

OAK RIDGES MORAINNE CONSERVATION PLAN

Technical Paper Series

3 - Supporting Connectivity

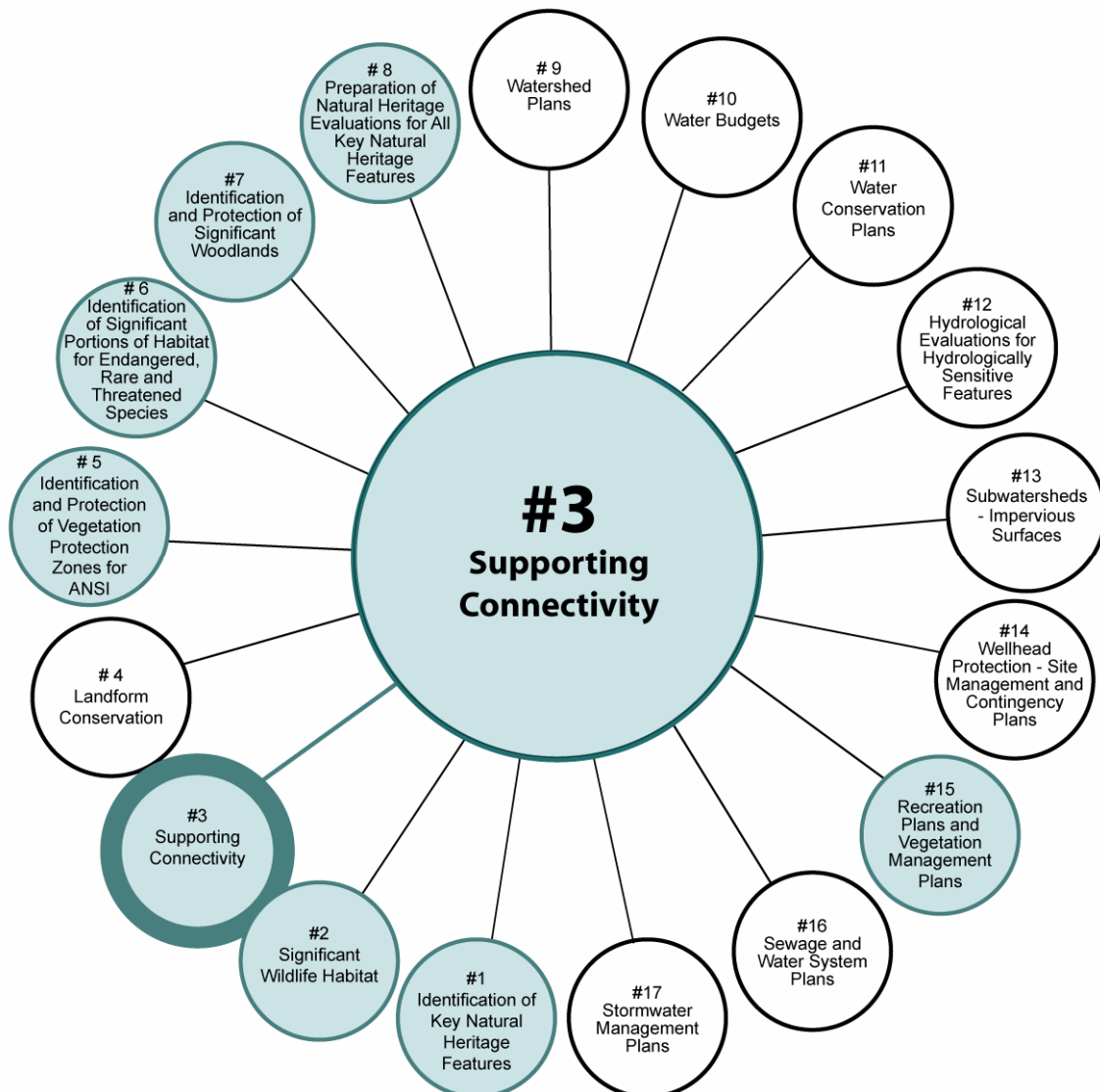
1 Purpose

This paper provides direction on how connectivity should be addressed in the planning and design component of any planning application on the Oak Ridges Moraine (ORM).

2 Related Considerations

It is suggested that the reader also review the associated topic areas as discussed in the ORMCP, shown highlighted in Figure 1 below.

Figure 1 ORMCP Topic Areas and Linkages with Technical Paper 3 - Supporting



3 Background

A key principle in the protection of the ecological integrity of the ORM is the maintenance and where possible enhancement or restoration of its connectivity. Connectivity as defined in the Oak Ridges Moraine Conservation Plan (ORMCP):

"means the degree to which key natural heritage features are connected to one another by links such as plant and animal movement corridors, hydrological and nutrient cycling, genetic transfer, and energy flows through food webs."

Section 20 of the ORMCP requires that:

"Every application for development or site alteration shall identify planning, design and construction practices that ensure that no buildings or other site alterations impede the movement of plants and animals among key natural heritage features, hydrologically sensitive features and adjacent land within Natural Core Areas and Natural Linkage Areas."

Section 23(1) of the ORMCP requires that a natural heritage evaluation be prepared for an application for development within 120 metres of key natural heritage features which, among other things, shall:

- (a) *"identify planning, design and construction practices that will maintain and, where possible, improve or restore the health, diversity and size of the key natural heritage feature and its connectivity with other key natural heritage features;"*
- (b) *in the case of an application relating to land in a Natural Core Area, Natural Linkage Area or Countryside Area, demonstrate how connectivity within and between key natural heritage features will be maintained and, where possible, improved or restored before, during and after construction."*

4 The Context

Connectivity is supported in the ORMCP through four main avenues.

4.1

The Natural Core and Linkage Area designations of the ORMCP were created as the basic framework of the ORMCP to protect the ecological integrity of the ORM. They contain over 85% of all key natural heritage features and hydrologically sensitive features. The policies of these two designations establish a major open space system across the ORM dominated by land uses with minimal building or structural coverage, large tracts of natural vegetation and open fields. To support this system, development, and site alteration has been limited to certain permitted uses across these critical parts of the ORM, thus minimizing disruptions to natural processes including connectivity.

Adherence to the policies of these two designations will support the continued movement of plants and animals across the ORM and to natural areas North and/or South of the ORM.

Mineral aggregate and wayside pit operations will only be permitted in Natural Linkage Areas where connectivity can be maintained. In accordance with Section 35 (3) of the ORMCP, an excluded area with a total width of at least 1.25 kilometres consisting of rehabilitated and/or undisturbed land must be maintained at all times through portions of the Natural Linkage Area in which the

mineral aggregate or wayside pit operation is located. This 1.25 kilometre excluded area(s) is the total area outside the limit of active extraction (i.e. excluding undisturbed and rehabilitated areas), and can include Natural Linkage Areas outside of the subject property.

4.2

The ORMCP identifies and protects, in a natural self-sustaining vegetated state, all key natural heritage features and hydrologically sensitive features that have been identified for the role they serve in connecting or linking ecological features or functions within the ORM including:

- Significant valleylands;
- Wildlife corridors (as part of the significant wildlife habitat) category;
- Permanent and intermittent streams; and
- Fish habitat.

4.3

In response to the requirements under Section 20 of the ORMCP, MNR has developed specific criteria in sections 5 to 7 of this technical paper for identifying, supporting and managing key linkages as part of the more detailed planning and design component of all planning applications.

4.4

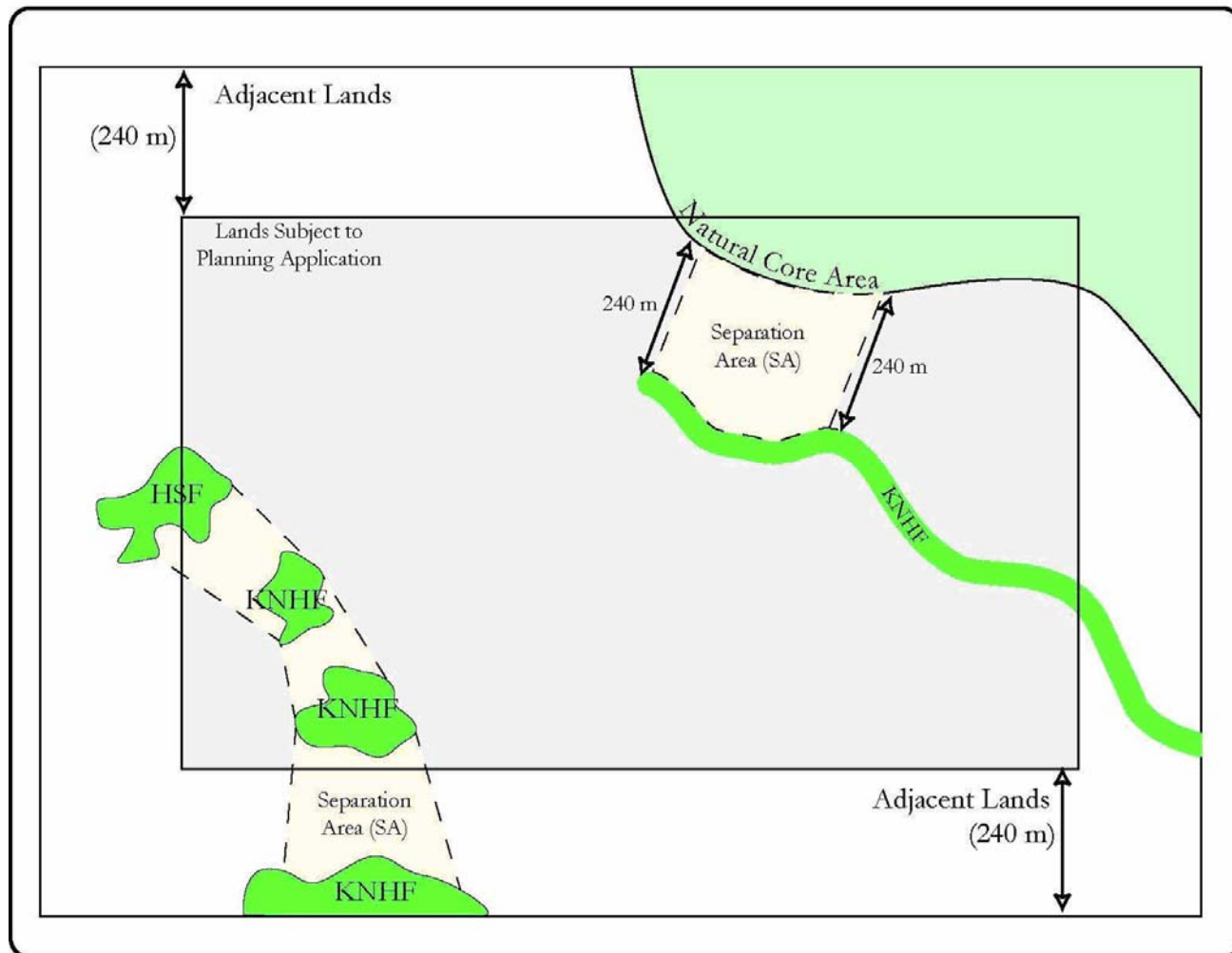
Additional measures may be identified as a result of a Natural Heritage Evaluation carried out under Section 23(1) of the ORMCP.

5 Separation Area

For the purposes of this technical paper a “separation area” is defined as:

“All intervening lands between one key natural heritage features and hydrologically sensitive features and another key natural heritage features and hydrologically sensitive features; or between one key natural heritage features and hydrologically sensitive features and lands designated as Natural Core/Natural Linkage Area, in which the intervening distance is 240 metres or less.” (See Figure 2)

Figure 2 Example of a Separation Area



6 Addressing Connectivity in the Review of Planning Applications

6.1 Connections in Natural Core and Natural Linkage Areas

A new planning application in a Natural Core Area or Natural Linkage Area does not need to specifically identify planning, design or construction practices to maintain or enhance connectivity. Adherence to the permitted uses within these two designations will ensure the continued movement of plants and animals across the ORM and to natural areas north and/or south of the ORM.

6.2 Connections in Countryside Areas

6.2.1 Major Development

The proponent of any planning application for major development shall:

- (a) identify all separation areas that are located on the lands subject to the planning application. (Note: this will require identifying and considering all known key natural heritage features and hydrologically sensitive features and Natural Core/Linkage areas on-site and within 240 metres of the subject lands);
- (b) demonstrate to the satisfaction of the approval authority that within the separation area:
 - a continuous open corridor will be preserved that connects the key natural heritage features and hydrologically sensitive features and Natural Core/ Natural Linkage areas such that the width of the corridor is at least 60 metres wide, or half the width of the separation area (to a maximum of 240 metres), whichever is greater;
 - all wooded areas outside *key natural heritage features and hydrologically sensitive features* and their associated minimum vegetation protection zones (including hedgerows) will be maintained or enhanced except where:
 - there is no reasonable alternative to the removal of the vegetation;
 - the removal will not significantly diminish ecological value especially for species that are most dependant on wooded linkages; and
 - other portions of the separation area are returned to a natural vegetated state wherever possible to compensate for losses due to removal of the natural vegetation.
 - no buildings or structures are permitted in the open corridor except roads or utilities that may be considered where no reasonable alternative exists and where they do not impede the movement of native plant and animal species (Note: agricultural uses not requiring the construction of large scale buildings or structures and golf course fairways are generally not considered impediments to plant or animal movement within the corridor);

- as much of the open corridor as possible is maintained or restored to native self-sustaining vegetation cover; and
- (c) as an alternative to (b), the proponent shall demonstrate to the satisfaction of the approval authority that:
- a continuous open corridor with the same attributes as described in 6.2.1(b) can be preserved wholly, or partially outside the separation area;
 - this alternative would be a more effective connection for plant and animal movement; and
 - this alternative has a reasonable probability of being established and/or maintained over the long term.

6.2.2 Mineral Aggregate Operations

The proponent of any planning application for a mineral aggregate operation shall:

- (a) identify all separation areas that are located on the lands subject to a planning application (Note: this will require identifying and considering all known key natural heritage features and hydrologically sensitive features and Natural Core/Linkage areas on site and within 240 metres of the subject land); and
- (b) develop a rehabilitation plan that demonstrates how all lands within the separation areas will be restored to an open corridor similar to those identified in 6.2.1.

6.2.3 Minor Development

(All planning applications not defined as major development or mineral aggregate operations in the ORMCP)

The proponent of any planning application for minor development shall:

- (a) identify all separation areas that are located on the lands subject to a planning application (Note: this will require identifying and considering all known key natural heritage features and hydrologically sensitive features and Natural Core/Linkage areas on site and within 240 meters of the subject lands); and
- (b) demonstrate to the satisfaction of the approval authority that, where alternatives exist:
 - the erection of buildings and structures will be limited to areas outside of the separation area; and
 - where no alternative exists, the construction of buildings and structures within the separation area are kept to an absolute minimum.

6.3 Connections in Settlement Areas

The municipality and proponents of any planning applications for major or minor development in Settlement Areas should be encouraged to make best efforts to

establish or maintain connectivity in the manner described in section 6.2, including designs that place open space components of the urban fabric into the separation area.

7 Additional Measures

Notwithstanding any other requirement in this technical paper, a natural heritage evaluation carried out in accordance with Section 23(1) of the ORMCP may identify additional measures to maintain connectivity on or adjacent to lands subject to a planning application.

8 Alternative Approaches

Notwithstanding any of the foregoing, the approval authority may develop and design an alternate approach in consultation with the local conservation authority and/or Ministry of Natural Resources to maintaining connectivity provided:

- it is developed on a comprehensive ecosystem or municipal-wide basis;
- it is based on sound ecological principles and practices that will achieve connectivity for plant and animal movement; and
- a clear and effective implementation system is in place.