



Subject: Identification and Confirmation Procedure for Areas of Natural and Scientific Interest		Procedure No. PM 11.08	Revised <input checked="" type="checkbox"/>
Compiled by – Branch Ontario Parks	Section Planning & Research	Date Issued August 13, 2008	
Replaces Directive Title ANSI 2000	Number	Date April 14, 2000	Page 1 of 13

Purpose

The Areas of Natural and Scientific Interest (ANSI) Identification and Confirmation Procedure ensures:

- a consistent approach across Ontario for
 - identifying ANSIs;
 - confirming the status and boundaries of candidate and new ANSIs; and
 - modifying and removing ANSIs;
- timely and appropriate contact with affected landowners, municipalities, or other effected interests;
- that roles and responsibilities within the Ministry of Natural Resources (MNR) regarding the ANSI process are clearly defined.

The key functions of the identification and confirmation process are the collection, interpretation and review of scientific information on the significance of each ANSI, identification of ANSI boundaries, notification of planning authorities and landowners and securing required approval.

Provincially significant ANSIs designated prior to the confirmation procedure continue to remain in effect.

Definitions

Areas of Natural and Scientific Interest (ANSIs) are areas of land and/or water containing natural landscapes or features which have been identified as having life science or earth science (or both) values related to natural heritage protection, scientific study or education. ANSIs vary in their type and level of significance.

There are two kinds of ANSIs:

- **Earth Science ANSIs** are geological in nature and consist of some of the most significant representative examples of the bedrock, fossil and landforms in Ontario and include examples of ongoing geological processes¹.

¹ Ontario Ministry of Natural Resources. 1992. Areas of Natural and Scientific Interest. Queen's Printer for Ontario.

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- **Life Science ANSIs** are significant representative segments of Ontario's biodiversity and natural landscapes including specific types of forests, valleys, prairies and wetlands, their native plants and animals and their supportive environments. They contain relatively undisturbed vegetation and landforms and their associated species and communities².

Five selection criteria, which are similar for both life and earth science ANSIs, are used to evaluate candidate ANSIs^{3,4}:

1. **Representation** - of geological themes or landform-vegetation features of an ecodistrict;
2. **Condition** - existing and past land uses are used to assess the degree of human-induced disturbances;
3. **Diversity** - the number of high quality, representative features that exist within a site are assessed;
4. **Other ecological considerations** - ecological and hydrological functions, connectivity, size, shape, proximity to other important areas, etc.
5. **Special features** - such as populations of species at risk, special habitats, unusual geological or life science features and educational or scientific value.

Provincially Significant ANSIs are sites selected on a systematic basis (using the above criteria) and contribute to the representation of the natural features and landscapes of Ontario.

- Life Science ANSIs contain the best examples of the landform/vegetation features of a particular ecodistrict
- Earth Science ANSIs contain the best examples of earth science features for an environmental theme.

Since 1996, provincially significant ANSIs have been afforded protection under the Planning Act and Natural Heritage policies of the Provincial Policy Statement (PPS⁵) as well as the Greenbelt Plan⁶; the Oak Ridges Moraine Conservation Plan⁷ and the Niagara Escarpment Plan⁸.

Regionally Significant ANSIs are the “next best” natural areas that also meet the five evaluation criteria. They are afforded protection in some parts of the province (e.g., under the Niagara Escarpment Plan; the Oak Ridges Moraine Conservation Plan; Greenbelt Plan or in some Municipal official plans).

Locally Significant ANSIs contain representative vegetation-landform features that meet many of the evaluation criteria for provincial or regional significance, but are adequately represented elsewhere in the province or region. These sites may provide life science or earth science values related to interpretation and/or education.

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Candidate ANSIs^a are areas of natural and scientific interest that have been identified and recommended for protection by MNR or other sources but have not been formally confirmed through the confirmation procedure. MNR confirms whether the ANSI is provincially, regionally or locally significant. Additional Candidate ANSIs may be identified at any time.

Procedure

The identification and confirmation of ANSIs is a multi-step process. **Figure 1** provides an overview of the ANSI Confirmation Procedure and the steps required to confirm a provincially significant ANSI.

This procedure is designed to support the implementation of policy for Areas of Natural and Scientific Interest provided in the District Land Use Planning Guidelines⁹ and the Crown Land Use Planning Atlas (CLUPA).

STEP 1: Identify Priorities/Work Planning

Annual work planning is required to provide direction to regions and districts when considering local ANSI needs each year. Districts set strategic confirmation targets for ANSIs. Single or multi-year strategies to process single or multiple ANSIs may be considered and detailed as part of Step 1.

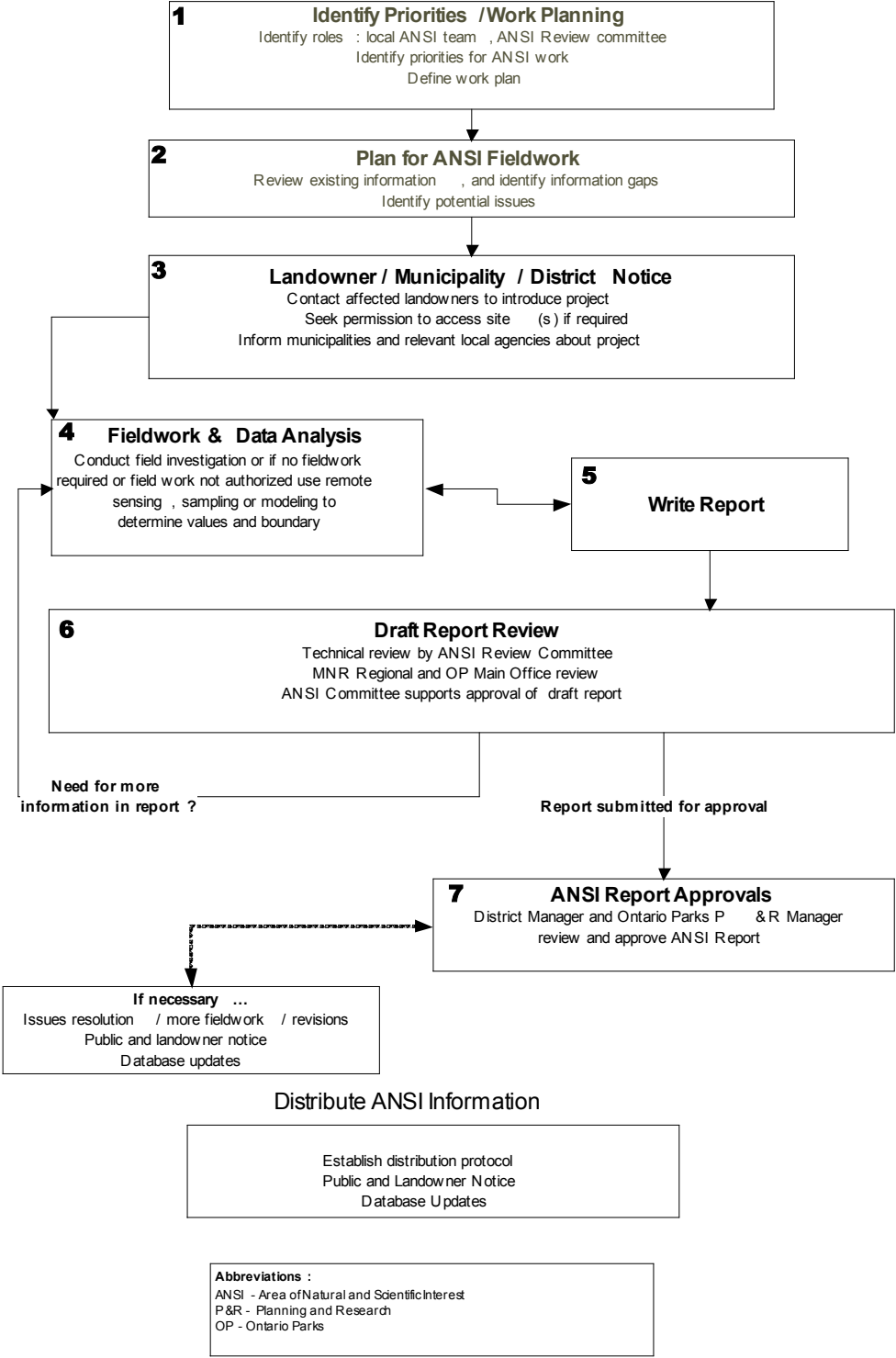
Identify Roles

There are several levels of involvement in ANSI confirmation:

- Local ANSI Team - assesses ANSIs in their district along with additional experts (consultants or specialists) as required. Team members may include the district or area ecologist/biologist (generally the team lead), district planners, communications specialist; conservation geologists, assistants and consultants. The local ANSI team is responsible for work planning and coordinating the processing of ANSI information as well as landowner contact and associated notifications.
- ANSI Review Committee - reviews the ANSI report and status recommendations as prepared by the ANSI Team. Committee members are provincial experts and may include NHIC staff, one or more regional ecologist(s), Ontario Parks Planning and Research staff (senior conservation geologist and/or ecologist), or external experts on specific features (e.g. research scientists).

^a Candidate ANSIs were formerly referred to as “nominated ANSIs” in the Background: Land Use Guidelines, Appendix D Policy for Areas of Natural and Scientific Interest. Over time, the preferred language has become “candidate ANSI” rather than “nominated ANSI” when referring to a value that appears to meet criteria of an ANSI, but has not yet been confirmed.

Figure 1



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- District Manager and Manager of Ontario Parks, Planning & Research Section - approve final ANSI report

Identify Priorities for ANSI Work

The primary researcher (District/Area Biologist/Ecologist, or, for Earth Science ANSIs, Conservation Geologist) and local ANSI Team review ecodistrict, earth science and life science gap analysis reports and other relevant natural heritage information to identify priorities for ANSI confirmation. If fieldwork or data analysis has confirmed the presence of provincially significant features, the gap analysis can be used to identify the best representative sites. It can also facilitate identification of provincially-significant features that are adequately represented, unrepresented or under-represented within the study context.

MNR should seek input from municipalities as to which additional or candidate ANSIs are at greatest risk of new development applications to determine priorities.

Whenever possible it is a best practice to deal with all life science features within an ecodistrict at one time. Similarly assessing an entire geological theme at one time to determine where ANSIs exist within it, is a best practice.

Define Work Plan

The local ANSI team recommends confirmation priorities to the district supervisor and regional planning unit in the form of a proposed work plan. This document outlines roles and responsibilities, the scope of the ANSI work, scheduling and required resources. The district will seek support from the regional planning unit to approve work plan proposals and funding. After the planned projects are approved, the ANSI team initiates and directs approved and funded ANSI projects.

For most ANSIs, fieldwork is essential to confirm the significance and integrity of the identified values, and to determine accurate site boundaries. Where insufficient time or access constraints prevent effective field investigations, remote sensing and/or aerial photographic interpretation may be useful. These constraints and resulting impacts on the study should be documented.

If contractors will be involved in the ANSI project, a Terms of Reference document will need to be developed to guide their participation.

If a provincially significant ANSI is being considered for downgrading in significance or potential removal, a new site or boundary reconfiguration may need to be identified to replace either or both of the earth and life science values represented by the original site. The identification and delineation of the replacement should be a component of the work plan when this is the expected outcome. In addition, landowner and municipality notification is required as there may be impacts on land use and Conservation Land Tax Incentive Program (CLTIP) status.

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During initial work planning, the local ANSI Team confirms membership on an ANSI Review Committee composed of provincial experts who are involved with the provincial ANSI program. At this time, Ontario Parks Planning and Research Section

(PRS) staff should be provided with relevant background information and the rationale for the ANSI work. Ontario Parks zone ecologists should be contacted as well and made aware of the site(s) and planned activities if ANSI is adjacent to a provincial park.

When an ANSI Confirmation Affects More Than One Administrative District:

Where a candidate ANSI site crosses District boundaries, there should be coordination among the ANSI teams regarding work planning, fieldwork, landowner contact activities and communication of results to landowners, municipalities, conservation authorities and appropriate crown land authorities, as well as information management following confirmation. A project lead should be designated to coordinate these activities. Also, approval from two or more district managers will be necessary during the confirmation procedure.

ANSI Boundary Modification

There are different levels of ANSI boundary modification. In some cases the changes are minor (corrections); however, some changes to an ANSI boundary are major and are the result of scientific investigation and require review and confirmation of the information gathered. In the case of a minor boundary change the implications should be assessed and approval at the district level may suffice (e.g. Information Management Supervisor or equivalent). If the district considers the change to be administrative or minor in nature such changes are to be documented by the district. All changes require updating in NRVIS following data standards developed by the custodian of the ANSI data layer (Ontario Parks Planning and Research Section). Also, landowner notification may be required as there could be impacts on land use and CLTIP status.

STEP 1 Outcome:

- Local ANSI Team and Review Committee established
- Work plan completed
- District approves work plan
- Ontario Parks PRS and Zone Ecologist and/or Senior Conservation Geologist are advised about planned work
- District approves work plan and budget and supports landowner contact if required
- Minor boundary changes need to be evaluated to determine if this ANSI confirmation procedure is applicable.

STEP 2: Plan for ANSI Fieldwork

Review Existing Information

The researcher leading the assessment coordinates the assemblage of all pertinent information for the ANSI ecodistrict, environmental (geological) theme and/or study region. Sources reviewed for information should include one or several of the following, as appropriate to the site features: internal MNR science and planning reports and file information, consultants' reports, scientific journal articles, geological

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and other maps, air photos, Forest Resource Inventory (FRI), LANDSAT, the Natural Heritage Information Center (NHIC) natural areas database, Ontario Parks Earth Science Database, Ontario Parks park information collections, other vegetation and land cover information, and local expert knowledge. Previously completed evaluations that should be referenced include: site region reports, site district and ecodistrict reports, earth science theme studies, regional earth science systems plans, and site-specific reports and checksheets (life science and/or earth science).

Using this information, the local ANSI Team develops a fieldwork plan.

If fieldwork is not possible (landowner permission not granted) or not required the ANSI project completes step 3 (notification) and then moves on to step 4 (data analysis fieldwork not required or not authorized) of the confirmation procedure. Justification for completing the report without public access should appear in the ANSI report.

Identify Potential Issues

As a “heads-up” for issues and/or landowner concerns, MNR should consult with the municipality regarding the land use planning status of additional or candidate ANSIs. This information should be documented as it will identify pending/existing development applications and other potential conflicting land uses. If candidate ANSIs have not been identified at this stage, land use status may have to be checked at a later stage. ^b

STEP 2 Outcomes:

- Background information gathering/analysis for selected study area.
- Fieldwork plan
- If no fieldwork is done, necessary documentation to complete the ANSI report is collected

STEP 3: Landowner / Municipality / District Notice

On Private Lands: Contact affected landowners

Site visits are often required to best document current values and delineate the ANSI boundary. Prior to the start of any fieldwork, landowner contact is required to introduce the project and obtain permission to enter private property to access a site. The researcher(s) must respect the individual wishes of landowners with regard to access and must abide by the requirements of the *Trespass to Property Act*. It is the district’s responsibility to make landowner contact.

As private landowners are the primary stewards of ANSIs on non-public lands, it is important to engage them during the early stages of the project. Prior to a site visit, the landowner will receive an information kit including:

- ▲ Letter requesting permission to visit the site and a description of the project, including: a description of the necessary fieldwork; possible implications if a feature on the property is identified as a provincially significant ANSI; an explanation of post-fieldwork “next steps” to keep the landowner informed (e.g., they will receive a checksheet describing the site’s ecological or geological significance and recommendations for protecting site values;
- ▲ Explanation of what an ANSI is and how it is identified and evaluated;

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^b Support provided by the District Strategic Officer, District Communications Specialist or District Planner.

- Contact(s) at MNR district or main office for further information (usually the primary researcher).

On Private Lands: Inform Municipalities/Agencies

At the same time, the information kit with an explanatory covering letter should also be sent to the affected municipality(ies), county planning departments and conservation authorities, if appropriate. Notifying these parties up front is helpful in case a landowner contacts them with questions or concerns about the planned project.

On Crown Lands: Inform Managing Authorities

The Ministry of Natural Resources is responsible for the management of public lands. If any work is to occur on an ANSI on Crown land, the researchers should notify the appropriate MNR district staff (if this has not occurred in step 1) to determine if there are any barriers to the work proceeding.

On Non MNR Public Lands: Inform Managing Authorities

If any work is to occur on an ANSI on such lands, the researchers should notify the appropriate authorities (if this has not occurred in step 1) to determine if there are any barriers to the work proceeding.

STEP 3 Outcomes:

- Landowner information kits sent.
- ± Landowner permission.
- If permission is not granted, decision is made by ANSI Team and the review committee re: alternate means to survey and confirm the ANSI.

STEP 4: Fieldwork and Data Analysis

If deemed necessary, the primary researcher coordinates a field investigation to collect the required physical data for the ANSI assessment. Life Science and Earth Science checksheets or equivalent should be used to collect and document this information. Researchers should ensure that sufficient information relevant to gap analysis is collected to determine the level of significance of the features in a site.

The checksheets are used to describe and assess a number of criteria to help determine whether the feature is provincially significant.

- Life science criteria include: representation, condition, diversity, ecological functions and special features
- Earth science criteria include: representation, condition, diversity and special features (type sections, type morphologies, fossils, etc.) and life science values.

Where coincident earth and life science values are represented in one ANSI, evaluation or reevaluation should consider both types of features. In the case of life science ANSI evaluations, the primary researcher should check with the Senior Conservation Geologist to determine if significant earth science features exist (e.g. by consulting checksheets).

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The focus of ANSI fieldwork is the collection of information on the natural heritage values of the site; however, site visits also provide an opportunity to ask landowners about their knowledge of the site that could assist with the assessment. The visit is also an opportunity to educate the landowner(s) about the natural heritage values on their property, the ANSI program and the implications or benefits of confirmation (primarily CLTIP and associated land-use management requirements in local municipal plans or other related plans like the Niagara Escarpment Plan).

Boundary Determination

Rationales for ANSI boundary decisions must be defensible, and explicitly stated in the ANSI Report. Preferably, ANSI boundary information is mapped as polygons at the finest possible scale.

STEP 4 Outcomes:

- Fieldwork completed.
- Site features and boundaries documented and evaluated.
- If fieldwork not possible or incomplete, results from alternative methods of collecting information are documented.

STEP 5: Report Writing

Upon completion of Step 4, the primary researcher, along with ANSI Team members as appropriate, prepares a report that documents ecological or geological values of the selected site and areas of sensitivity, and provides conclusions and recommendations about the significance and boundaries of the site. It is recommended that staff use MNR's *Ontario Parks Life Science Checksheet Guidelines (2003)* or *Earth Science Inventory Checksheets (2003)* when preparing reports. These ANSI toolkit documents are available on the [Ontario Parks PRS intranet website](#).

Outcomes of the evaluation may include the following:

- designate provincially significant ANSI status
- designate regionally or locally significant ANSI status
- reduce or increase significance of existing ANSI
- re-align boundary of an existing, candidate, or previously approved ANSI
- delete ANSI designation.

The ANSI Team will inform the district manager(s) about the recommendations of the draft report. Upon completion, the ANSI Team provides the draft report to the ANSI review committee.

STEP 5 Outcomes:

- Draft report is completed and supported by the ANSI team and sent to the ANSI review committee.
- Rationale for ANSI significance, designation and boundary determination clearly stated.
- District manager(s) are advised about the recommendations of the draft report.

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STEP 6: Report Review by ANSI Review Committee

The ANSI Team submits the draft ANSI report to the Review Committee, which conducts an additional technical review. The regional natural heritage specialist coordinates review.

The reviewers or the author edit the report depending on who was delegated this role in the work plan. If reviewers determine that more information or additional analysis is required, the lead of the local ANSI Team is directed to coordinate additional work. The leads of both the ANSI Team and Review Committee work together to resolve any outstanding data gaps or requirements. When revisions are completed, the Review Committee supports the report by signing off on an approval sheet.

STEP 6 Outcomes:

- A final draft of the ANSI report is completed with review committee sign-off on the tracking sheet.

STEP 7: ANSI Report Approvals

The local ANSI Team presents the final report for review by both the district manager(s) and the Ontario Parks PRS manager. The district/area ecologist/biologist coordinates district approval and the regional natural heritage specialist coordinates PRS approval. The district manager(s) ensures that the scientific methodology and documentation undertaken by the team are complete and sound. The PRS manager ensures that the report and decisions are consistent with protected area policy, and also approves the work of the Review Committee. Both managers ensure that the appropriate level of notification has taken place.

If issues are encountered at this stage, they should be identified to the local ANSI Team. The district/area biologist/ecologist or ANSI team lead will pursue the resolution of all issues to everyone's satisfaction and make appropriate revisions to the report. If there are outstanding matters beyond the scope of this scientific exercise, then they need to be flagged so they can be addressed outside the ANSI confirmation procedure.

MNR district(s) use the reports to ensure that new or changed status of ANSIs is effectively communicated to landowners, municipalities and other stakeholders. This helps ensure that ANSI values are considered in land use planning decisions.

ANSI NRVIS files are updated to reflect report decisions (see Database Updates)

STEP 7 Outcomes:

- Approval by the district manager (s) and the Ontario Parks PRS manager results in a finalized report and ANSI confirmation.
 - OR, if required, managers request ANSI Team to do further work / revisions to the draft ANSI report

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- Approval or rejection of the report is communicated.
- Appropriate ANSI NRVIS file(s) updated to reflect report decisions.

Distribute ANSI Information

Communications are an important part of the ANSI confirmation procedure and require careful coordination. The following protocol is suggested:

Internal Distribution: Private Land / Crown Land ANSIs:

- The local ANSI team lead informs the rest of the ANSI team of the report approval or rejection of ANSI status and/or changes to the boundary.
- The team lead also completes and/or delegates the following information distribution of the approved ANSI report to the:
 - District ecologist/biologist for life science ANSIs (who keeps a copy in district files)
 - Senior conservation geologist
 - Senior conservation ecologist
 - District planner, district Strategic Officer and/or district communications Specialist
 - District manager, lead researchers as designated in the work plan
 - Regional natural heritage specialist
 - Natural Heritage Information Centre representative
 - Ontario Parks PRS manager
- Final reports and documentation of approvals are filed with the MNR district, region and NHIC offices as well as the Ontario Parks PRS. Also, copies of updated ANSI reports should be provided to the appropriate parties as described above.

External Distribution: Private Land ANSIs

Affected Landowners:

Notice of ANSI confirmation (creation, deletion or modification) is sent to affected landowners by the district. It includes an explanatory cover letter, the life science checksheet or earth science checksheet and an appropriately-sized map as a minimum. Landowners should also be provided with a contact at the district office for further questions they may have or an opportunity to review the report available at the district/area office. Information about relevant stewardship resources would be beneficial. In some cases, special interest groups such as naturalist clubs or land trust organizations should be sent an information package.

Municipalities/Agencies:

The information and cover letter that is sent to the landowner(s) should also be forwarded to the appropriate municipality and conservation authority offices or other agencies responsible for land decision-making or input. If requested, districts should also be encouraged to share full ANSI report information using digital technology whenever possible.

External Distribution: Pubic Lands

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When ANSI confirmation (creation, deletion or modification) occurs on Crown land, the district planner needs to be notified so he/she can communicate the status of the ANSI values to other users of Crown land and ensure the land uses and activities which occur provide for the protection of the identified values.

Database Updates

ANSI NRVIS files are updated to reflect report decisions. NRVIS is the primary corporate database for provincially significant ANSI boundary information. The Earth Science Database is the primary source of information for all earth science ANSIs including any information that exists for regionally and locally significant ANSIs. District and NHIC records are the primary source of information for life science ANSIs.

ANSI information is updated in NRVIS by the districts. This information *must* be entered for provincially and regionally significant ANSIs, and *may* include locally significant ANSIs where information exists. Some districts record this information in layers on local or regional servers. It is important that this information be regularly updated onto the provincial server for access by users outside the district.

Also, to determine eligible Conservation Land parcel(s), district staff overlay provincially significant ANSI boundaries onto the property parcel layer and provide the relevant information (affected assessment roles, eligible acreage and ANSI type (life science - ALS, earth science - AES) to the CLTIP program area. It is CLTIP staff in Peterborough who notify the Municipal Property Assessment Corporation (MPAC) of any changes to CLTIP-eligible parcels resulting from the confirmation procedure.

MNR's Role with Respect to Protection and Land Use Management

As noted in Step 7, decisions on the appropriate levels of protection and appropriate land uses on private lands with confirmed ANSIs are guided by the PPS but are the responsibility of approval authorities, primarily municipalities. MNR's role is to provide science support and advice to landowners, municipalities and Crown and public agencies, as requested, about the implications of provincially significant ANSIs on land use and resource management decisions.

References

¹ Ontario Ministry of Natural Resources. 1992. Areas of Natural and Scientific Interest. Queen's Printer for Ontario.

² Ontario Ministry of Natural Resources. 1992. Areas of Natural and Scientific Interest. Queen's Printer for Ontario.

³ Beechey, T.J. 1980. A Framework for the Conservation of Ontario's Biological Heritage; Ontario Ministry of Natural Resources, Parks and Recreational Areas Branch

⁴ Davidson, R.J. 1981. *A Framework for the Conservation of Ontario's Earth Science Features*. Ontario Ministry of Natural Resources, Parks and Recreational Areas Branch, Open File Earth Science Report 8101

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⁵ Ontario Municipal Affairs and Housing. 2005. Provincial Policy Statement 2005. Queen's Printer for Ontario.

⁶ Ontario Municipal Affairs and Housing. 2005. Greenbelt Plan. Queen's Printer for Ontario.

⁷ Ontario Municipal Affairs and Housing. 2002. Oak Ridges Moraine Conservation Plan. Queen's Printer for Ontario.

⁸ Niagara Escarpment Commission. 2005. The Niagara Escarpment Plan. Queen's Printer for Ontario.

⁹ Ontario Ministry of Natural Resources. 1983. Backgrounder: Land Use Guidelines. Ontario Ministry of Natural Resources, Toronto, Ontario.
