
Grey County Natural Heritage Systems Study

Technical Advisory Committee Meeting #3

Monday, September 21, 2015 – 9:00 a.m.

Grey County Council Chambers

Present: David Stephenson and Katharina Walton, NRSI; Lorelei Jones, MSH; Suzanne Robinson, MNRF; Judy Rhodes-Munk, NEC; Dave Featherstone, NVCA; Erik Downing SVCA; Andy Sorensen, GSCA; Liz Buckton, Municipality of Meaford; Margaret Potter and John Howard, City of Owen Sound.

County Staff Present: Randy Scherzer, Scott Taylor, Sarah Morrison and Monica Scribner (recording secretary)

Presentation by Katharina Walton, Natural Resource Solutions Inc. (NRSI)

Ms. Walton provided an overview of prior steps taken and then reviewed a number of maps completed as part of the process to date.

- The “all green map” shows all significant natural heritage features; however that map has been refined from the last discussions to focus on priority areas for the natural heritage system.
- As part of the mapping exercise NRSI merged all natural heritage features and reviewed the resulting polygons based on size and connectivity to other features. They then refined the polygons using air photos, the flight video and MNRF mapping.
- Next, interior core habitat was examined using an interior core analysis mapping exercise. The methodology involved using a 300 metre internal buffer, and the resulting areas were considered core habitat. If there was a hole that was less than half a hectare, then it was included in the core. ‘Fingers’ or hedgerows were also generally excluded from the functional boundary of the core. The Core Area boundary is the line 300 metres out from the 300 metre internal buffer line, i.e. the woodland edge without the ‘figures’.
- North of Grey Road 4, all interior core habitats of at least 50 hectares were included as core habitat. Deep interior core that was 10 hectares or greater could

also be included if it was connected to a 50 hectare core. South of Grey Road 4 all deep interior cores of 10 hectares or greater were included as core habitat. Any patch at least 10 hectares within 5 kilometers of the shore was also included as core habitat. Note: although Core Areas were identified based on the size of their deep interior habitat, Core Areas are mapped generally as the entire feature.

- Settlement areas were excluded from this core mapping exercise.
- A graph was created that shows the number of the deep interior polygons by area. Keep in mind they look small on the map but they are actually large areas; most are 50+ hectares in size.
- To map the linkages they looked at connection routes, all existing significant features, and significant valleylands. For the linkages the shortest route was examined, but the linkages are generally based on areas of greatest natural coverage.

Comments

- It may be useful for review to show a map of which new areas or features are being added through the natural heritage systems study process.
- What constitutes a 'connection' for the purposes of this study?
- Some of the current boundaries do appear to go into settlement areas (e.g. Owen Sound and Springmount). Individual feature mapping is still protected in settlement areas even if cores and linkages do not extend into these areas.
- The system and linkages should be mapped based on science and preferred options. In some cases best efforts clauses may be necessary to strive towards the linkages, and where it is not feasible, perhaps alternative linkages could be considered.
- Should there be alternatives to mapped linkages provided in local official plans?
- The hope is to have scientifically defensible corridors shown on the mapping, and not areas where the linkages cannot be scientifically defended.

Presentation by Lorelei Jones, Macaulay Shiomi Howson Ltd.

(MSH)

One of the purposes of the third TAC meeting is to discuss the policy options for moving forward with the implementation of a Natural Heritage System for Grey County. The following information is provided for discussion purposes at the meeting. This letter must be read in conjunction with Maps.

PPS Context

The Provincial Policy Statement (2014) states that:

"2.1.1 Natural features and areas shall be protected for the long term.

2.1.2 The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and

among natural heritage features and areas, surface water features and ground water features.

2.1.3 Natural heritage systems shall be identified in Eco regions 6E & 7E1, recognizing that natural heritage systems will vary in size and form in settlement areas, rural areas, and prime agricultural areas.”

A natural heritage system is defined in the Provincial Policy Statement, 2014 as: “A system made up of natural heritage features and areas, and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems. These systems can include natural heritage features and areas, federal and provincial parks and conservation reserves, other natural heritage features, lands that have been restored or have the potential to be restored to a natural state, areas that support hydrologic functions, and working landscapes that enable ecological functions to continue. The Province has a recommended approach for identifying natural heritage systems, but municipal approaches that achieve or exceed the same objective may also be used.”

The Ministry of Natural Resources and Forestry (MNRF) provides guidance in identification of a natural heritage system in their Natural Heritage Reference Manual. Using this approach, the fundamental components of a natural heritage system consist of cores and linkages. Core areas are generally the building blocks of the natural heritage system and consist of relatively large natural areas which perform important ecological functions, such as provincially significant wetlands and significant woodlands. Cores are identified based on a number of factors including size, integrity, shape, rare species and other significant designations as well as other factors, and in many cases are comprised of clusters of several habitat types. Linkages are components of the natural heritage system that allow movement of wildlife and plant species. In addition, the natural heritage systems approach can encourage the consideration of future natural environment conditions including restoration areas and connectivity, thereby including areas that do not currently contain significant natural features or functions, but by association with the core have the potential to provide substantial ecological benefit.

Highlights of the Current County Policy Approach

- 1. Goals indicate “Respect the natural, cultural and heritage features of the County, including minimizing adverse impacts on the natural environment, protecting significant environmental features, the water quality of various watersheds”*
- 2. Environmental Objectives are provided.*
- 3. Natural Environment policies recognize landscape features and processes.*
- 4. Schedule A Land Use designates hazards lands and provincially significant wetlands.*
- 5. Appendix B maps significant woodlands, other identified wetlands, and provincially significant Earth and Life Science ANSIs in. Policies note that there may be inaccuracies in the mapping. Policies indicate that significant woodlands must be 40 ha in size or larger outside of settlement areas or 4 ha*

- within settlement area boundaries or for overlap with other woodlands, natural heritage features or interior habitat greater than 8 ha*
6. *Appendix A maps special policy areas (Karst).*
 7. *Policies note the attempt to maintain natural linkages between features.*
 8. *Policies define adjacent lands and identify the width based on the type of feature*
 9. *Policies note that nothing is intended to limit the ability of existing agricultural uses to continue*
 10. *Policies address Hazard lands.*
 11. *Policies address provincially significant wetlands,*
 12. *Policies address significant woodlands*
 13. *Policies address special policy areas.*
 14. *Policies address Natural Function which are significant natural areas in the County for which there is no mapping or mapping is incomplete including threatened and endangered species habitat, valleylands and wildlife habitat.*
 15. *Implementation policies identify Environmental Impact Study requirements and indicate none of the natural heritage policies are intended to limit the ability of existing agricultural uses to continue*

Natural Heritage System Policy Options

Option 1

Option 1 as shown on Map A identifies all of the known (mapped) significant natural heritage features in the County. As is obvious from reviewing the map, using these features with the associated buffers as the basis for creating the Natural Heritage System (NHS) means that an extensive portion of the County would be located within the NHS. Although this map indicates all of the natural features in the County that currently have some level of conservation through provincial, county and/or conservation authority policies and regulations, considering further protection of these areas does not appear to be consistent with the County's desire to balance natural heritage protection with the on-going agricultural, recreational/tourism and resource uses within the County, does not focus on conservation of cores and linkages as per the PPS, could exceed the requirements under the PPS for natural heritage protection and may in fact, conflict with the PPS which also seeks to protect prime agricultural areas and mineral aggregate resources. Notwithstanding, it is important to note that regardless of further identification of NHS and development of policies, these areas will receive some level of conservation consideration.

Option 2

Option 2 as shown on Map B identifies potential Core Areas based on analysis of the natural feature mapping assembled during this study. This option assesses the area of natural areas within the County in an attempt to determine the existence of possible large core areas. Option 2 is based on digitized natural features and a GIS rule-set used to identify Core Areas by examining the distribution of core areas of various sizes. This approach is very much affected by the approach to digitizing the features which may not reflect actual ecological viability. It also leaves large areas of the County within the Core of the NHS. This approach does not differentiate between

large sustainable habitats and narrow habitats as delineation is based on GIS rule-sets not ecological principles. Again, in order to address the desire to balance protection of the NHS with the existing on-going uses in the County it becomes difficult to provide a policy framework that achieves that goal without broadening the permitted uses within the Core to an extent that makes the Core less relevant. This approach also makes it impossible to differentiate between narrow, unsustainable habitats and large ecologically sustainable and diverse habitat clusters.

Option 3

Map 3 as shown on Map C identifies Core Areas for the NHS that are based on large natural areas that provide interior habitat conditions. The approach focused on identifying large clusters of habitats and addressed the presence of narrow and fragmented natural areas. The Core Areas are substantially reduced from Map A, but take into account the current natural vegetative cover of the County and thereby focus on natural habitat clusters that are far greater in area than in any other municipality in southern Ontario. The Cores are therefore more appropriate for creating “no-touch” areas that truly protect the natural heritage features given the relatively high natural cover of the County. The Linkages were assessed based on the location of the Cores. The high natural cover of the County, in conjunction with conservation policies and regulations currently in place, provides for a diversity of connections. However, it is essential that connections between the Cores be identified and policies be developed that address them. At the same time, it is important to recognize that given the size of the proposed Cores and Linkages, crossings of these areas either currently exist or may be required in the future. Also given the size of the areas under consideration, the potential broad range of issues and pressures must also be considered.

Draft Policy Approach for the Recommended Option

Based on the three options that were reviewed, it is recommended that Option 3 be utilized. The following Official Plan amendment approach is suggested in order to implement Option 3.

Goals and Objectives

- Modify Goal 3 to reflect that a natural heritage system approach is being used to provide connections between environmental features*
- Modify Environmental objectives by adding the word “restoration” after “maintenance” to the first objective*
- Modify Environmental objectives by adding an objective to maintain the functionality and connectivity of the natural heritage system of the County*

Natural Environment Policies

- Add policies to identify that the natural heritage system is comprised of a connected and integrated system of natural core areas and linkages which provide connectivity and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of*

indigenous species, and ecosystems. A natural heritage system has a greater ability to sustain itself compared with an approach which only protects individual features as it facilitates biodiversity and resiliency. As the natural heritage system provides a range of habitats, it may include areas which are not significant natural features but which are critical to maintaining connectivity. Policies should also recognize that there are many areas that will be conserved by existing provincial, County and Conservation Authority policies/regulations, but that the County Cores/Linkages are to be provided extra consideration/protection/restoration.

- *Provide policies indicating that NHS is focused on the rural areas.*

Core Areas

- *Core Areas are to be designated on Schedule A Land Use*
- *Provide a definition of Cores Areas which identifies that they are large, sustainable habitat clusters; the building blocks of natural heritage systems. Core areas are capable of providing and sustaining ecological functions and may be comprised of a mix of ecosystem types.*
- *Provide policy that requires Core areas to be identified / designated in the local Official Plan.*

The boundaries of Core areas may be refined in the local Official Plan based on criteria for identifying the core area boundaries at a site specific level and the area of Core can be expanded but cannot be reduced. Gaps within the Core would be preferred sites for restoration and inclusion into the Core if current, non-natural uses discontinue.
- *Provide policy that development and site alteration are prohibited in Core areas except for:*
 - *conservation and flood control projects,*
 - *forest, fish and wildlife management,*
 - *essential infrastructure,*
 - *passive recreation,*
 - *legally existing uses, buildings and structures, and*
 - *accessory uses, buildings and structures.*
 - *Minor expansion of legally existing uses, buildings, or structures may be permitted outside of provincially significant wetlands, if an EIS can demonstrate no significant incremental or cumulative impacts on the land forms, features, or ecological function of the Core area.*
 - *The intent of the Core is to protect the very large natural areas in the County while recognizing continued private use and encouraging landowners to continue to protect and manage these lands.*
 - *Cores should have a 120 m adjacent land zone with policies that reflect the PPS definition of adjacent lands. Development proposed within the 120 adjacent land zone will be required to undertake an EIS which will recognize the need to assess the natural features that fall inside the adjacent lands and/or extend beyond the adjacent lands and in some cases, these adjacent land zones would include existing land uses and may cutoff portions of existing natural features.*

Linkages

- *Linkages are to be shown on Schedule A.*
- *The establishment of Linkages are based on several factors including:*
 - *Shortest distance between core areas*
 - *Area of greatest natural cover (terrestrial and/or aquatic; areas of deep interior habitat considered)*
- *Provide a definition of Linkages that they are components of natural heritage systems and are designed to provide movement corridors for both plants and animals between core areas to provide and protect biodiversity and the long-term viability of ecological systems. Linkages are ecologically functional, with a width of at least 200 m in Grey County. Linkages are delineated within the NHS as the closest distance between cores, while providing the most habitats (i.e. natural heritage features).*
- *The boundaries of Linkages can be refined in the local Official Plan but must meet the definition/ criteria.*
- *Provide policy that development and site alteration are prohibited in Linkages except for:*
 - *conservation and flood control projects*
 - *forest, fish and wildlife management*
 - *essential infrastructure*
 - *passive recreation*
 - *sustainable forestry?*
 - *agricultural uses including new buildings and structures?*
 - *mineral aggregate operations or wayside pits and quarries?*
 - *legally existing uses, buildings and structures, and*
 - *accessory uses, buildings and structures.*
- *Expansion of legally existing uses, buildings, or structures may be permitted outside of provincially significant wetlands, if an EIS can demonstrate no significant incremental or cumulative impacts on the land forms, features, or ecological function of the Linkage area.*
- *Development proposed within the Linkage will be required to undertake an EIS.*
- *The intent of Linkages is to provide for connectivity within the NHS while recognizing continued private use and encouraging landowners to continue to protect and manage these lands.*
- *Crossing of Linkages (e.g. for roads, utilities, buildings) should be minimized and context sensitive design as well as eco-passages need to be considered.*
- *Where Core areas are within 240 m of each other, they will be considered to be one Core and a connection of at least 300 m wide should be provided.*

Natural Heritage Features

- *Existing Hazard Land designations to remain on Schedule A Land Use*
- *Provincially Significant Wetland designations not included in the Core Area to remain on Schedule A Land Use*
- *A Map similar to Map A showing all natural heritage features to be provided in the appendices.*

- *Modify the existing Natural Function policies to be called Natural Heritage Features.*
- *Modify Natural Function policy (1) to indicate there is insufficient information available and the scale of the study too broad, to definitively establish the boundaries of the natural heritage features. Therefore, the policies of the Plan require that where development is proposed within (except for wetlands) or adjacent to a natural heritage feature, the ultimate boundary will be determined through more detailed studies based on a range of criteria including the provision of appropriate buffers. For a site specific application, the boundary will be determined through submission of an Environmental Impact Study (EIS) where the site is located within 120 metres of any part of the natural heritage feature.*
- *Provide policy that indicates the local municipality may also carry out a more detailed municipal wide or area specific natural heritage study and refine the boundaries of the natural heritage features. Local mapping may be more restrictive but not less so.*
- *Buffer widths are recommended as 30 m from all natural heritage features that are within the NHS unless an EIS identifies a larger buffer is required.*

Areas for additional discussion

- *Should new single detached dwelling be permitted on an existing lot of record in the Core Area if the zoning would have permitted the dwelling on the date the OPA was adopted subject to an EIS to determine the most appropriate location for the dwelling?"*

Comments on the Policy Options

- If we have core areas and linkages in our Official Plan how does this get implemented at the local level? Would these areas be included in local zoning by-laws? Currently a number of the County's mapped natural heritage features are Official Plan level constraints and are not zoned. We need to be careful not to get to a point where any minor work on a property would require an EIS.
- There needs to be some clear exemptions on what development is permitted in core areas and linkages, whether it be alterations to an existing use/structure, or new development on a vacant lot of record. Within these exemptions we also need to define when an EIS is required and when it may be able to be waived.
- There is merit in showing the cores and linkages on schedule A so you get the whole picture, but could identify it as an overlay so you can permit/not permit for implementation and updating zoning by-laws purposes.
- A scoped-EIS procedure should also be created for more streamlined approvals for more minor applications.
- If we are going to have more restrictive policies within cores, could there be some less restrictive provisions outside of the core areas? Such an approach may help strike a balanced approach, while highlighting the importance of the cores.

- Currently people get frustrated that they have to do an EIS for minor works (e.g. for building a house in the adjacent lands to woodlands).
- It is important to protect the ANSI. It appears some ANSI boundaries are included within the cores, while other parts of the ANSI are not. If you cut off the boundaries, would that affect the ANSI, and take away from why it was mapped in the first place?
- Although an individual feature boundary may be 'cut' for the purposes of determining the core, the entire individual feature will still have protection as an individual feature, and the portion within the core will simply have that added protection.
- If we do not have a lot of scientific data on the cores themselves, it may make determining the parameters of an EIS difficult. Scoping the EIS could also become difficult in this regard. The cores which overlap public lands may already be studied and have a good level of background information about them.
- Looking at the individual appendix maps will still show the boundaries for each natural heritage feature which will aide in the background for EIS's in this regard.
- Huron County stopped at the "all green map" and went with the features that are mapped. This may not be an appropriate approach for Grey.
- We need to make sure the policy language is clean and easy to interpret.
- Is there anything new being protected and how much more is being protected? Can a map be created to show what is new versus what currently exists?
- Will the Municipalities be required to include the NHS mapping in their zoning by-law?
- Could a map be created for information purpose that removes lands that are in public ownership, to determine what would be left? There is a large land base in public ownership that will not be developed.
- A similar map could be created for those lands Identified which are proposed to have a higher level of protection.
- Could look at it as a two-tiered approach wherein the lands shown on the land use schedules could be no development, whereas lands shown on appendices would be a 'maybe' subject to further screening or an EIS.
- Should the cores include all Provincially Significant Wetlands (PSWs) instead of 'cutting' some, or is this covered off by having PSWs already shown on schedule A?
- Sometimes ground-truthing, or on-site inspection is key for determining the studies or level of study needed. It may even be possible to use a drone to investigate an area looking at a species in hard to reach areas.
- Concern that we have to be careful when putting things in a policy. It may undercut all our linkages and handcuff us to the policy. The example of two species close to area but who do not need the linkage was brought up.
- Oak Ridges Moraine linkages are 600m wide. We are not suggesting that large of a linkage because the Core Areas will be self-sustaining; linkages will provide for wildlife movement between Core Areas.

- Perhaps the policies for the linkages could be about education, promoting restoration, and strengthening of the linkages; rather than taking a 'big-stick' type approach.
- NRSI has provided so much information it should be available to all of the people involved for review i.e. such Municipal staff can go out and see if an EIS is needed.
- Where the cores do not follow a feature boundary, this may cause confusion. Is it possible to round out the core to follow the features?
- The way the "all green map" is presented is important. It would be best to use positive messaging like "look at all the green; we have so much great land" etc.
- The little bits outside of the significant woodlands are causing us the most issues e.g. hedgerows and thin slivers of woodlands. Can we remove these areas from the layers as part of this process or refine later?

Next Steps

- With respect to individual landowner requests for site visits, the overall feeling from the group is that this may be beyond the scope of this study. Agencies such as the Conservation Authorities and the Ministry of Natural Resources and Forestry could also help answer questions on this one, once the study is more substantially completed or through the implementation.
- NRSI and MSH staff will take the input from today and address the issues.
- All TAC members to send Katharina comments as quickly as possible (preferably by end of October) by email or phone. Please let her know if you agree with the approach, policy direction comments and overall core linkages comments.
- Information will be shared with Municipalities and Councils to allow them a chance to comment before and after the next open houses. Including the period before and after the open houses a two month comment period would be appropriate.
- All maps and the presentation will be put on the Portal by Katharina.
- NHSS policy recommendations will also be shared.
- Open Houses and receive public input.
- Finalize report
- Presentation to Planning and Community Development Committee
- Presentation to County Council
- Future Official Plan Amendment to the County Plan to implement the results.

Meeting adjourned