

#### **D.4(a) Natural Heritage System Strategy**

A natural heritage system is an ecologically based delineation of nature and natural function – a system of connected or to be connected green and natural areas that provide ecological functions over a longer period of time and enable movement of species. Natural heritage systems encompass or incorporate natural features, functions and linkages (also referred to as “corridors”) as component parts within them and across the landscape. They also enable the linking of different landscapes.

A natural heritage system informs and supports land use planning and resource management while providing a strategic focus for restoration, stewardship, securement and the conservation of biodiversity. It also serves to:

- Limit landscape fragmentation;
- Mitigate the effects of climate change by facilitating migrations to more suitable habitats;
- Facilitate the maintenance of ecosystem health resilience and enjoyment / use by humans; and
- Provide ecosystem services such as clean air, flood attenuation, erosion prevention, and productive soils

The following Natural Heritage Features and Areas will make up the Natural Heritage System:

- Provincially Significant Wetlands
- Coastal Wetlands, including Significant Coastal Wetlands
- Significant Wildlife Habitat
- Areas of Natural and Scientific Interest (A.N.S.I.)
- Fish Habitat
- Habitat of Endangered and Threatened Species
- Alvars
- Linkages

Natural heritage features and areas shall be protected for the long term. The significant Natural Heritage Features and Areas are lands that represent the legacy of the natural landscape of the area and as a result have important environmental and social value. Natural Heritage Features and Areas in the District have been identified on Schedule D. Natural Heritage Features and Areas that make up the Natural Heritage System have been identified on Schedule F, except where data sensitivity or other issues prevent their display. Features meeting the requirements of the Natural Heritage System constitute part of the system regardless of whether they appear on Schedule F. The Planning Board and municipalities will work to conserve, restore and enhance them, wherever possible.

The following policies apply to Natural Heritage Features and Areas and the Natural Heritage System:

1. Natural Heritage Features and Areas have been identified and mapped to the extent possible and are based on data from the Province and its partners as well as, in some cases, Environmental Impact Studies undertaken during Planning Act applications. The accuracy of the feature limits is based on that of available data. The boundaries of the features and areas making up the Natural Heritage System may be refined, with additions, deletions and/or boundary adjustments, through individual Environmental Impact Studies prepared in accordance with section D.7 of this plan or other similar studies as outlined in later sub-sections, and accepted by the Manitoulin Planning Board and/or the Municipalities. Once approved through an approval process under the Planning Act, these refinements are in effect on the date of such approval. The Board will maintain mapping showing such refinements and incorporate them as part of the Planning Area's statutory review of its Official Plan.
2. The Planning Board and municipalities will encourage, wherever possible and appropriate, the enhancement and restoration of features and areas of the Natural Heritage System, including maintenance or re-naturalization of shoreline areas.
3. Features and areas considered part of the Natural Heritage System may occur on the landscape that are not mapped, or cannot be readily mapped. Any feature or area that meets the criteria set out in D(4)(a) and (b) is part of the Natural Heritage system and is subject to the policies of this plan.
4. The Planning Board and municipalities will encourage, wherever possible and appropriate, that trees be planted to replace trees removed if a development proceeds. The Planning Board and municipalities will also encourage the conservation or replanting of roadside and fence-line shrubs and trees, and riparian area vegetation, wherever possible and appropriate in the context of new development. Financial compensation for tree loss is not considered as the preferable means of appropriate mitigation for development.
5. When considering development proposals, the Planning Board and municipalities will encourage the exploration of opportunities for creating new habitats, natural vegetation regeneration, conserving natural landforms and functions for protecting and enhancing groundwater and surface water resources, and for promoting environmental education and interpretation.
6. Where components of Natural Heritage Features and Areas are held in private ownership, nothing in this Plan will require that these lands be free and available for public use, and the identification of land will not oblige the Planning Board, municipalities, or other public agencies to purchase the land.

7. Subject to Provincial and Federal statutes, the policies of this Plan will not prevent the continuation of existing agricultural uses within or adjacent to Natural Heritage Features and Areas.
8. The Planning Board and municipalities will, to the extent feasible, ensure that required maintenance of existing drains is carried out in a manner that mitigates impacts of the maintenance of drains on Natural Heritage Features, Areas, and their functions.
9. When considering applications or initiating projects under the *Drainage Act* or *Water Resources Act* for drainage works, the Planning Board and municipalities, in consultation with the Province, will be satisfied that the works will be engineered and constructed to ensure no negative impact on Natural Heritage Features, Areas, and their functions. Such considerations may include completion of an EIS or an environmental evaluation/appraisal carried out under the *Drainage Act*.
10. The following policies will apply whenever a planning application proposes development and/or site alteration within a Natural Heritage Feature or Area that is part of the Natural Heritage System. More detailed policies for specific feature types are outlined in section D.4.1 to D.4.6 of this plan.
  - a. Development and Site Alteration will not be permitted in:
    - i. Provincially Significant Wetlands; and
    - ii. Provincially Significant Coastal Wetlands
  - b. Development and site alteration will not be permitted in:
    - i. Coastal Wetlands
    - ii. Other Wetlands
    - iii. Alvars
    - iv. Significant Wildlife Habitat
    - v. Areas of Natural and Scientific Interest; and
    - vi. Linkages

Unless it can be demonstrated through an E.I.S or equivalent study (as per Section D.7) that there will be no negative impacts to the natural features or their ecological functions.

- c. Development and site alteration will not be permitted in:
  - i. Fish Habitat
  - ii. Habitat of Endangered or Threatened Species

Except in accordance with provincial and federal requirements, and supported by an E.I.S or equivalent study (as per Section D.7).

11. Development and site alteration in the *adjacent lands* of features identified in Sections 10 above will not be permitted unless it can be demonstrated through an E.I.S or equivalent study (as per Section D.7) that there will be no negative impacts to the natural features or their ecological functions. The distances used to determine the adjacent lands of the features comprising the Natural Heritage System are set out in the chart below and based on the criteria of the Natural Heritage Reference Manual:

Feature or Area Type	Adjacent Lands Distance
Provincially Significant Wetlands	120 metres
Coastal Wetlands	120 metres
Alvars	120 metres
Significant Wildlife Habitat	120 metres
Areas of Natural or Scientific Interest (A.N.S.I.) – life science	120 metres
Areas of Natural or Scientific Interest (A.N.S.I.) – earth science	50 metres
Fish Habitat	120 metres, or 300 metres for a Lake Trout Lake that is designated an at-capacity lake.
Habitat of Endangered or Threatened Species	120 metres

12. If an E.I.S or equivalent study is required under preceding section 10 or 11, it may be appropriately scoped or waived if the proposal meets certain criteria as laid out in the specific sub-sections for these features later in the plan.

#### **Section D.4(b) Feature-Specific Policies**

In addition to the policies in section D.4(a) regarding features and areas composing the Natural Heritage System, the following policies apply to specific features that may or may not form part of the Natural Heritage System.

##### **D.4.(b).1 – Provincially Significant Wetlands**

Existing Provincially Significant Wetlands in the District of Manitoulin will be protected. If any additional Provincially Significant Wetlands are identified during the life of this Plan, this Plan will be amended in accordance with Section F.2.1. The boundaries of PSWs will be defined based on information from the Province. The boundaries of PSWs may be refined without an amendment to this Plan provided approval is obtained by the Province. The addition or removal of a PSW will *not* require an amendment to this Plan.

##### **D.4.(b).2 – Other Wetlands**

The following policies apply to Other Wetlands:

1. Other Wetlands (OWs) are delineated on Schedule D, and include Unevaluated Wetlands, Coastal Wetlands, and Evaluated (Not Significant) Wetlands.
2. The boundaries of OWs will be defined based on information from the Province, which may be amended from time to time. Where new information becomes available, the Planning Board will review and update the policies related to unidentified wetlands as part of any subsequent review to this Official Plan.
3. The Planning Board may require that a Wetland Evaluation be prepared for any development or site alteration adjacent to an OW in accordance with the Province's Ontario Wetland Evaluation System (OWES) for Southern Ontario, or other provincial guidance document as may be created or amended from time to time, to determine their status under policies of the Provincial Policy Statement and this Plan. Evaluations are to be accepted by the responsible Provincial Ministry. Where an evaluation is completed and an OW is determined to be Provincially Significant, the policies applicable to Provincially Significant Wetlands shall apply.
4. Wetlands may be subject to additional regulations or legislation. No policy of this Plan is intended to and does not imply waiving, permission or authorization of any kind.

##### **D.4.(b).3 – Habitat of Endangered and Threatened Species**

The following policies apply to Habitat of Endangered or Threatened Species:

1. Habitat of Endangered Species and Threatened Species will be defined based on the *Endangered Species Act* and the Species at Risk in Ontario (SARO) list.
2. The Province is the responsible authority to approve the delineation of habitat of endangered and/or threatened species identified by an ecological site assessment or as part of an environmental impact study.
3. In accordance with common practices to protect the associated features from disturbance, the Habitat of Endangered or Threatened Species are not illustrated on the schedules to this Plan. Instead, a screening map, prepared by the Province showing areas of potential habitat of endangered and/or threatened species has been

provided to the Planning Board for reference, which may be updated from time to time. Where the screening map identifies the potential habitat of endangered and/or threatened species, an ecological site assessment (EcoSA) will be required in support of a planning application. The EcoSA will assess the potential for habitat and delineate the extent of habitat of endangered and/or threatened species within or adjacent to an area proposed for development or site alteration. In cases where an environmental impact study (EIS) is triggered by this Plan, the above requirements may be addressed as part of the EIS, provided it is undertaken by a qualified individual.

#### **D.4.(b).4 - Fish Habitat**

The following policies apply to Fish Habitat:

1. The Planning Board and municipalities recognize that the health of the aquatic environment is a fundamental indicator of the health of the overall ecosystem in the District and beyond. The harmful alteration, disruption or destruction of fish habitat is prohibited under the *Fisheries Act*.
2. Through a fish habitat mitigation/compensation assessment, in consultation with the Planning Board and the Department of Fisheries and Oceans (DFO), it is the Planning Board's objective to secure a "no net loss" of productive capacity of fish habitat, and where possible, secure a net gain of productive capacity of fish habitat.
3. Any development or change in land use within or adjacent to an existing fish habitat area, or potential fish habitat area along lands adjacent to any lake, river, stream, or wetland, will be reviewed by the Planning Board in consultation with the DFO with respect to the potential impact. Adjacent lands will be defined by the Planning Board, in consultation with the Province and DFO, and will generally be 30-120 metres from the edge of the identified Fish Habitat. Any such proposal may be subject to a scoped Environmental Impact Study, in accordance with Section D.7, to determine if proposed development will adversely impact the fish habitat. If it is determined that development will impact the fish habitat, development will not be permitted. If it is determined, through consultation with DFO, that development will not impact fish habitat then the requirement for an EIS may be waived, in accordance with Section D.7. An example of this may include development on full municipal services and nearby, intervening development between the site and the identified fish habitat.
4. Where it has been determined by the DFO that the development or change in land use will affect the natural functions of the fish habitat, the preparation of a fish habitat mitigation/compensation assessment will be required. The assessment will typically be required to include the following information:
  - a. identify the nature and extent of potential impacts;
  - b. determine appropriate mitigative measures to protect the affected fish habitat;
  - c. specify compensation for loss of fish habitat through near-site replacement of habitat, off-site replacement of fish habitat or an on-site increase of fish habitat capacity;
  - d. determine appropriate buffering and how such buffering will be protected in the future; and
  - e. address other matters as determined by the DFO.

5. Any requirements imposed through a fish habitat mitigation/compensation assessment will be implemented by the proponent with input from, and to the satisfaction of the Planning Board and the DFO.

6. Any development or site alteration within 20 metres above the high water mark will have regard to the Shoreline Management Plan (SMP), which was developed by the Province.

#### **D.4.(b).5 – Significant Wildlife Habitat**

Significant wildlife habitats are ecologically important and includes species ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or natural heritage system. Significant wildlife habitat is an area where plants, animals and other organisms live and find adequate amounts of food, shelter, water and space needed to sustain their populations. All plants and animals have individual habitat requirements, which vary for different periods in their life cycles. Specific wildlife habitats of concern may include areas where species concentrate at a vulnerable point in their life cycle, and areas, which are important to migratory or nonmigratory species. An example of this includes Deer Wintering Areas, which are identified on Schedule D to this Plan.

The following policies apply to Significant Wildlife Habitat:

1. Significant Wildlife Habitat is to be screened for an assessed in accordance with the Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (M.N.R.F. 2015) as may be amended from time to time.
2. Significant Wildlife Habitat is generally not mapped on Schedules to the Plan, with the exception of Deer Wintering Areas.
3. A screening assessment for Significant Wildlife Habitat is to be completed to determine potential presence of this feature type in accordance with Section D.7.

#### **D.4.(b)5.1 Deer Wintering Areas**

The following policies apply to Deer Wintering Areas:

1. Deer populations provide a broad range of economic, social and cultural benefits to Manitoulin Island residents. These include both direct benefits (e.g. hunting, viewing, tourism) and indirect benefits (e.g. contributions to biodiversity, bequest to following generations). It is the intent of the Planning Board to conserve important Core Deer Yards as part of the natural ecology of Manitoulin. Core deer yard boundaries are shown on Schedule D of this Plan.
2. Core deer yards consist mainly of coniferous trees (pines, hemlock, cedar, spruce) with a conifer canopy closure of more than 60% and may include interspersed areas of deciduous forest. Core deer yards provide suitable areas of cover, food, and adjacent natural lands. Lands surrounding the core deer yard can be agricultural, or mixed/deciduous forest; however, a core deer yard is predominantly woodland habitat with

minor components of cultural lands. These areas are traditionally used by deer and are absent of barriers to migration to and from the yard itself.

3. Development and site alteration can be beneficial when it maintains cover and provides winter browse. It can be detrimental when excessive amounts of conifer cover are removed or converted to mixed woods or hardwoods. The three most important features of a successful yard are traditional use, cover and browse.

4. Policies aim to be enabling and flexible to allow for local land use planning decisions to address local circumstances and needs, while still contributing to the broader landscape-based deer management needs.

5. In areas identified as Core Deer Yard or adjacent lands, shown on the land use schedules to this Official Plan, and outside of the identified urban areas and village areas, new development or site alteration may be permitted without an Environmental Impact Study provided:

a. The proposed new lots have a minimum 90 metre frontage and 90 metre depth, and vegetation retention is maximized through the use of tools such as a development agreement or a subdivision agreement, miscellaneous notification agreement (and subject to the other policies of this plan). Smaller lot sizes may be considered if through means of an Environmental Impact Study it can be demonstrated that no adverse impact will occur to the habitat or herd.

b. An Environmental Impact Study as set out in Section D-7 will be required for the creation of more than three new lots as a means to determine the extent of conifer habitat to be retained and other mitigation measures. A Township lot as originally surveyed, i.e. 40 hectare lot, may be severed from an entire holding without affecting the three lot limit.

c. Where development is proposed in shoreline areas, coniferous fringe habitat along the shoreline (providing deer browse and shelter habitat) shall be conserved.

6. For development proposals within or adjacent to deer habitat, the Planning Board will require an applicant to provide the following information:

a. a map or sketch indicating the property and the location of the deer habitat on or adjacent to the proposed development and identifying all adjacent land uses;

b. identify existing land use and proposed land use;

c. identify alternative development locations or forms considered;

d. describe the existing forest cover of the area including species, extent of existing forest types etc., including pictures and maps to assist in review of the application;

e. describe other identified natural heritage features or development constraints present on the site;

f. provide any previous habitat assessments or studies that exist;

g. identify the potential impacts of the proposal on key ecological functions including loss of existing conifer cover, food production areas, and linkages;



- h. identify how the identified deer wintering habitat will be protected or enhanced;
  - i. outline the proposed mitigation measures which will be employed to reduce potential impacts to the deer wintering area as a result of the proposed development; and
  - j. specify the net predicted effect of the development and proposed mitigation measures.
7. Where requested to be completed by Planning Board an Environmental Impact Study must be completed by a qualified professional, the cost of which will normally be borne by the applicant. Planning Board may require a peer review of an Environmental Impact Study.
8. An Environmental Impact Study may be required for a planning application, other than new lot creation, for a change in land use to a commercial, industrial, or institutional use where the proposed building coverage and clearing may result in negative impacts to the natural features and their ecological functions.
9. An Environmental Impact Study will be required when a planning application is made for a large scale recreational use (e.g. a golf course, serviced campground, tourist lodge, motor sport track) that will require large scale site alteration, or the large scale removal of the natural vegetation coverage.
10. On existing lots of record, where planning approvals are not required and residential uses permitted, new residential uses do not require the submission of an Environmental Impact Study.

#### **D.4.(b).6 Alvars**

Alvars are naturally open areas of thin or no soils over essentially flat limestone, dolostone, or marble rock, supporting a sparse vegetation cover of mostly shrubs and herbs. Alvars are shown on Schedule D. Policies regarding development and/or site alteration within or on the adjacent lands of Alvars are contained in section D.4(a).10.

#### **D.4(b).7 Areas of Natural and Scientific Interest (ANSI)**

ANSIs are areas of land and water containing natural landscapes or features, which have been identified as having values related to protection, appreciation, scientific study or education. These areas have been identified, mapped, and ranked by the Province. The boundaries of all known ANSIs have been shown on Schedule D. Changes to the boundaries of an ANSI require the approval of the Province.

#### **D.4(b).8 Linkages**

The Natural Heritage System intends to protect the ecological function of Natural Heritage Features and Areas by ensuring connectivity between identified features. This connectivity is meant to ensure that hydrological and ecological function is preserved, to allow the free movement of wildlife, and to limit landscape fragmentation.

The mapping of linkages on the Schedules is general in nature and is meant to recognize and highlight connectivity in the landscape. Linkages currently identified in the schedules include:

- Water courses connecting Coastal Wetlands to Lake Huron, to a distance of 50 metres from the bank of the stream;
- Water courses connecting areas of identified Fish Habitat, to a distance of 50 metres from the bank of the stream, or in the case of meandering streams, the line from which the adjacent lands would be measured as if the stream were designated Fish Habitat, as set out in the *Natural Heritage Reference Manual Second Edition (2010)*;
- Portions of shoreline and lake bed connecting nearby areas of Fish Habitat on a lake
- Areas of natural cover between identified Alvars that occur within the Alvars' adjacent lands distance
- Site Scale Linkages identified in an Environmental Impact Study

Smaller site-scale linkages are intended to provide connection within and between natural heritage features and areas in close proximity. Linkages at the site-level scale, as may be assessed and identified through a site specific study such as an EIS, do not appear on the schedules; however, the policies of this plan continue to apply.

The following policies apply to Linkages in the Natural Heritage System:

1. The mapping of landscape-level Linkages uses the best currently available mapping of the features and areas that make up the NHS. Landscape level linkages will vary in size and shape depending on their habitat types and/or functions. This scale of mapping is general in nature and minor shifts may be permitted when informed by more detailed assessment.
2. Existing uses on lots of record within Linkages will be permitted to continue.
3. Development and Site Alteration for low-intensity uses may be permitted in linkages within this plan if it can be demonstrated through an Ecological Site Assessment (EcoSA) that the development will have no negative impacts on the function of the Linkage, or that the development can be conducted in such a way as to avoid the Linkage altogether. In cases where an EIS is triggered by this assessment, the requirements of Section D.7 shall apply.
4. When considering waiving or scoping an EIS supporting a proposed development within a Linkage, the Board will have consideration for the criteria applied to the Natural Heritage Features for which the Linkage is providing connectivity, and for the nature of the land uses proposed.

5. Smaller site-scale linkages are intended to provide connection within and between natural heritage features and areas in close proximity. Linkages at the site-level scale, as may be assessed and identified through a site specific study such as an EIS, may not appear on the schedules; however, the policies of this plan continue to apply.
6. Development and Site Alteration within site-scale linkages will not be permitted except for portions of naturalized stormwater management facilities or similar infrastructure that does not disrupt the function of the Linkage.