

Fact Sheet

Ministry of Natural Resources

April 2011

GRAHAM LAKE HILL

*Earth Science
Area of Natural and Scientific Interest (ANSI)*

PART 1 - Areas of Natural and Scientific Interest (ANSI)

1. What is an Area of Natural and Scientific Interest (ANSI)?

Areas of Natural and Scientific Interest (ANSIs) are areas of land and water containing natural landscapes or features which the Ministry of Natural Resources (MNR) has identified as having values important for natural heritage protection, scientific study, or education. Each ANSI is identified as a life science and/or earth science site depending on the natural heritage values.

Life science ANSIs are significant representative segments of Ontario's biodiversity and natural landscapes. They include specific types of forests, valleys, prairies, and wetlands, their native plants and animals, and their supporting environments. Life science ANSIs contain relatively undisturbed vegetation and landforms, and their associated species and communities. Provincially significant life science ANSIs include the most significant and best examples of the natural heritage features in the province and many include other significant features and areas such as wetlands, valley lands, and woodlands.

Earth Science ANSIs contains natural heritage values that are representative of the province's geological diversity and natural landscapes. Exposed bedrock locations, geological formations such as a fossil bed and landforms, and the processes creating them can represent these natural heritage values.

2. What is the purpose of identifying an ANSI?

ANSI's are one component of Ontario's Natural Heritage Program. They contribute to Ontario's natural heritage goals by identifying and protecting provincially significant examples of the natural landscapes and elements of Ontario's biodiversity. The ministry undertakes province-wide surveys of natural areas to identify a series of sites which represent the full diversity of natural landforms, environments, and biological communities in Ontario.

The Ministry of Natural Resources (MNR) has the lead in identifying ANSIs. For those ANSIs located on private land, MNR encourages landowners, municipalities and other agencies to practice good stewardship and management by providing information, education and other protection strategies.

So far, more than 600 ANSIs have been identified across the province.

3. How is an ANSI identified?

The identification of ANSIs is intended to encourage the protection of a system of natural heritage areas representative of Ontario's natural diversity. This process began in the 1970s as a response to the widespread loss of natural areas and international efforts to undertake systematic, comparative surveys of significant natural areas, and work towards their conservation.

Areas of Natural and Scientific Interest are selected by MNR to include sites which represent the full spectrum of Ontario's natural diversity. Studies are conducted on ecologically defined regions of the province to identify candidate sites. Gap analysis (using digital map comparison) is used to compare sites with similar features within ecologically defined regions (ecodistricts). The sites with similar features are compared and the most significant are selected, based on the best available information. Evaluations and recommendations are reviewed by other knowledgeable professionals and academics, non- government organizations, local experts, and MNR staff. Geological theme studies are conducted to identify the most representative earth science sites.

Life science ANSIs are selected using the following criteria: representation, diversity, condition, ecological consideration, and special features. For earth science ANSIs the following selection criteria are used: representation, type sections and related features, diversity, condition, life science values, and special features

Once a site is identified as a candidate site, it is evaluated and confirmed through a process called an 'ANSI Confirmation Procedure'. The criteria used to evaluate ANSIs are based on a scientific framework with the evaluation carried out by knowledgeable academics and professionals from both the public and non-public sectors.

4. What is a provincially significant ANSI?

Once an ANSI is confirmed through MNR's ANSI Confirmation Procedure, or if was confirmed through a previous approved process, it is called a "provincially significant ANSI".

Only provincially significant ANSIs are considered to be of provincial interest and have status under the Provincial Policy Statement (S. 2.1.4). 'Regionally' significant and 'locally' significant ANSIs identified in the past, do not have this status but may be protected by municipal policies. MNR will provide what information it has on 'regionally' and 'locally' significant ANSIs and encourage good stewardship by the parties concerned.

PART 2 – Graham Lake Hill ANSI

1. What is the Graham Lake Hill ANSI?

Graham Lake Hill is an elongate ridge of unconsolidated glacial sediment related to the remnants of glacial spillway deposits and activities in the North Bay area. These spillways served to drain glacial Lake Algonquin near the end of its existence. Some notable features include terraces and bluffs cut into the sides of the spillway deposit. The glacial history of Graham Lake Hill is strongly tied to the Genesee Moraine which abuts its southeast corner, and the Genesee Outlet, which fronts both of these features.

2. When was the Graham Lake Hill ANSI identified?

Graham Lake Hill site was originally recommended as a potential area to represent post-Algonquin shorelines in a reconnaissance aerial photo study conducted in 1988. More detailed evaluations of the site's features using modern air photographs and satellite imagery were conducted in Summer 2010 which helped refine the features and define a better candidate ANSI boundary; however, further field work is still required.

3. Why is this particular ANSI significant?

Graham Lake Hill is located in an area that was impacted by a number of intensive glacial events that occurred in relatively rapid succession over a very small area. The features occurring at this site, in combination with the adjacent Genesee Moraine and the Genesee and Fossmill Outlets have played a significant role in unravelling the chronology of events that occurred during the roughly 1,000 year period (11,000 to 10,000 B.P.) that represents the sequence of falling post-Algonquin lake levels. The site is therefore considered to be provincially significant.

PART 3 - ANSIs, Landuse Planning and Development

1. How is an ANSI recognized in land use planning?

The Provincial Policy Statement (PPS) (2005), issued under Section 3 of the Ontario Planning Act, provides direction on matters of provincial interest related to land use planning. ANSIs that have been confirmed as provincially significant are considered a matter of provincial interest in section 2.1.4 of the PPS. The Planning Act requires that planning authorities, in exercising any authority that affects planning matters, "shall be consistent with" the PPS.

The MNR informs municipalities about the location and significance of ANSIs. Municipalities are encouraged to protect ANSIs through appropriate policies and designations in official plans, and through appropriate zoning by-laws. At the request of municipalities, MNR may provide advice, guidelines and technical information to municipalities on evaluating the effects that proposed land uses could have on ANSI natural heritage values.

MNR does not provide comments on specific planning applications directly to municipalities or proponents. Formal provincial reviews of planning applications that

effect ANSIs are coordinated through the Ministry of Municipal Affairs and Housing according to the provincial One-window Planning System.

2. How are development proposals within an ANSI evaluated?

Section 2.1.4 of the PPS states that development and site alteration may be permitted in, or on lands adjacent to, a provincially significant ANSI if it has been demonstrated that there will be no negative impacts on the ANSIs natural features or the ecological functions.

To demonstrate that a planning proposal will have no negative impacts, a planning authority would normally require an Impact Assessment or Environmental Impact Study. The Impact Assessment can show how impacts to natural heritage values will be minimized or eliminated with consideration of the landowners needs.

3. What activities are considered appropriate to maintaining the natural values of an ANSI?

The Ministry of Natural Resources encourages ecologically sensitive land uses that do not have detrimental impacts on the natural heritage features for which the ANSI was chosen. In general terms, it has been the management by private and public owners that has maintained the present natural values of ANSIs. However, some changes to current land uses could enhance the natural values of a property, while other changes may be undesirable. Particular land use activities adopted by a landowner to conserve a site should be based on the particular characteristics and sensitivity of individual properties.

In life science ANSIs, or portions thereof, appropriate activities can include wildlife viewing, fishing, hunting, trapping, compatible forest management, and some trail uses. Forest management activities should be carefully planned prior to implementation to ensure that ANSI values will be maintained or enhanced. Activities that could impact the integrity of a life science ANSI include land clearing, cattle grazing, incompatible forestry practices, housing developments, gravel or peat extraction, quarrying, and indiscriminate all-terrain vehicle use.

Earth science ANSIs can normally sustain more intensive land uses than life science ANSIs, such as agriculture and more intensive forest management practices. Activities that could impact the integrity of an Earth Science ANSI include aggregate extraction and housing developments requiring extensive re-contouring of the landscape. In general, appropriate activities for Earth Science ANSIs are those that conserve the topography, geological exposures, or other features and processes.

Decisions on the appropriate levels of protection and appropriate land uses for an identified ANSI are the responsibility of municipalities under authority of the Planning Act.

At the request of municipalities, MNR staff may provide information, advice and guidelines in areas such as appropriate natural heritage policies, mapping, specific information on natural heritage values, and approaches to evaluating impacts.

4. What help is available to landowners who want to protect and /or learn more about ANSI values on their properties?

The natural heritage values of each ANSI often exist because of careful stewardship by private landowners. In the case of most life science sites, allowing the property to remain in as undisturbed a state as possible is the best way to ensure the values of the ANSI are retained. With earth science sites, activities which do not significantly change the land surface will not normally affect the ANSI values.

Ministry of Natural Resources staff has information on the ANSI program in general and on each ANSI specifically. They can provide advice and natural heritage information to landowners upon request.

If you own a property within a provincially significant ANSI, you may be eligible for reduced taxes through MNR's Conservation Land Tax Incentive Program (CLTIP).

PART 4 – MNR's Conservation Land Tax Incentive Program

1. What is the Conservation Land Tax Incentive Program (CLTIP)?

The purpose of the CLTIP is to recognize, encourage and support the long term private stewardship of Ontario's provincially significant conservation lands by providing property tax relief to those landowners who agree to protect the natural heritage values of their property. In exchange for property tax relief, landowners agree not to undertake activities that will degrade, damage, destroy or result in the loss of the natural values of the site.

Eligible lands placed under CLTIP receive a 100% property tax exemption for that portion of the property that meets the CLTIP criteria.

The CLTIP is subject to regulations made under the Assessment Act in effect for the current taxation year.

2. Where can you find out more information about the CLTIP – eligibility, applying, etc.?

Each year MNR puts out the *Guide to the Conservation Land Tax Incentive Program (CLTIP)* which is available from your local ministry office. This office can also provide information on the identification and protection of the conservation land you own.

The CLTIP identifies and sends application packages to eligible landowners annually (in late spring). Once the boundary of an ANSI has been confirmed by district staff, the information is forwarded to the CLTIP; property information is identified and included in the next mailing which applies to the following tax year. If you do not receive an application, you should contact the CLTIP. The application deadline is July 31 for the next tax year.

For general information about the CLTIP and how to apply, contact the CLTIP Info-line at 1-800-268-8959 or visit the Website at:

www.mnr.gov.on.ca/en/Business/CLTIP/index.html

3. Are provincially significant ANSIs considered as eligible conservation lands?

Yes, landowners who have property with provincially significant ANSI are eligible for the CLTIP. Each year, eligible landowners are sent a program application; those who agree to the terms of the program and return the application by the regulated deadline receive property tax relief on their conservation land the following year. After the deadline, participating landowner information is submitted to the Municipal Property Assessment Corporation (MPAC), who assesses the property value of the conservation land, marks it as tax exempt, and forwards the property information to the local municipality for adjustment on the following year's tax notice. (Note that from 1988-1998, the program was known as the Conservation Land Tax Reduction Program, CLTRP).

4. What activities are allowed within the ANSI if I participate under the CLTIP?

The purpose of the CLTIP is to promote the good stewardship and conservation of provincially important natural heritage features, and to alleviate the tax burden associated with protecting these lands. Under the program, landowners agree not to undertake any activities that will degrade, damage, destroy or remove the natural or earth science values for which the site was originally identified. Low impact activities that do not affect the essential landform features are permitted. In the Graham Lake Hill ANSI low impact activities such as agricultural practices and recreational uses are permitted. Activities that significantly alter the natural landscape features, such as aggregate extraction, estate lot subdivision development (but not necessarily single lot development) are not compatible with the objectives under the CLTIP.

Landowners with questions about permissible activities should contact the CLTIP before starting. Activities undertaken, not consistent with the terms and conditions of the Program, will forfeit the property's eligibility. The tax exempt status would be removed and full taxes would apply again. For more information, please contact Conservation Land Tax Incentive Program staff at 1-800-268-8959, email cltip-info.mnr@ontario.ca

PART 5 – Property Values and Impacts to Landowners

1. Will the identification of a property as an ANSI affect its property value?

A property identified as an ANSI will always be viewed favourably by some and with reservation by others. Identifying a property as an ANSI may make it more valuable to some people in the sense that it represents a significant, special, or unique piece of Ontario's natural heritage, and is eligible for property tax exemptions. This may be reflected in higher real estate values in some areas. In other areas, real estate values may be decreased or unaffected, depending on the property zoning and designation in planning documents. The permitted land uses, which can affect property values, are governed by the designation and zoning of the property in municipal planning documents.

2. Will the ANSI evaluation process result in my land becoming part of the ANSI / removed from the ANSI and change my status under CLTIP?

Areas of Natural and Scientific Interest are identified and mapped by the Ministry of Natural Resources using the best scientific information available at the time. Their boundaries or status may be revised in light of new information.

Properties may be added to or removed from an ANSI if it can be shown to MNR's satisfaction that the property adds to or does not add to the values of the ANSI. Changes must have some basis in a scientific or technical review of the individual property in question, relative to the remainder of the ANSI and the site district or geological context. If the ministry changes an ANSI boundary, the appropriate changes will be made to the eligibility of the property under the Conservation Land Tax Incentive Program.

3. Have all landowners been informed that they own part of any ANSI?

All landowners of provincially significant ANSIs are notified that they own conservation lands and are eligible for the Conservation Land Tax Incentive Program (CLTIP). Any exceptions would pertain to landowners of newly identified ANSIs or new landowners of existing ANSIs who have not yet been notified. For established ANSI's, notification takes place on an annual basis through the CLTIP application process and, for newly identified ANSIs, initially through the district MNR office.

4. Will the ANSI evaluation result in restrictions on what a landowner can do with their land?

The ANSI Confirmation Procedure is a science-based approach that evaluates ANSIs only on the merits of the area's features and functions. It does not address the potential social, economic or resource management issues. These issues are dealt with by the municipality through their Official Plan policies and zoning by-laws.

The ministry encourages landowners who have significant natural areas and features on their property to practice good stewardship. The MNR can help landowners with their stewardship efforts by providing information, education and financial incentives through programs such as the CLTIP and the Community Fish and Wildlife Improvement Program.