial Policy Statement and municipal official plans.

### 5.0 OTHER CONSIDERATIONS

Sensitive information regarding the habitat of endangered or threatened species, or the habitat of other species at risk, shall be utilized and considered by the consultant, but shall not be shared in a manner that could further endanger the species or its habitat.

The location of the boundary of an evaluated wetland may only be determined by a trained wetland evaluator, and is subject to the approval of staff of the Ontario Ministry of Natural Resources. Changes to the boundary of an evaluated wetland or area of natural and scientific interest (ANSI) is subject to the approval of the Ontario Ministry of Natural Resources.

# 6.0 REVIEW PROCESS

The CRCA will assess a cost-recovery fee for its review of an EIA document, based on the approved Plan Review Service Fee Schedule, as amended from time to time. A standard EIA will typically be reviewed at the staff level. However, depending on scope and complexity, EIAs may

be subject to a peer review, at the expense of the proponent, by a third party professional who will be retained by the municipality.

The preparation of an EIA, or its acceptance by the CRCA, does not guarantee that a development or site alteration proposal will automatically be supported by the CRCA or approved by the planning authority. Approvals from other agencies may also be required.

Any approved development or site alteration shall be constructed in accordance with the recommendations of the approved EIA. These recommendations should be incorporated into applicable plans such as plans of subdivision, plans of condominium, and/or site plans, and related agreements, as appropriate. The municipality may require that funds be held in reserve for the purpose of long-term monitoring, which may occur following the completion of the development or site alteration.

# **REFERENCES**

Ontario Ministry of Municipal Affairs and Housing. 2014. Provincial Policy Statement. Queen's Printer for Ontario.

Ontario Ministry of Natural Resources. 2010. <u>Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005</u>. Second Edition. Queen's Printer for Ontario.

# FOR MORE INFORMATION

Please contact the CRCA at 613-546-4228 or info@crca.ca, or visit our website at www.crca.ca.