



# Natural Heritage System Strategy for the Credit River Watershed Phases 3 and 4: Credit River Watershed Natural Heritage System methodology and implementation recommendations

## Frequently Asked Questions

### 1. What is a Natural Heritage System?

- A natural heritage system is defined by the Province of Ontario 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 objectives may also be used” (Provincial Policy Statement 2014).
- A natural heritage system (or NHS) is made up of areas that are owned and/or managed by a variety of public agencies such as provincial ministries, municipalities and conservation authorities. It is also owned or managed by private landowners such as agricultural producers, commercial and recreational operators.
- Systems-based planning recognizes that natural features linked by proximity or by stream and valley corridors within a properly designed NHS are more likely to function over the long term than those that are more fragmented.

### 2. Why are Natural Heritage Systems important?

- An NHS typically includes natural features such as woodlands, wetlands, watercourses and valleylands that provide society with ecosystem services that are life sustaining or improve quality of life. These include a clean and reliable supply of groundwater and surface water; flood moderation; erosion control; moderation of air quality; pollination services; genetic resources for food, medicine, fibre or other products; and recreation opportunities.
- An NHS helps Credit Valley Conservation (CVC), its partners and the public protect, restore and enhance the health of the watershed’s features and functions.



- The importance of NHS development to sustain well-being and quality of life is recognized by the province and municipalities through guidance and strategies.

### **3. Why are we developing the Credit River Watershed Natural Heritage System (CRWNHS, abbreviated to NHS)?**

We are developing the Credit River Watershed Natural Heritage System (CRWNHS or NHS) for several reasons including the following:

- To protect, restore, and enhance the ecological integrity of the Credit River watershed's natural features, functions and systems; and to protect and enhance the quantity and quality of surface and ground water for environmental and human uses.
- To support and inform CVC land securement, restoration, stewardship, education, and inventory programs.
- To help CVC provide technical advice related to ongoing strategies, plans and applications ranging from the provincial scale (e.g., implementation of Ontario's Biodiversity Strategy) to the local scale (e.g., technical advice when land use change is proposed).

### **4. What is included in the NHS?**

- The NHS is made up of three components: (1) *natural heritage features*, (2) their *buffers*, and (3) *natural heritage areas*. Thresholds for identifying these features are based on current science in landscape ecology. They are informed by local data and an analysis of current conditions in the watershed.
  - (1) *Natural heritage features* include valleylands, wetlands, woodlands, aquatic habitat, Lake Ontario shoreline, significant wildlife habitat, and habitat of endangered species and threatened species that provide important ecological functions in the watershed.
  - (2) Minimum *buffers* have been applied to specific valleylands, wetlands, woodlands and aquatic habitat based on current science, and are to be applied on other natural heritage features as needed upon evaluation. Buffers help to reduce the impacts of adjoining land uses on the ecological function of natural heritage features.
  - (3) *Natural heritage areas* are Centres for Biodiversity. A total of 11 *Centres for Biodiversity* have been identified in the watershed. These areas contain concentrations of high quality natural heritage features as well as areas with non-natural land uses that provide some ecological function due to their location in the system. Collectively, these areas are important for supporting native biodiversity in the watershed over the long term.



- Together, *natural heritage features, their buffers, and natural heritage areas* make up the NHS. They are essential to manage jointly and collaboratively for the long-term function and resilience of the watershed's health.
- The system is predominantly made up of lands that are natural or semi-natural features, such as forests, wetlands, watercourses and water bodies and meadows. The system also includes some other lands, however, such as those under active agricultural use and urban open spaces (e.g. manicured parks) that are not natural. These provide important supportive functions in the natural heritage system because they allow for species movement or feeding, or allow for infiltration of water. These are part of the system. They are identified as "enhancement areas" because they are considered priorities for stewardship best management practices or for ecological restoration in the Credit River watershed, based on landowner interest and feasibility.

## **5. Why develop the NHS when there are already a number of provincial and municipal plans and policies that protect much of the natural heritage in the watershed?**

- Having a common NHS across the watershed will allow CVC to take a more science-based, transparent and consistent approach to watershed planning, greenlands securement, and advisory plan review and input. The NHS will allow plans and strategies to be evaluated within the context of watershed health.
- Having a common approach will also allow CVC to take a more science-based, transparent and consistent approach to providing municipalities with guidance in developing or refining their NHSs.
- For effective implementation, natural heritage systems should be developed at different scales – including provincial (e.g. Ontario's Greenbelt), watershed (this plan), regional (e.g. Region of Peel Greenlands), and local scales (e.g. City of Mississauga Natural Heritage System). Natural heritage systems designed at different scales should complement one another, but will not be identical. That is because the requirements for protecting features and functions may differ at different scales of planning. The NHS builds upon existing regional connections within the Greenbelt Plan Area, with a focus on enhancing watershed health.
- A watershed approach to planning is promoted by the province. It represents the basis upon which conservation authorities (CAs) manage natural resources and is the direction CAs are taking elsewhere in the Greater Toronto Area to protect watershed features and functions.



## 6. What does the NHS mean for local landowners and residents?

- The NHS contributes to the health and well-being of the watershed's residents over the short and long term by making important contributions to surface and ground water quality, flood control, erosion control, air quality, pollination services, natural pest control, genetic resources, property values and quality of life, health and well-being.
- The NHS is made up of a variety of land use types. Some of the lands may be actively used for other purposes such as agriculture, forest management, urban areas and open spaces such as golf courses and manicured parks. Including these lands recognizes their value in supporting distinct but equally important purposes. These lands provide ecological functions (such as water supply, movement or feeding habitat) as well as current and approved practices and uses. This approach is consistent with the current provincial direction provided in the Provincial Policy Statement, where the definition of a system can include "...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 NHS uses a science-based approach to identify non-natural lands that are priorities for best management practices as well as voluntary stewardship programs that would make the greatest contributions to helping improve and manage water quality and water supply, and to support local biodiversity.
- The NHS contributes to reducing risks associated with climate change and helps inform mitigation and adaptation opportunities.

## 7. How is the NHS expected to be applied in practice?

- Through implementation, we will work with our public sector partners to identify similar opportunities for maintaining and improving water quality, water quantity, and biodiversity in the watershed. This will include helping municipalities develop, refine and implement NHS objectives that are consistent with their various land uses.
- During implementation, we look forward to working with interested private landowners and agencies or non-governmental organizations whose lands are identified within the NHS. We hope to collaborate so we can balance or improve existing livelihood needs. This will include opportunities for maintaining and improving water quality and water quantity locally and downstream, and supporting biodiversity in the watershed.
- Notably, NHS mapping may be refined through local level studies, such as subwatershed studies, secondary plans or block plans or site plan applications. Mapping may also be modified as appropriate, to incorporate new information or more detailed information as it becomes available.



## 8. Is there a plan that describes how CVC will use the NHS?

- CVC has produced a draft report, *Phase 4: Recommendations for Implementation*, that outlines how CVC will use the NHS to guide core programs.
- Recommended actions in the report outline how CVC will use the NHS in a variety of areas, including: protection, land planning and management, water management, inventory, monitoring, applied science, restoration, and stewardship.
- The report also outlines important management strategies to help ecosystems adapt to stresses including climate change.

## 9. What are the next steps?

- CVC has already begun implementing the NHS through updates of its land securement, restoration and stewardship, inventory, and planning and development services programs. CVC has also developed a set of example policies to help inform future stakeholder discussions about CVC planning policy and potential updates.
- CVC will continue to work through municipal and agency partners to implement the NHS.
- The CVC Natural Heritage System Strategy, including the NHS methodology and recommendations for implementation, will be taken to the CVC Board of Directors for approval following final publication of reports. This is anticipated timeline by the end of 2015.

## 10. Where can you find more information?

- See the Natural Heritage System Strategy page on CVC's website:  
<http://www.creditvalleyca.ca/watershed-science/our-watershed/natural-heritage-system-strategy/>
- Contact Yvette Roy at [yroy@creditvalleyca.ca](mailto:yroy@creditvalleyca.ca) tel. 905-670-1615 ext. 412.