

The Baseline Documentation Report (BDR)



A manual to assist in the preparation of BDRs for natural heritage properties and natural heritage conservation easement agreements in Ontario



An agency of the Government of Ontario



Acknowledgements

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PREFACE

Our natural heritage is vital to our well being and essential in understanding and defining our communities. As special places in the province come under increasing development pressures, conservation partners must continue to work together to preserve this non-renewable resource base. Land securement for conservation may take many forms. Ownership of sites or holding conservation easement agreements over ecologically sensitive areas are the two key methods that ensure long term protection. Both forms of securement require a full understanding of the natural heritage features and the pressures on the land. The natural heritage documentation process results in a formal report which is known as a "Baseline Documentation Report (BDR)". The proper preparation of a BDR is critical to successful property stewardship and for the enforcement of conservation easement agreements.

The Ontario Land Trust Alliance (OLTA) and the Ontario Heritage Trust (OHT) are pleased to contribute to the conservation community this "how to" manual on the preparation of Baseline Documentation Reports. It represents a state of the art methodology for recording property information for land held in fee simple ownership and for properties protected under conservation easement agreement.

This report continues to be a work in progress. It is intended to encourage the consistent high quality documentation of sites by the growing private land conservation movement. It also recognises that such documentation will vary with different sites, as well as change over time as our abilities, experience and technology evolve.

Preservation of the province's rich and diverse natural heritage for present and future generations requires a systematic and collaborative approach. We hope that you find this manual informative and useful in fulfilling this natural heritage conservation mission.



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The Baseline Documentation Report (BDR) For Natural Heritage Properties and Natural Heritage Conservation Easement Agreements

1.0 Introduction

The ongoing mission of registered charitable conservation organizations (land trusts) is to identify, preserve, protect and promote the conservation of Ontario's natural and cultural heritage for the benefit of present and future generations. These organizations acquire areas of significance across the province and agree to look after them forever. They do this by either owning the land or acquiring interest in land by way of a conservation easement agreement¹ which protect, by legal covenants, the heritage features that the owner and conservation organization seek to conserve.

"Forever" implies an *in perpetuity* stewardship obligation by the conservation organization. Natural areas stewardship is the long-term management of land and water to sustain natural heritage resources, restore and enhance habitat conditions suitable for rare species, and protect the inherent biodiversity and beauty of natural communities. The protocols necessary for good land stewardship consist of four components: (1) a local steward who is either the land owner, a local conservation organization or other partner who assumes responsibility for long term care of the site; (2) a site assessment and recording of the site's natural values which becomes the Baseline Documentation Report (BDR); (3) the Stewardship Plan for the property which outlines conservation objectives and how they are to be attained; and (4) regular monitoring by the steward to ensure that the goals identified in the Stewardship Plan are being achieved. Regardless of whether the property is being protected through ownership by a conservation organization or through a conservation easement agreement held by the conservation organization, these four conditions need to be met if the property is to be protected in the long term.

This report focuses on the site assessments required for the purpose of producing a Baseline Documentation Report.

¹ NOTE ON TERMINOLOGY: The terminology for conservation easement agreements can be found primarily in two provincial statutes in Ontario which enable their use: the *Ontario Heritage Act* and the *Conservation Land Act*. They are known as "easements or covenants" under the *Ontario Heritage Act* and as "conservation easements or covenants" under the *Conservation Land Act*. The Ontario Heritage Trust has a long standing practice of using the term "Heritage Conservation Easement Agreement". The Canadian Land Trust Alliance (CLTA) adopted the term "conservation agreement" in its 2005 *Standards and Practices*. In Ontario, "conservation easement" or "easement" is commonly used to describe these legal agreements, while in British Columbia and other parts of Canada, they are known simply as "covenants". In Quebec, they are known as "servitudes". For the purposes of this manual, the term "conservation easement agreement" will be used to cover both the "easements" and "covenants" that are part of every protective agreement with a land owner. Using the term "conservation easement agreement" recognises a term which has been in common usage within the Ontario land trust community and imports the terminology referenced in the enabling legislation, and at the same time is consistent with the term "conservation agreement" preferred by the CLTA.

2.0 What Is A BDR?

The baseline documentation report is a document which records the ecological, physical and cultural features of a property and its uses, at the point in time at which the property was field inspected. The completion of the BDR should coincide with the time the property is secured for conservation purposes either by its purchase or the placement of a conservation easement agreement over the property by the land trust.

The goals of a BDR are to provide an inventory of the property's baseline conditions. Identifying how the BDR will be used, and by whom, ensures that an appropriate BDR and stewardship plan will be undertaken for the property. Depending on what the BDR is being used for, this document will have varying degrees of rigour. If, for example, the property is owned by the land trust to preserve its natural heritage values, then the BDR can be simple, designed to facilitate an understanding of the property and the stewardship issues that will be faced in the future.

For properties that remain privately owned and whose natural heritage values are protected by a conservation easement agreement held by the conservation land trust, the BDR serves as a factual legal document providing an accurate depiction of the features of the property and their condition at the time the conservation easement agreement is registered on title. It ensures that both the landowner and the conservation easement agreement holder are fully aware of the specific features that are to be protected and their current condition. In this case, the BDR prepared in support of a conservation easement agreement, will serve as an essential source of baseline information for monitoring compliance and enforcing the conservation easement agreement restrictions. It may be used as evidence in a court of law.

A BDR prepared for these two purposes is not to be equated with an environmental inventory for scientific monitoring unless this stated research purpose has been deemed appropriate. Such a detailed report, involving as it does, an exhaustive biophysical inventory using sampling techniques such as transects and sample plots goes beyond the scope of the type of BDR that most conservation land trusts require for understanding their properties and developing stewardship plans or monitoring conservation easement agreements.

Nor should the BDR be confused with the baseline file. The baseline file is where all information and data on the property is held. This includes copies of previous field studies for the site, management plans, biological inventories, information on neighbouring land uses, newspaper articles on the landowner or on the site, monitoring information, and any other information on the site which may prove useful in the future. This file has no legal significance and it is not a public document. Its sole purpose is to act as a repository for information that you have gathered on the site over the years. The BDR however, draws on this information to produce a concise document which analyzes and summarizes the condition of the property at the time of acquisition. The BDR may become a public document and in the case of conservation easement agreements, it is signed by the landowner and the conservation easement agreement holder and it may be registered on title along with the conservation easement agreement itself.

Data for both the BDR and the baseline file is generally collected at the same time so clearly defining and understanding their respective functions and content is very important. It will save you time, avoid confusion, and ensure that the BDR is not overburdened with too much information while at the same time making sure that potentially useful information is not lost or overlooked. One goal of this manual is to help conservation organizations determine what information should be included in the BDR and what should be left to the baseline file.

3.0 Why Should A BDR Be Prepared?

The BDR serves a number of purposes and, depending on how the site is secured, comes in a variety of forms. If your conservation land trust purchased the land or had it donated and you now own the site, preparation of the BDR is a relatively simple process as outlined in 3.1. Where the property is privately owned and subject to a conservation easement agreement containing covenants (prohibitions) on what may be undertaken on the property by the landowner and third parties, a far more rigorous BDR is required as described in Section 3.2. The third type of BDR, designed for scientific monitoring and research purposes, will be briefly described (3.3) to distinguish it from the other BDRs.

3.1 For Properties Owned by the Land Trust:

The BDR is a useful reference tool for land trusts as it provides a record of the property's natural heritage features for the Board, land trust staff and volunteers without requiring all individuals to undertake extensive site visits. It allows interested individuals to get a quick overview of a site without having to read through all of the information in the baseline file. While gathering information for the report, you may notice certain hazards on the land such as dangerous trails which should be addressed for insurance purposes. It fosters an understanding of the land. Even as a simple description of the property's ecoelements, ecosites (Lee, 1998), including dominant species, hazards, invasives and human disturbance, accompanied by maps of important ecological features on the property noting (with or without precise locations for security reasons) rare and endangered species that have been allocated special protection, a BDR can become a very useful tool by providing the basis for developing stewardship plans in the future.

3.2 For Properties Subject to a Conservation Easement Agreement:

A conservation easement agreement² is a written legal agreement voluntarily entered into by a landowner and a conservation agency under which the landowner agrees to conserve the natural features on his or her property. Conservation easement agreements run with the property title and are binding on the present and all future owners. The conservation easement agreement consists of two main parts: a list of *covenants* covering activities that may not be undertaken on the property and an *easement* section that allows the conservation easement agreement holder or its agent to enter onto the property for purposes of monitoring compliance with the covenants and remedying breaches. Thus, they offer conservation organisations the advantage of legally binding long-term protection of the property without the burden of outright ownership.

² Legislation pertaining to the use of conservation easement agreements in Ontario are the **Conservation Land Act** and the **Ontario Heritage Act**. The *Conservation Land Act* allows incorporated non-profit eligible conservation bodies as listed in Section 3(1) of the Act, to acquire and hold "conservation easements and covenants" to conserve Ontario's natural heritage. Eligible conservation easement agreement holders may assign agreements with the consent of the Minister of Natural Resources. The *Ontario Heritage Act* permits the Ontario Heritage Trust (OHT), to negotiate agreements with private landowners for the protection of property having historical, architectural, archaeological, recreational, aesthetic, natural or scenic importance. It also contains provisions which allow the OHT to acquire natural heritage or other conservation easement agreements and then assign them to another conservation organisation. This provision has been used by the OHT to transfer recreational (trail) easements to the Bruce Trail Association (BTA).

The BDR prepared in support of a conservation easement agreement serves as an essential source of baseline information for monitoring compliance and enforcing the covenants or restrictions. The BDR must give an accurate depiction of the features of the property and their condition at the time the conservation easement agreement is registered on title. It provides a basis for agreement between the two parties on factual matters concerning the property and a reference for comparison for future monitoring and enforcement. It must be rigorous enough to be used as evidence in a court of law. The report will also ensure that future landowners know what the original conditions of the property were. Since it may be used as evidence in a court of law, both the landowner and the land trust should provide their written agreement or acknowledgement of the accuracy of the report.

The issue of long-term enforceability of the conservation easement agreement is important to the donor and the land trust. BDRs enable the conservation easement agreement holder to prove, in court if necessary, that violations did not pre-date the conservation easement agreement. This means that BDRs need to be completed in a form which will withstand critical scrutiny in court. Even if negotiations with the landowner were amicable, you must remember that the conservation easement agreement is in place in perpetuity. Problems with violations and non-compliance may show up once the property has been sold or passed on to family members of the current landowner. Therefore baseline reports are a critical safeguard against violations even if you don't foresee any problems with compliance by the current owner.

Another purpose of the report is to foster a common understanding between the landowner and the conservation easement agreement holder as to the goals of the conservation easement agreement and how they apply to specific features on the property. It is not a contractual agreement but a factual document designed to ensure that both parties are aware of the specific features that are to be protected, why they are to be protected, and their current condition. In doing this, the report is intended to encourage sympathetic stewardship of the property by the landowner and minimize the potential for unintentional violations.

A well-executed BDR will facilitate monitoring for biological and anthropogenic change as well as for compliance. In effect, it is the first monitoring report. It provides a common reference point for future inspections.

The Canadian Land Trust Alliance (CLTA) in its Standards and Practices released in December 2005 provides under Standard 11, Section B the following:

Baseline Documentation Report: For every conservation easement agreement, the land trust has a baseline documentation report (that includes a baseline map and photographs) prepared prior to closing and signed by the landowner at closing. Both the landowner and the land trust should hold at least one original copy. The report documents the important conservation values protected by the conservation easement agreement and the relevant conditions of the property as necessary to monitor and enforce the conservation easement agreement. In the event that seasonal conditions prevent the completion of a full baseline documentation report by closing, the baseline documentation report may include an interim baseline documentation report and an acknowledgement it will be replaced by a full report. This interim report and acknowledgement will be signed by the landowner at closing.

In assessing your land trust's progress in implementing these Standards and Practices, the CLTA requires the BDRs to:

- Include a baseline map and photographs;
- Document the important conservation values protected by the conservation easement agreement;
- Document the relevant conditions of the property as necessary to monitor and enforce the conservation easement agreement;
- Be prepared prior to closing; and
- Be signed by the landowner at closing.

3.3 BDRs for Scientific Monitoring

These BDRs are essentially comprehensive biophysical inventories and water quality inventories using scientific measuring techniques. The methodologies used to collect data may be prescribed peer reviewed "resource inventory standards". Regardless, the methodologies are science based, possibly using fixed plot sample methods and/or transects which select and measure environmental indicators and are used to report on environmental conditions. They need to be reproducible methodologies and may involve counting or photographing through fixed photo points (Hall, 2001, 2003). They are useful for determining and predicting anthropogenic impacts, for monitoring environmental change, and for monitoring the results of restoration projects. So, as with all BDRs, the data collected depends on what the report is being used for and if prepared for particular research and scientific objectives, it must be prepared for scrutiny, not by the law courts, but by the scientific community.

4.0 Who Compiles The BDR?

There are no legal requirements for compiling a BDR for a conservation easement agreement (unless such a requirement is written into the Agreement). Therefore, the responsibility for compiling one will generally fall on the party which benefits most from having the document: the conservation easement agreement holder.

Many BDRs can be prepared by a trained layperson that is familiar with the BDR form and content requirements set out in Section 7, the Appendices A and B that form part of this manual and the Ecological Land Classification system for Ontario. For BDRs relating to conservation easement agreements, the detail and skill level dramatically increases as this document constitutes a legal reference point for conservation easement agreement violations. Recordors can use existing data and reports along with their own skills to acquire all of the necessary information on the site. The landowner may also be able to provide some valuable information and assistance. However, there are often situations where a professional is necessary. For example, identification of the vegetative communities and the identification of rare and endangered species will likely require a trained specialist.

If the conservation easement agreement holder elects to delegate the responsibility for preparing all or part of the BDR to an outside consultant, it is still important that the reports adhere to the standard established in the attached templates. These standards include the format for the report, the information to be contained in it, and the techniques to be used for gathering that information. Ultimately, it is the conservation easement agreement holder, not the consultant, that must be able to understand and effectively rely upon the BDR information in monitoring and compliance matters.

5.0 When Should The BDR Be Prepared?

The timing of when to prepare the BDR requires careful consideration. Preparing the report does involve some expenses and the conservation easement agreement holder will not want to invest limited resources in documenting a site only to have the agreement fall apart at the last minute. Also, the conditions of the conservation easement agreement may change late in the negotiation process and these changes may alter the types of information you will need in the report. Lastly, if the report is completed too much in advance of the signing of the conservation easement agreement, it is less valuable for enforcement purposes. You will have no proof that violations did not occur between the signing of the report and the signing of the conservation easement agreement. For all of these reasons, it is best to have the BDR completed and signed at the time the conservation easement agreement is registered on title when all of the parties are focused on the issues and available to complete the supporting documentation.

For any number of reasons however (including seasonal limitations in the field) it may not be possible to have a completed BDR at the time the conservation easement agreement is registered on title. In these circumstances, the conservation easement agreement may include an interim baseline documentation report or a summary of the best available information on the conservation values and condition of the property, together with an acknowledgement that it will be replaced by a full report by a specified date.

6.0 How Do You Pay For a BDR?

There are a number of potential costs associated with preparing BDRs. These include:

- staff, consultants and/or volunteer time;
- travel;
- equipment purchase and/or rental (e.g. GPS, clinometers, etc)
- purchasing maps and other documents;
- taking and developing photographs to archival standards;
- administration (archival material, phone, mailing, photocopying, storage, etc.); and
- survey costs are part of your acquisition costs. When the survey is completed, ensure that the surveyor provides for your file copy GPS coordinates for each survey point as this will facilitate your use of the survey in the field.

Most conservation organizations draw on two different sources of funds for conservation easement agreements: one for conservation easement agreement acquisition and one for ongoing stewardship. Acquisition involves up-front costs such as legal expenses and the one time administrative costs associated with negotiating the agreement. The completion of a BDR is one of these acquisition expenses. Ongoing stewardship involves annual costs for such activities as monitoring and enforcement. It is recommended that a fund for ongoing stewardship be established in which the principal is invested and the income from this investment is used to cover the annual costs of stewardship. Consider a "stewardship/transfer fee" clause for such purposes in your conservation easement agreement. This clause would provide to the land trust a small percentage of the value of the property each time it changes ownership.

The money for acquisition (which includes preparing the BDR) may come from the group's general operating budget or from fundraising efforts. Having a separate fundraising event for each new conservation easement agreement acquisition may be one of your best

options. Members of the local community are generally more willing to donate money to protect a specific nearby natural area where they can enjoy the tangible results of their acquisition as opposed to donating money to a pooled conservation easement agreement acquisition fund. Don't be afraid to ask the landowner to contribute to this acquisition fund. It may seem unfair after he/she has just donated the conservation easement agreement, but they are the most logical choice for such a donation. Who cares more about seeing the property protected?

Remember that the BDR "Master Copy" must be archival in quality. Producing a physically stable report that will last "forever" is discussed in Section 10.

7.0 What Should Be Included In Any BDR?

When deciding what to include in the BDR, keep in mind the three purposes of the report:

- (1) to foster a common understanding about the landowner and trust's mutual goals for the property,
- (2) to provide a common reference point for monitoring, and
- (3) to facilitate enforcement in cases where the report is prepared to accompany a conservation easement agreement. It is not a biological inventory. It should not be a comprehensive file of everything that is known about the property. The focus needs to be on the natural heritage aspects of the property that are of greatest value which you as an organization identify as worthy of protection and now are committed (and legally obligated) to protect.

Two TEMPLATES are provided as APPENDIX A (for properties owned by a land trust) and APPENDIX B (for properties subject to a conservation easement agreement) at the end of this report to guide your data collection. The specific contents of the BDR will vary from site to site depending on the features and functions of the property, the preferences of the conservation easement agreement holder, and the particulars of the conservation easement agreement. However the following items should be included in **all** reports. They are described in more detail later in this section.

- a Preface providing a Purpose Statement and who completed the BDR and when;
- a Reference Statement;
- an Executive Summary;
- landowner contact information and property location;
- property improvements/structures;
- property zones;
- basic property information (legal description, address, access details, UTM, NTS & OBM references, Municipal Planning information);
- a site description using data available at conservation data centres such as OMNR-NHIC, CAs, NCC etc. (Environment Canada. 2005 and APPENDIX C).

This would cover:

- (a) the main vegetation, wildlife and wildlife habitat, water, geology & soil communities and their condition using the ELC, Conservation Blueprint, etc.;
- (b) COSEWIC threatened or tracked native plants and animals and their Rarity Rank: G-rank (Global rarity), N-rank (National rarity), S-rank (subnational i.e. provincial rarity);
- (c) main landforms, water bodies, drainage patterns;
- (d) land uses; and

(e) disturbances and potential threats focusing on factors affecting the natural values that motivated the protection of this site. These are generally anthropogenic threats (ATVs, unauthorized hunting) and/or biological threats such as invasive species.

- condition of the property as it specifically relates to each restriction (for properties subject to a conservation easement agreement);
- an Acknowledgement of Condition Statement (Figure 5) for properties subject to a conservation easement agreement; and
- pagination that notes every page as x out of y (e.g. 2/59).

In the course of preparing the report, other issues may arise and some means of documenting and communicating these should be established. For example, a "memo to file" reporting on these issues may be written and placed in the baseline file.

7.1 Preface, Purpose and Reference Statement

The BDR should begin with a Preface and Purpose statement that provides a context for the report and who was involved in preparing the document. After the Cover a statement along the following lines provides this information:

Preface and Purpose: During [dates] staff from the XYZ Land Trust recorded the significance, condition and appearance of the natural heritage property known as [file name of site] legally described as [legal description]. The property is protected for the purpose of ... [maintaining biodiversity and to conserve the habitat of the following rare species...]. This recording of property information that follows forms the official Baseline Documentation Report for the property referenced in the Heritage Conservation Easement Agreement (page x to y) held by the XYZ Trust (Instrument No. -----, Registered [Date]. Photographs were taken by [Name(s)]. The natural heritage values site assessment was completed by [Name]. The report was compiled by [Name].

A statement referencing the ownership of the property and/or conservation easement agreement then follows. In the case of a conservation easement agreement, it should contain language to reinforce that agreement as the overriding document in the event of inconsistencies between the BDR and the conservation easement agreement. A sample statement would be:

This Baseline Documentation Report (BDR) has been prepared as part of the stewardship plan for [legal description of the property], owned by XYZ Land Trust, and registered as Instrument # ABC in the Registry Division of xxxx.

Or

This Baseline Documentation Report (BDR) is ancillary to the Conservation Easement Agreement between John and Linda Bright and the Ontario Conservation Organization XYZ dated October 5, 2006 and registered as No. 12345678 at the Registry Division of xxxx. In cases where there is a difference between this Baseline Documentation Report and that Conservation Easement Agreement document, the Conservation Easement Agreement will take precedence.

7.2 Executive Summary

The Executive Summary is one of the most important parts of the BDR. It should give the reader a good overview of the site and the conservation easement agreement in just one or two pages. This summary should include the name of the landowner and the location of the property as well as a brief overview of the key natural features on the property and the particulars of the covenants (prohibitions) of the conservation easement agreement (more detailed information will be required as noted in Section 7.5).

7.3 Landowner Contact Information

The BDR should include the name and contact information for the current landowner. It should also indicate whether or not the landowner lives on the site.

7.4 Property Location

This section should give the address of the site along with the lot and concession numbers of the property and directions to the site. You should attach maps showing the regional and provincial setting of the property in order to help orient any readers who are unfamiliar with the site.

7.5 Conservation Easement Agreement Covenants

A reiteration of the conservation easement agreement covenants/prohibitions is an essential part of the BDR either in the body of the report or as an Appendix. It will tie the report to the agreement and ensure that the two documents support and compliment one another. The reiteration of the covenants will also act as an important focus for data collection and a reminder to the landowner of what is expected of him/her. Cut and paste from the legal document rather than relying on a summary. Accuracy and consistent interpretation facilitate monitoring and landowner relations.

7.6 Property Information

Properties are acquired and natural heritage conservation easement agreements are held over sites for the purpose of protecting the natural features of a particular property. Consequently, the property information section is the fundamental part of the report. It describes the natural features of the property, why they are important and their current condition. It is here that all of the necessary physical data is recorded. This includes descriptions, measurements, and sketches of all pertinent ecological, agricultural, scenic, and human-made features on the property.

The property information section can become quite unwieldy if not adequately focused. The key to focusing this section is the reason the land trust purchased the property or the reason it is protected by a conservation easement agreement. This "reasoning" provides the direction for the BDR. The report is complete when it contains enough information to briefly describe the property's natural features and to relate these features to the rights and restrictions in the conservation easement agreement. Any additional information should be left in the baseline file.

You can save a great deal of time in preparing the report by taking advantage of the wide array of previous studies and reports that have been done on natural areas in Ontario.

APPENDIX C lists and describes several sources of this information in Ontario and how it can be obtained. Copies of all of these studies should be kept in the baseline file and then analyzed, interpreted, and summarized as needed for the report.

Where existing data is insufficient or unavailable, you will have to gather your own. The data required for a typical report for a property owned by the land trust can be collected by a knowledgeable and trained layperson. For more complex conservation easement agreements and/or sites, a professional may be required to determine what data is needed and how to collect it as well as to carry out the baseline study. The number of times that you visit the site to collect baseline data, the date of the visit(s), what information was collected, and who collected the data, should all be noted in the report. There are many different approaches to organizing the information in this section of the baseline report. The recommendations below stress the use of easily acquired information to describe briefly, in non-technical language, the important natural features on the property in a straightforward, easy to understand format.

7.6.1 Municipal Planning Information

Municipal land use planning reports have information that is useful to include. These include the Official Plan designation for the site and related policies, as well as the uses allowed on the property in the zoning by-law. The Official Plan and the municipality's Comprehensive Zoning By-law provide a list of permitted uses allowed on the property. For example, if the site is recognized as an Area of Natural and Scientific Interest (ANSI) or designated Environmental Protection in the local Official Plan, this should be mentioned in the report along with the activities which are permitted by that designation. Zoning by-laws and other plans for the site such as flood and fill regulations may also be useful to include (be sure to make note of the specific by-law and the year it was introduced).

Some sites may have had stewardship plans prepared for them in the past. These should be referenced in the report and information from them may be included where relevant.

7.6.2 Air Photos and Maps

An air photo is one of the most important pieces of information to include in the property information section of the report. It will show the extent of vegetation on the property, watercourses, the location of buildings, and much more. The most widely available air photos are the 1:10,000 black and white photos taken in the late 1970s by the Ontario Ministry of Natural Resources. In addition to these, many municipal governments, conservation authorities, and other government bodies have commissioned their own air photos from private companies. These may be more recent and some are available in colour. Copies can be obtained directly from the private company which took them.

The best scale for an air photo to identify natural features will vary, but in general a scale of 1:10,000 or greater (e.g. 1:8,000 or 1:5,000) is preferred depending on the size of the property. Enlargements from 1:10,000 or 1:20,000 scale photography can usually be purchased.

National Topographic Series (NTS) maps (1:50,000) and Ontario Base Maps (OBMs) (1:10,000) should also be included in this section of the report. They illustrate the broad pattern of the landscape showing forest cover, rivers and streams, elevation, roads,

buildings, and other features. It is important to remember that, from an enforcement standpoint, air photos, topographic maps, and Ontario Base Maps are only accurate as of that time must be noted if they are to be of any use in proving violations. If there have been no identifiable changes, this should be mentioned in a short statement on the back of the air photo or map or in the text of the report.

7.6.3 Natural Features Maps

Natural features maps indicate the locations of the various natural features that are present on the property. The "polygons" delineated are then described and explained in the text of the report. The Ecological Land Classification for Southern Ontario (SCSS Field Guide FG-02) is the reference guide for Southern Ontario that should be used.

There are several different methods for preparing natural features maps. You may prefer to trace the natural features directly onto a hand-drawn sketch of the property, an NTS map, an OBM, an air photo, or some other map of the property or you may prefer to trace them onto a mylar overlay which is placed on top of one of these maps. All of the information could be placed on one map or overlay, or broken down into components and placed on two or three different maps or overlays. The sample shown below (Figure 1) has the features demarked and referenced using a legend.

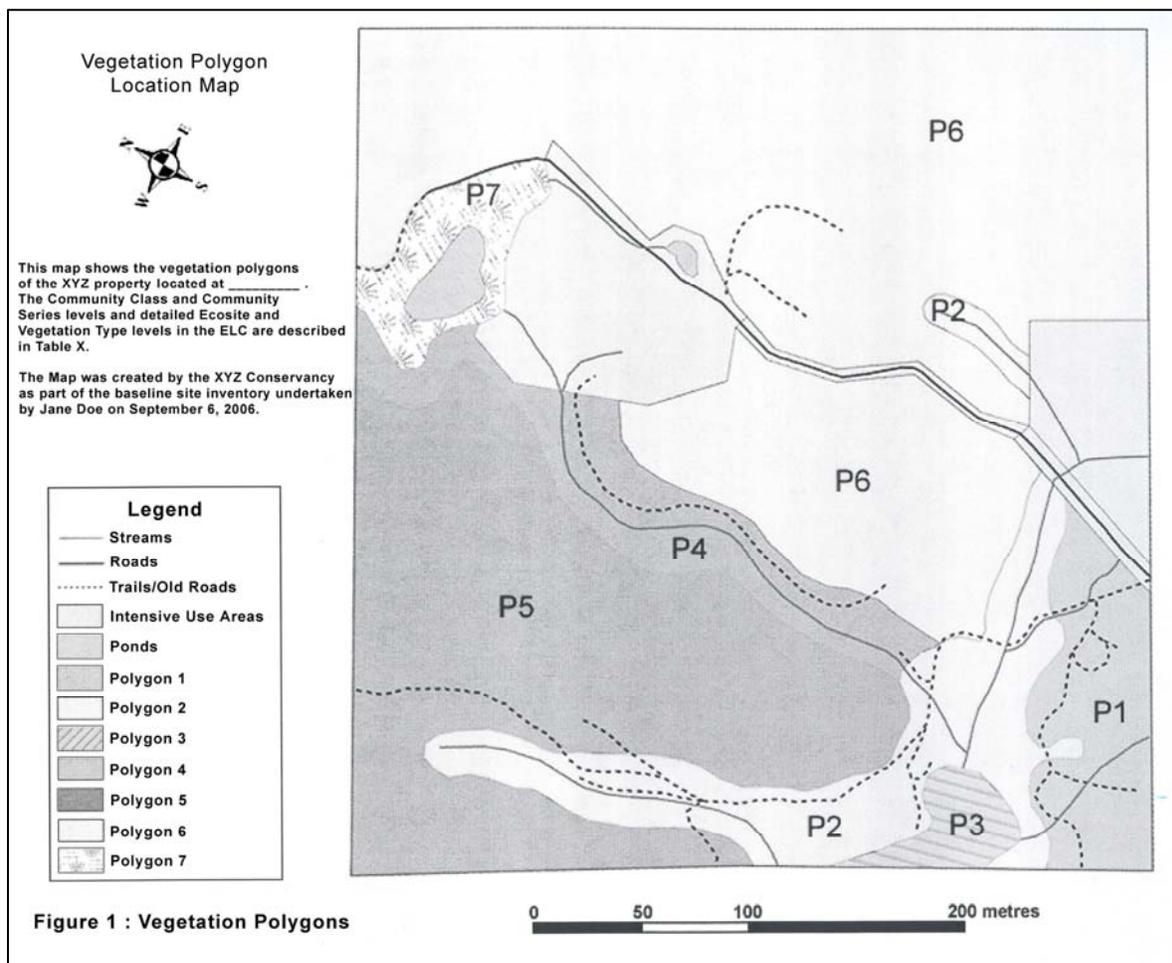


Figure 1: Vegetation Ecosites

When preparing these maps, it is important to remember that the information should be to scale so that in indicating the location of a significant woodlot, you can also indicate its dimensions and distance from any potential threats. Subjective language such as "the wetland is healthy" should also be avoided. You do not want to make the report too complicated or alienate the landowner by making it seem too restrictive. However, you must keep in mind that this information will be used as the basis for future monitoring and may be necessary for enforcement. The following sections outline some examples of information which should be shown on your natural features map(s) (and described in the text of the report). If little of this information is available, you should decide whether a basic environmental inventory should be conducted before the report is prepared.

Significant Area Boundaries

Many conservation easement agreements are acquired because the property contains all or part of a significant natural area or feature previously identified by a conservation organization or government body. The feature of interest is often described in the purpose section of the conservation easement agreement. Widely recognized categories of significant natural areas include Areas of Natural and Scientific Interest (ANSI), Class 1-3 wetlands and Environmentally Significant Areas (ESA). The reports and studies identifying these areas usually describe the area and its features and delineate the area's boundary. This information should be shown on the natural features map and described in the text of the report. The description should be concise with references to the original report or study as a source of further information.

Vegetation Communities and/or Habitat Types

Vegetation communities and/or habitat types (Lee, 1998) should be shown on the natural features map and described in the text. The particulars of the conservation easement agreement will dictate how elaborate this information has to be. For example, if the conservation easement agreement simply restricts the cutting of trees, all you will need to show on the map would be the location and extent of any woodlots. However if the conservation easement agreement restricts the alteration of habitat, you will need to break this down further and show the various vegetation communities that are present. In many cases, information on vegetation communities can be taken from Forest Resources Inventory maps, Wetland Evaluation maps or other types of resource inventories that government or private organizations have undertaken. APPENDIX C includes a few sources for these types of maps. Where such information is unavailable, an air photo can be used as a starting point. Broad habitat types such as field, pasture, maple-beech forest, pine plantation, swamp forest, cattail marsh and so on can be deduced from the air photo and supplemented with information from your site visit.

Water: Streams, Rivers, Ponds and Shorelines

Documenting the location and types of streams, ponds and other water bodies on your natural features map(s) can be particularly important if the features the conservation easement agreement is meant to protect include wetlands or significant trout streams. Some of this information can be taken from Ontario Base Maps and the air photo. Smaller bodies of water can be identified in the field during your site visit. The direction of water flow should be noted in order to identify where potential impacts may originate from. The patterns of streams and creeks and the shapes and locations of ponds and wetlands should be recorded so that dredging and channelization can be monitored.

Special Natural Features

A variety of other "special" natural features may also be shown on the natural features map. Of particular interest is the occurrence of rare flora and fauna. Conservation agencies, local naturalists, expert scientists, and the MNR's Natural Heritage Information Centre (NHIC) can sometimes provide this information (see APPENDIX C). The significance of these species should be noted (i.e. whether they are provincially or regionally rare and associated rankings) as well as their habitat requirements and/or ecosystem functions. In some cases this type of information may be unavailable.

Other types of features that should be noted include rock outcrops, springs and seepage areas, hills and crevices, scenic views, and any features considered uncommon or rare. If the property has significant geological or "earth science" features this type of information may be especially important.

Improvements and Structures

The location of buildings, roads, trails, fences, access points, wells and other human-made features should be shown on your natural features map(s) and described in the text. They are important reference points. Any obvious human impacts such as recent logging, brush clearing or cattle watering in creeks should be recorded as well, particularly if there are covenants prohibiting these activities in the future. This detailed recording of the condition at the time of the imposition of the conservation easement agreement ensures that responsibility for this activity is not placed on the owner through the signing of the "Acknowledgement of Condition Statement" (Figure 5) once the BDR is completed.

Information Related To Conservation Easement Agreement Restrictions

In addition to the information mentioned above, any information that is necessary to define the restrictions in the conservation easement agreement should be shown on the natural features map and described in the text of the report. APPENDIX B provides a template using the covenants as a focus for data collection. Enough information should be included in the report so that if any of the restrictions are violated you will be able to prove it using the report. Once again, this information should be measurable and avoid the use of subjective language. The data should be presented in such a way that the landowner is aware of exactly to which features on the property each of the restrictions apply. This will decrease the risk of unintentional violations and encourage sympathetic stewardship of those features.

7.6.4 Going into the field and taking Ground Photographs

Ground photos are important in order to thoroughly document the condition of a site. They can be used as evidence of violations and to indicate points of interest to future monitors.

The particulars of the conservation easement agreement will for the most part determine what features on the property should be photographed. Most conservation easement agreements have a residential or impacted area where buildings are allowed and a protected area where no buildings are allowed. Unless there are specific re-building requirements in the residential area (i.e. replacement structures need to be the same shape and footprint), pictures of the buildings would only be for historical interest and completing the baseline file. Don't try and micromanage the entire site when the conservation easement agreement only has covenants protecting the natural features. Those features which contribute to the significance of the property and the conservation easement agreement's boundaries should be documented with photographs. Make certain that all vulnerable features are

photographed such as the edge of a woodlot which borders on a residential area or cultivated field.

Going into the field is expensive. Forgotten equipment or back-up batteries can waste the day. Determine the best access route. Be sure that you have access permission and will not cause any neighbors to be concerned. Think about the public values that will be conserved, such as wildlife, open space, and scenic values and if this documentation is for a conservation easement agreement, check and recheck the conservation easement agreement covenants. Each covenant feature will need to be documented. Think about the future. BDRs are used when dealing with future owners, future pressures, future neighbors, future public access issues, etc. Consider the following:

A) Allow Enough Time: Site visits are expensive, so make the first one count. A 20 acre property should be allocated a minimum of several hours to thoroughly document, and this could be longer depending on the complexity of the site.

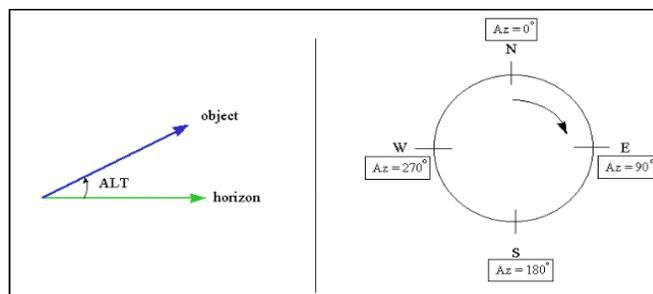
B) Necessary Equipment: Clipboard, GPS unit, compass, camera (high-resolution digital or 35mm SLR), measuring tape, guidebooks & Ecological Land Classification - SCSS Field Guide FG-02, aerial photo/or plat map (for navigation and plotting photo-points), binoculars (for viewing distant features that may or may not need to be photographed). *Don't underestimate the value of carrying back-up equipment such as extra batteries, film, digital memory cards, and even an extra camera.* Also bring personal gear for the conditions such as boots, clothing, water, food, etc. Consider rain gear and foot wear for crossing water barriers.

C) Protocols: send a letter at least 2 weeks prior to the visit; call landowner 48 hours in advance to confirm the visit (the landowner does not need to be present at the time of your visit); study aerial photos and your Natural Features Map to develop a strategy based on needs and the most efficient access; photograph with consideration of lighting and purpose of each photo; record GPS waypoints and plot each location and bearing on the site map or aerial photo; record the objective of each photo (i.e. to document X vegetation type, or the house front, or open space, etc.). Think about the likelihood of conservation easement agreement violations or encroachments. Note the day, time, and climatic conditions of the site visit and who was present.

D) Standard Baseline Inventory Photographs: take a GPS reading³ for each photograph location and note the azimuth of the photo direction⁴. Include

³ All GPS recordings should be in NAD 83 using the "average location" function on your machine – observe the accuracy level, when you do not see the accuracy level changing you can take a picture. Strive for 20 counts minimum.

⁴ The **altitude** is the distance an object appears to be above the horizon. The **azimuth** of an object is the angular distance along the horizon to the location of the object. By convention, azimuth is measured from north towards the east along the horizon.



D.1) Representative photos of each vegetation type (see: ELC Handbook – Lee et al 1998) identified in the Natural Features Mapping.

- Look at the aerial photo of the property prior to the site visit to visualize the distribution and number of vegetative communities that will need to be identified. Photograph a typical patch of each type with attention to the general features that illustrate the condition of the community. Features such as browsing, decadence, typical understories and overstories, tree and shrub reproduction, and even percentages of bare ground or plant litter accumulation, may be important.

D.2) Photos of Buildings and Structures:

Where necessary and important to monitor and enforce the conservation easement agreement, structures should be photographed. If the conservation easement agreement doesn't refer to the structure and they are not subject to covenants, there is no need to photograph them for the BDR. However, pictures for the baseline file may be of interest and useful. Cultural features on the site such as fences, historic shells of structures, head gates, etc. may have heritage value in the future and should be included in the baseline file. Although this may require physically walking the entire property, undocumented or confusing identification of structures reduces the value of the information as a historical record, and working (legal) document.

D.3) Photos of Boundaries:

- Photograph along boundaries and from corners when possible, paying particular attention to neighboring properties and the potential for encroachments.

D.4) Photos of Special Features:

- Rivers, creeks, wetlands, springs, and rock outcrops are all important physical habitat features that are generally intended for conservation.
- Game trails, raptor nests and rookeries, shrub browsing, deer beds, etc. are important visible features that indicate use of the property by wildlife that are generally intended to be conserved.
- The condition of agricultural productivity and operations, such as standing crops, crop storage locations, irrigation systems, equipment storage, grazing utilization and timing, all affect conservation objectives and should be documented if possible.

D.5) Use Levels:

- Trails, access roads, two track roads, existing trespasses or encroachments;
- Areas where there is a potential for any of the above characteristics to change in the future is very important. Properties subject to recreational use often exhibit wear and tear after a short period of time. Monitoring this use level through photo points over time can provide a case for revisiting the site's stewardship plan.

D.6) Open Landscapes and Scenic Views:

Open Landscapes (natural communities such as meadow, fallow field, grasslands, etc.) are best documented by "cross-photos" from opposite sides of the open space. Scenic values that are important to document generally have two aspects; 1) the views from the property to the outside world, and 2) those from outside the property into it.

Photographs will only be useful if future monitors can easily find the place where they were taken and take pictures of the same area for comparison. To do this, permanent photo points must be established. These may be a crossroads in a well-established trail, a pronounced bend in a stream, utility poles, major fence corners, or some permanent landmark such as a large rock. If no such landmarks are available and the photo is especially important, you may want to ask the landowner if you can place a small stake at that spot. The direction of each shot should also be recorded by taking an azimuth reading using a compass (for simplicity's sake, magnetic north is used without correcting for true north unless this is stated) or a GPS position reading.

Nearby subdivisions may create a risk of encroachments. Adjacent pasture may raise the potential for cattle entering a woodlot and destroying vegetation. Other external factors which may prove relevant include population and urban sprawl pressures. You may also want to identify features on the property or past land uses which could create environmental or other liability.

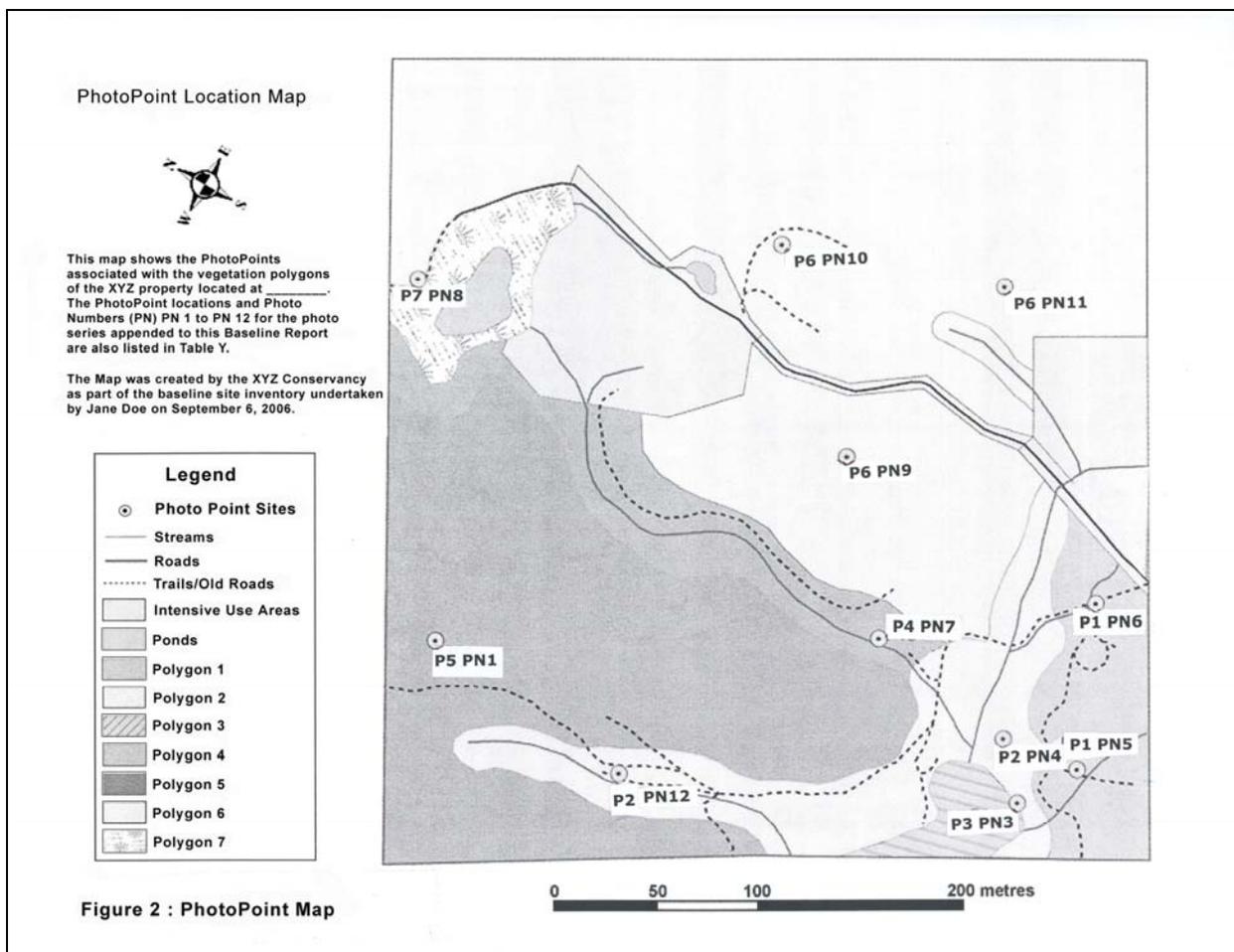


Figure 2: Photo Points

Each photo should be numbered and this number, the GPS/azimuth reading, the landmark from which the photo was taken, a description of the picture, the date and time that it was taken, and the name of the photographer and their signature should be recorded on the back of the photo as shown in Figure 3. This information should also be recorded in a table in the BDR. Negatives (or CD for digital photos) go into the sleeve in the "Master (Archival) Copy".

A photo point map such as the one shown in Figure 2 (above) must also be included in the report. This map indicates where each photo was taken and should show by arrows in what direction. Each photo should be signed and labeled on the face or back side by the owner and conservation easement agreement holder as well as the photographer.

P5 PN 1 – XYZ Property

**Taken on:
September 6, 2006
11:15 a.m.**

- **Dry-Fresh S. Maple Deciduous Forest FOD 5**
- **Azimuth 60°**

Taken by: Jane Doe

Jane Doe

Figure 3. Photo labels

A tabular listing of photos as below (Figure 4), should accompany the map.

Ground Photographs			
<p>The colour photographs for this baseline report were taken during a site visit on July 7th, 2000 by Simeon Stairs of the Ontario Heritage Foundation. The black and white photographs were taken during a site visit by Foundation staff on December 4th, 1991, and have been used here to show the built features of the property, which have remained essentially unchanged since 1991. All azimuth readings have been corrected for true north (2000 declination ~9°).</p>			
Table Describing Ground Photographs			
Photo Number	Photographer's Location	Azimuth	Purpose
1	On Road 9, at the end of the driveway.	25°	To show the general conditions along the driveway. Note that the driveway is regularly mowed, but that the surrounding areas are left in an essentially natural condition.
2	On the driveway, approximately 20 m in from the new Road 9 alignment.	48°	To show the general conditions along the driveway. Note the freestanding chimney and garage beyond it.
3	On the driveway, about 70m in from the new Road 9 alignment.	120°	To show the garage and its natural surroundings.
4	On the driveway, about 100m in from the new Road 9 alignment.	50°	To show the relatively undisturbed conditions along the driveway and in the vicinity of the storage shed. There is a small mowed clearing beside the shed, and an old track veers off to the NE from it towards the old scrap pile along the N property line.
5	On the driveway, about 85m in from the new Road 9 alignment.	19°	To show the privy and storage shed, and their relatively undisturbed surroundings.
6	At the end of the driveway by the cottage.	88°	To show the cottage and its relatively undisturbed surroundings. Note the steep rock ridge behind the cottage.
7	On the W side of Road 9.	81°	To show conditions at the NW corner of the property. Note the difference in understory structure between the easement lands to the right of the fence and the neighbour's pasture to the left.

Figure 4. Photo list

7.7 Acknowledgement of Condition Statement

The final section of the BDR is the Acknowledgement of Condition Statement (Figure 5).

XX. Acknowledgement and Condition Statement for the XYZ Baseline Documentation Report

We the undersigned do accept and acknowledge that this document, including the attached maps and photographs as being, to the best of our respective knowledge, an accurate description of the natural features and current land uses on the subject property.

Document and photographs prepared by:

Name: _____ Date: _____
Title: _____
Organization/Consultant: _____

Reviewed and accepted by:

Name: _____ Date: _____
Title: _____
Ontario Land Trust

Signing Representative for the Land Owner:

Name: _____ Date: _____
Title: _____

Signing Representative for the Easement Holder:

Name: _____ Date: _____
Title: _____
Ontario Land Trust

XX. Acknowledgement and Condition Statement for the XYZ Baseline Documentation Report

We the undersigned do accept and acknowledge that this document, including the attached maps and photographs as being, to the best of our respective knowledge, an accurate description of the natural features and current land uses on the subject property.

Document and photographs prepared by:

Name: _____ Date: _____
Title: _____
Ontario Land Trust staff

Signing Representative for the Land Owner:

Name: _____ Date: _____
Title: _____

Signing Representative for the Easement Holder:

Name: _____ Date: _____
Title: _____
Ontario Land Trust

Figure 5. Acknowledgement of Condition Statement

For properties protected by a conservation easement agreement, it is a necessity, not just “good practice” to prepare an Acknowledgement of Condition Statement and include it with the report. If a consultant prepared the BDR for the conservation agreement holder, use Figure 5- left. If staff of the land trust that holds the conservation agreement holder prepared the BDR, use the form on the right above (Fig. 5). Signing the document will ensure that your Board and the landowner have read the report and that there is a common understanding between all as to the features on the property and how the conservation easement agreement applies to them. By having all parties sign it, the statement will reinforce the idea that this is a cooperative, rather than simply a regulatory relationship. The acknowledgement statement hopefully will also promote sympathetic stewardship of the property. Lastly, and most importantly, this signing affirms the accuracy of the information in the report should it be needed in a court of law when the person who collected the data (and took the photographs) is no longer around to stand as an expert witness to verify the contents of the report.

Depending on the timing of the completion of the BDR, it may be useful to include a clause in the conservation easement agreement which requires the landowner to sign such a statement within a specified period of time. The conservation easement agreement may include the following section:

When the XYZ Land Trust has completed its Baseline Documentation Report (the "Report") containing visual and written information relating to the condition of the Property and its heritage value, the Owner agrees to execute an acknowledgement in the Report to confirm the photographs and written information are accurate physical depictions and descriptions of the Property. Copies of the Report shall be provided by the XYZ Land Trust to the Owner. An original copy of the Report will be filed in, and may be examined at [insert location].

8.0 Future Monitoring

One of the main purposes of the BDR is to facilitate monitoring. The report is essentially the first monitoring report. It will provide future monitors with a common reference point from which to identify natural and human-made changes on the site. It will also allow them to monitor and facilitate landowner stewardship initiatives on the property. However, monitoring is often done by different individuals over the years with varying skills. They may each reach different conclusions from the report about what it is they should be looking for. In order to clarify this and ensure consistency, the individual(s) responsible for preparing the BDR should use their first-hand knowledge of the site to also prepare a list of monitoring recommendations.

These recommendations are not included in the report itself but comprise one of the most useful sections of the baseline file. The monitoring recommendations should address a number of questions. For example, how often should the site be monitored? What skills will the monitor need? What features on the property are most sensitive to disturbance and what appear to be threats to their long term survival? For properties owned by the land trust, these are all items that need to be considered in the Stewardship Plan which will likely focus on monitoring for invasive species and human disturbance. Of course in monitoring compliance to a conservation easement agreement, the covenants (prohibitions) of the conservation easement agreement, which are listed verbatim from the conservation easement agreement as part of the BDR, are the essential part of the package that you take on the site visit.

When your monitoring goes beyond compliance monitoring to include ecological monitoring, consider undertaking this in a scientific way using survey and monitoring techniques developed for field biology as well as visual photo point monitoring (Hall 2001,2003; Lucey & Barraclough, 2001). For example, you may want future monitors to note the water levels in a stream or the infiltration of non-native species. You may even want to include information on the landowner such as the best time of the year to visit them, whether or not they prefer to accompany you on your visits, and any other information which will help future monitors establish a good working relationship with them.

9.0 What Do You Do With The Completed BDR?

When the report is completed it should be reviewed by your land trust's "Property Committee" or Board. In the case of privately owned land where you hold a conservation easement agreement send a copy to the landowner for comment, review, and approval of contents. A face-to-face meeting may be a good idea as it will allow you to go over the report and explain the content. Once the landowner and official of your organization have signed the *Acknowledgement of Condition Statement*, attach the signed statement to the report. The report is now complete and copies should be sent to the landowner and to the monitoring agency if another agency will be responsible for monitoring. Your organization should keep three copies of the report: one administrative copy for the file, one field copy for monitoring (laminated if possible), and one "Master" **archival** copy in a permanent, protected place. In addition, a digital master of the BDR along with a PDF version should be recorded onto a CD and stored in the file.

Some conservation organizations have explored the option of registering an archival "Master" baseline report on title at the land registry office along with the conservation easement agreement. The Ontario Heritage Trust files its reports for cultural conservation easement agreements with the Archives of Ontario. A registered or filed report may have a stronger legal standing in a court of law than a report which exists "outside" the conservation easement agreement. Registering is also more likely to ensure that future landowners are aware of the original conditions of the property. A Registry Office provides a safe, long-term storage site for the report and it is recommended that the appropriate regional Registry Office be contacted prior to undertaking the BDR to determine the degree of documentation acceptable. Some Registry offices, now moving to an electronic system will not accept a large bulky document filled with photographs.

If the Registry Office will not accept the BDR and there is no central agency formally assuming that role, then the best alternative is to provide an overview or summary attached to the conservation easement agreement and a reference in the Agreement should clearly say where the full documents are held. The Ontario Heritage Trust holds its natural heritage BDRs at its Toronto office.

10.0 Archival Standards

Conservation easement agreements are held in perpetuity; a BDR must be designed to last in perpetuity as well. What does this entail?

For the archival copy of the BDR, use archival print paper, photo film and printer pigments (200+ year min. which can be achieved with a specialized Epson heavy duty archival printer). All of the content is stored in archival sleeves. Black and white images can achieve a 300 year lifespan projection. Film and printed photos are preferred to digital given the rapidly changing technology in the digital photo industry.

The sleeves for all prints are rated archival quality as is the binder itself. The documents are handled with archival gloves. A copy of the BDR is deposited in a secure "third party" location (as noted in the conservation easement agreement itself).

The administrative copy of the document used in the field and found in the Baseline file need not be "archival", but should be laminated. A *PDF* prepared for administrative (digital file) purposes is also useful. Quick reference to the digital copy, rather than retrieving from the file, thumbing through and then refilling also reduces the amount of wear and tear on the originals.

11.0 Updating the BDR

Even without human interference, landscapes are dynamic and evolve over time. In a constantly changing landscape a BDR may well need to be updated periodically. A natural or human disturbance may alter the face of the landscape that you are monitoring. Should you update the BDR?

Keep in mind that a BDR is a snapshot of the condition of a property at a particular point in time. If situations arise where new information becomes available that you would like to include as part of the report, this is still possible. For example, you may acquire the resources to conduct a biological inventory of the site a few years after the original report has been completed and signed, or natural changes may alter the original condition of the property. In cases such as these, it is best not to alter the original report. New information should be added as *addenda* to the original report. Each addendum should then be signed and dated. If the condition of the property changes as a result of a landowner activity which was approved by your organisation or for which violation charges were laid, the altered condition of the property does not need to be described in the report. These changes will be sufficiently addressed in the modification approval or violation record report.

To keep track of these, it is wise to keep in a handy binder a *baseline data sheet* for each property. This sheet provides a separate, easy reference log for each property that summarizes the property's condition at the time of the securement, the name, address and phone number of the current landowner (if privately owned and secured by a conservation easement agreement), how to access the property, a listing of the covenants contained in the conservation easement agreement, and a record of any "waiver" or "permissions reports" and/or amendments as well as unusual circumstances.

When the property changes hands the old landowner may want to ensure that any alterations by the new landowner are not blamed on him/her, and conversely the new landowner will want to ensure that changes made by the old landowner are not attributed to him/her. The conservation organization will want to ensure that the new landowner is fully aware of the condition of the property. Once again it is best not to alter the original report. A "letter of good standing" should satisfy the needs of the old landowner. Be prepared, if requested, to be able to provide a special monitoring report which includes new photos and a record of all changes that have occurred since the original report was signed. This documentation undertaken during monitoring visits or as part of the record keeping process if minor variances are granted to some of the easement covenants should be readily available and should satisfy the new landowner. To give the conservation organization time to do this, it is a good idea to include a clause in the conservation easement agreement which requires advance notice of sale.

12.0 Conclusion

The BDR is an invaluable part of owning conservation land or holding a natural heritage conservation easement agreement over privately owned land. It provides a full understanding of the stewardship responsibilities of land ownership. In cases where the land trust owns the land, a BDR is the basis for understanding the site and developing a stewardship plan that will ensure a focus to site monitoring and the maintenance of the heritage features being protected. As a component of a conservation easement agreement, the BDR is an essential tool for enhancing the conservation organization's working relationship with the landowner, in addition to providing a common reference point for future monitoring, and enforcement. The OHT and OLTA have prepared this manual to provide conservation organizations in Ontario with a general framework for preparing this important document for their owned properties and those over which they hold natural heritage conservation easement agreements. The unique situations that will be faced by these organizations as they acquire conservation easement agreements are of course impossible to predict and fit into a universal framework.

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**APPENDIX A:
Annotated Baseline Documentation Report (BDR) Template for
Natural Heritage Lands Owned by a Land Trust**



**Annotated Baseline Documentation Report (BDR) Template
for Natural Heritage Lands Owned by a Land Trust**

This Annotated Baseline Documentation Report (BDR) Template was prepared by the request of the Ontario Land Trust Alliance (OLTA). This report was also prepared in conjunction with the Ontario Land Trust Assistance Program (OLTAP). Since 2002 OLTAP has granted tens of thousands of dollars to Ontario land trusts to help secure properties of ecological interest. This document has been reviewed by the OLTAP Committee and is being endorsed as a recommended approach to preparing Baseline Documentation Reports for land trust owned properties.

This report is intended to provide recommended guidelines to those applying for funds from the OLTAP program and may also suit the general needs of Ontario land trusts as the basis for a Baseline Documentation Report (BDR) for lands owned by land trusts. Annotated comments are included in text boxes and are intended to guide the user when filling out information data fields.

Disclaimer

This material is designed to provide accurate, authoritative information in regard to the subject matter covered. It is provided with the understanding that the Ontario Land Trust Alliance (OLTA) is not engaged in rendering legal, accounting, or other professional counsel. If legal advice or other expert assistance is required, the services of competent professionals should be sought.

Prepared for the Ontario Land Trust Alliance (OLTA)
By Michelle K.M. Albanese and Robert Orland
OrLand Conservation
Revised September 2006

SECTION 1 Annotated Baseline Documentation Report (BDR) Template for Owned Properties

This Baseline Documentation Report has been developed as a guideline of recommended information fields for land trusts and conservation organizations to include. The text boxes under each section are there for formatting purposes and do not have to be kept in your working copy.

Property:

Name of Property

Date of Site Visit(s):

Month, day, year. May take multiple site visits.

BDR Prepared by:

Name of person(s) who prepared the BDR.

BDR Summary:

This is a helpful addition to the BDR, especially if the document ranges from 20-30 pages including maps, ground and aerial photographs. The summary can highlight the importance of the baseline report and the purpose of protecting the property i.e. the conservation values/natural features being protected on the property.

GENERAL PROPERTY INFORMATION

1. Property Information

Type of Agreement:

Indicate whether fee simple donation, purchase, split receipt, and whether the property is an Ecological Gift under Environment Canada's Ecological Gift Program and the assigned Ecological Gift Reference Number. Also indicate other details such as life interest or lease agreements.

Property Address:

The street address of the property

Legal Description:

A description of the property as indicated on the title deed. Lot and concession numbers etc;

Location (latitude, longitude):

UTM Reference:

Zone, Easting, Northing

Surface Area (acres and hectares):

Approximate or as noted by legal survey

Directions to the Property:

Provide driving directions to the property from nearest major centre.

Access Details for the Property:

Provide any information about point(s) of access to the property, whether by foot or car etc.

Aerial Photo Numbers:

Reference with Year – Roll – Flight Line – Numbers – Scale

Official Plan Land Use Designation(s):

Zoning of Property:

Maps: -

National Topographic System (NTS) maps (1:50,000) and Ontario Base Maps (OBMs) (1:10,000) can be used here to illustrate where the property is situated in the context of the landscape. These maps typically show broad patterns of forest cover, rivers, streams, elevation, roads, buildings and other features. Information relating to property specific mapping will be discussed in subsequent sections of this report.

- *[National Topographic System Map from NRC]*
- *[Ontario Base Map from MNR]*

2. Site Description, Ecosystems and Habitats

Site Description:

Include a description of the property including topography and natural features as well as reasons why the property is being protected.

Site Designations :

Indicate whether the property has any ecological significance, and if the property is part of any special designations (e.g. local Environmentally Sensitive Areas (ESAs), Areas of Natural and Scientific Interest (ANSIs), Provincially Significant Wetlands (PSWs) or conservation planning initiatives that may be on a local, regional, provincial scale. If the property is donated through Environment Canada's Ecological Gift program, list Ecological Sensitivity Criteria as qualified by Environment Canada.

Habitat Characterization :

General vegetation communities, habitat types or natural area information can be listed here. For more detailed Vegetation see Section 1, Part.8.

Other Ecological or Heritage Values:

Include information on whether the property is a buffer, corridor, has archaeological or scenic value.

Land Uses:

Historic use:

What past uses have occurred on this property? This may lead into a more detailed environmental audit.

Adjacent land use:

Identify the land use of each adjoining property, indicated by direction. Indicate whether these lands or neighbouring uses pose any threat to the property.

Current use:

Specify land use by checking the following boxes and add description including whether activity is occurring with permission or via trespassing, details of how long the land use has been occurring and a description of any damage that it is causing. Include photos for documentation purposes and locate on property map.

Recreational:

Activity	Occurring (Y/N)	Details/Comments
Hiking/walking		
Berry Picking, Other Harvesting		
Bird Watching		
Picnicking		
Camping		
Agricultural		
Hunting		
Fishing		
Four-Wheel Driving		
ATV Use		
Trail Riding (horse)		
Snowmobiling		
Cross-country skiing		
Swimming		
Cycling		
Other(s):		

Additional detail:

Is public access allowed?

Y/N

Details:

Is permission required before access? Who is the contact for permission? Where are the points of access?

Scientific/Educational (research, nature study, etc.):

Habitat/Ecosystem Management or Preservation (planting, bird houses, etc.):

Residential (permanent or seasonal residences, mobile homes, etc.):

Agricultural (orchard, vineyard, garden, horse/cattle pasture, etc.):

Forestry (reforestation, harvesting, etc.):

Commercial (sales to the public, etc.):

Industrial (aggregate, mining, etc.):

Sections adapted from LTA BC, 2001 – Volunteer Guide to Stewardship Agreements

3. Property Structures, Developments and Constructed Features

Describe purposes of each and location on property, using a baseline map. Include photos for documentation purposes and locate on property map.

Buildings/Structures:

Trails & Roads:

Wells & Septic:

Fences:

Power lines:

Pipelines:

Other:

4. Disturbances & Potential Threats to Site

The following table lists disturbances already noted (o), as well as additional uses that can be anticipated to merit a particular management strategy (x) because of their nature or noted frequency of occurrence:

Vegetation /Animals	<input type="checkbox"/> o <input type="checkbox"/> x	Removal of Resources	<input type="checkbox"/> o <input type="checkbox"/> x	Vandalism/ Liability	<input type="checkbox"/> o <input type="checkbox"/> x	Trails/Roads/ Cutlines	<input type="checkbox"/> o <input type="checkbox"/> x	Natural Processes	<input type="checkbox"/> o <input type="checkbox"/> x
Tree Cutting		Sand		Garbage/litter		ATV/Snowmobiles Trails		Landslide	
Bark Stripping		Gravel		Signs or lack of		Roads		Flooding	
Collecting Plants/Animals		Peat		Structural damage or poor condition		Hiking Trails		Fire	
Hunting or Trapping Animals		Water		Campfires		Equestrian Trails		Other Disturbances (describe):	
Invasives		Other Disturbances (describe):		Swing Ropes (for diving, swimming, etc)		Cutlines/ Seismic			
Use of Pesticides or Herbicides				Steep Cliff Faces		Fence lines			
Grazing				Mountain Bike Jumps & Ramps		Pipelines/ Wellsite			
Tree Plantation				Other Disturbances (describe):		Power Lines			
Beaver Cutting/Flooding						Trail Erosion			
Other Disturbances (describe):						Drainage Ditches			
						Other Disturbances (describe):			

Table adapted from LTA BC, 2001 – Volunteer Guide to Stewardship Agreements

Additional detail:

Provide any additional detail, based on the table above, including details on frequency of event, severity etc.

5. Water

Interior water course/body:

Identify any water features with name, type (e.g. pond, lake, stream, river, wetland type, vernal pool), approximate size or distance with directional description of its location within the property and direction of flow; whether location is upstream or downstream of other activities; whether ephemeral or year-round; specify if constructed or natural. Describe the condition of banks or shorelines. Are they stabilized? Vegetated?

Ecological Land Classification can be used as a designate for describing aquatic ecosites. For land trusts working in Southern Ontario, the ELC reference to use is the Ecological Land Classification for Southern Ontario (Lee et al., 1998). (See Section 1, Part 8 for more information on ELC).

6. Geology & Soils

Ecological Land Classification (ELC) for Southern Ontario (Lee et al., 1998) may be used to provide additional information on soil substrate types, moisture regimes, soil texture, rock type and soil drainage (see Section 1, Part 8 for more information on ELC).

a). Surficial & Bedrock Geology

Identify surface and underlying geology.

b). Soils

Identify soil series, soil survey and list significant soil properties – saline/nonsaline, texture, drainage, permeability, suitabilities. ELC may be referred to for additional information on soil substrate (see 1.9 Vegetation for more information on ELC).

7. Wildlife and Wildlife Habitat

Evidence of Wildlife:

Wildlife/Trees/Snags/General		Animal Tracks		Animal Scat	
Squirrel or Mast Caches		Types of Animal Tracks:		Types of Scat:	
Bird's Nests					
Feathers					
Burrows					
Browsed Vegetation					
Other:					

Table adapted from LTA BC, 2001 – Volunteer Guide to Stewardship Agreements

Additional detail:

Provide any additional detail, based on the table above.

General description of habitats and ecological systems:

Current habitat for what terrestrial/non-terrestrial species and groups? Habitat for migrating species?

Wildlife observed on property:

List below any wildlife that has been observed on the property and the date of observation. Note that this list does not replace having a detailed Bio-Physical Inventory of the property at a later date, if deemed necessary by the land trust.

List common name followed by scientific name of each.

Birds:

Mammals:

Reptiles/Amphibians:

Insects and Spiders:

Fish/Aquatic Invertebrates:

Endangered, threatened, rare and significant species:

Specify, if any, along with Biodiversity Rankings for each species

8. Vegetation

Description of habitats and ecological systems:

Describe current habitat types (vegetation community types) and ecological systems.

List below any observed species of trees, shrubs, forbs & grasses, including threatened, endangered, or rare species, invasive species as well as the date of observation. Note that this list does not replace having a detailed Bio-Physical Inventory of the property at a later date, if deemed necessary by the land trust.

Ecological Land Classification can be used as a designate for describing vegetation as it provides a classification system for identifying vegetation community types. Additional information is also provided on soil types and moisture regimes. For land trusts working in Southern Ontario, the ELC reference to use is the Ecological Land Classification for Southern Ontario (Lee et al., 1998).

Plants:

List common name followed by scientific name of each. Indicate which species are invasive or non-native.

Trees =

Shrubs =

Forbs =

Forbs are non-woody or non-grass like plants.

Grass/Sedge =

Fungi =

Endangered, threatened, or rare species:

Specify, if any, along with Biodiversity Rankings for each species

9. Conservation Goals

Describe any conservation goals for the property or make reference to other reports, strategies that may be relevant (e.g. Managed Forest Plan, Species Recovery Plans etc).

10. Concluding Remarks and Recommendations

Conclude with any pertinent comments and indicate plans, timelines for any future work (stewardship or otherwise) which may add to or impact this report. Also, give recommendations for future visits such as monitoring for recreational use, prohibited activities to watch for, sensitive natural features, and the presence/distribution of invasive species.

11. Important Contacts

For each and where relevant identify a contact person's name, title, phone number and organization.

Municipality:

Conservation Authority:

Other Local Entities:

Ministry of Natural Resources:

Other Provincial Entities:

Environment Canada:

Other Federal Entities:

Neighbours:

12. Lists of Potential Maps, Photos or Data Sheets Attached to Master Copy of Report

List below the attachments which can include, but may not be limited to the following. Ensure that these attachments are referenced in the report, as necessary, and in fact attached to the document.

Exhibit A: Registered Survey of the [NAME OF] Property

Exhibit B: Legal Description of the [NAME OF] Property

May want to attach a copy of the registered title deed

Exhibit C: Zoning Schedule for the [NAME OF] Property (from the Municipality)

Exhibit D: Ortho photography of the [NAME OF] Property

Photo should be labeled with date of imagery, scale, direction arrow and other pertinent information

Exhibit E: Ground Photos of the [NAME OF] Property

Each photo should be labeled with date, description of photo reference site including direction of photo (via compass and/or GPS coordinate), name of photographer, details of equipment used as well a unique identifier so that in the future photos (digital, negatives and/or hardcopy) can be retrieved from files if necessary. It is also recommended to include a map of photo reference sites for future photo monitoring.

Exhibit F: Property Map Showing Natural Features & Description

A map of the property showing boundaries of ANSIs, ESAs, PSWs etc

**Exhibit G: Summary Life Science Checklist & Description or Natural Areas Report
(From MNR Natural Heritage Information Centre (NHIC) Website)**

Other Attachments as Necessary:

E.g. Surficial Geology Map, Soil Map, Highway Location Map, Tree Planting Plans, Management Agreements, Leases etc.

APPENDIX B:

Annotated Baseline Documentation Report (BDR) Template for Natural Heritage Lands subject to a Conservation Easement Agreement held by a Land Trust



Annotated Baseline Documentation Report (BDR) Template for Natural Heritage Lands subject to a Conservation Easement Agreement held by a Land Trust

This Annotated Baseline Documentation Report (BDR) Template was prepared by the request of the Ontario Land Trust Alliance (OLTA). This report was also prepared in conjunction with the Ontario Land Trust Assistance Program (OLTAP). Since 2002 OLTAP has granted tens of thousands of dollars to Ontario land trusts to help secure properties of ecological interest. This document has been reviewed by the OLTAP Committee and is being endorsed as a recommended approach to preparing Baseline Documentation Reports for properties with conservation easement agreements.

This report is intended to be compatible with the Canadian Land Trust Alliance (CLTA) *Standards and Practices*. The CLTA were released in December 2005. Standard 11, Practice B pertains to the Baseline Documentation Report.

This report is intended to provide recommended guidelines to those applying for funds from the OLTAP program and may also suit the general needs of Ontario land trusts as the basis for a Baseline Documentation Report (BDR) for lands under conservation easement agreement. Annotated comments are included in text boxes and are intended to guide the user when filling out information data fields.

Disclaimer

This material is designed to provide accurate, authoritative information in regard to the subject matter covered. It is provided with the understanding that the Ontario Land Trust Alliance (OLTA) is not engaged in rendering legal, accounting, or other professional counsel. If legal advice or other expert assistance is required, the services of competent professionals should be sought.

Prepared for the Ontario Land Trust Alliance (OLTA)
By Michelle K.M. Albanese and Robert Orland
OrLand Conservation
Revised September 2006

SECTION 2 Annotated Baseline Documentation Report (BDR) Template for Conservation Easement Agreement Properties

This Baseline Documentation Report has been developed as a guideline of recommended information fields for land trusts and conservation organizations to include. The text boxes under each section are there for formatting purposes and do not have to be kept in your working copy.

Property:

Name of Property

Conservation Easement Agreement Reference Statement:

Provide a reference to the conservation easement agreement, the date it was signed, where it was registered and where copies can be found. This gives the BDR a direct link to the legal document and facilitates enforcement at a later time should that become necessary. This reference can be incorporated into the letter of acknowledgement (see Section 2, Part 6). Ensure that capitalized words and important phrases are consistently used in the conservation easement agreement and the BDR.

Date of Site Visit(s):

Month, day, year. May take multiple site visits.

BDR Prepared by:

Name of person(s) who prepared the BDR. You may want to include a statement of their qualifications, training and/or expertise.

Contact Information:

Phone, fax, email, mailing address of the person who prepared the report.

Purpose and Intent of the Conservation Easement Agreement:

Include any references made in the conservation easement agreement about the landowner and agreement holder's specific, common purpose (or intent) in conserving the property and its conservation values. Recent literature (Paris and Albanese, 2005; LTA, 2005) and in some jurisprudence it is emerging as an important provision for a judge to rely upon having separate "conservation values" statement in determining the basic purpose of the conservation easement agreement and a context within which to decide the facts.

In many conservation easement agreements, the agreement itself has information contained in it, on the Purpose/Intent. The debate continues as to whether these statements should be broad or specific. Statements that are too broad in nature (i.e. the purpose of this conservation easement agreement is to protect the natural features of this property) may be too ambiguous and show a lack of understanding of what is to be protected. Conversely, statements that are too specific (i.e. the purpose of this conservation easement agreement is to protect the Class 1 PSW on the property as well as habitat for the Jefferson Salamander) may be too limiting as these elements could be subject to change over time. Most conservation easement agreements are designed to be in effect for perpetuity. But properties can dramatically evolve and change in a hundred year time frame. Species and habitats that were once important in protecting on a property may evolve into something else as a product of natural succession, climate change or other factors. A compromise may be to have both general comments about the conservation values of the property and the specific values (i.e. those documented in the BDR). Thus, the BDR serves as an important link to the conservation easement agreement in documenting the conservation values of the property, and the reason for performing the conservation easement agreement in the first place.

BDR Summary:

In most if not all cases, it will not be possible to register the entire BDR with all the maps and photo schedules on title. Therefore it may be advantageous to have a written summary of the BDR incorporated as a schedule into the conservation easement agreement, so that a summary of the BDR is instantly available together with the conservation easement agreement. It is especially important to have a summary or interim BDR in cases where the final BDR won't be completed at the time of closing (see Section 2, Part 6). The BDR summary included in the conservation easement agreement should be clearly reproducible in black and white and contain the following information at a minimum:

- 1) Conservation easement agreement reference statement;*
- 2) Property location;*
- 3) Significance of the property;*
- 4) General description of natural features on the property;*
- 5) Description or survey of conservation zones or areas within the property*
- 6) List of improvements/structures/trails etc that relate to the conservation easement agreement;*
- 7) Damaged or disturbed areas;*
- 8) Description of species or natural features of interest that relate to the conservation easement agreement;*
- 9) A black and white site plan or conservation agreement base map of the property (see Exhibit C); and*
- 10) Acknowledgement that the baseline is an accurate description of the values and features; and signatures.*

1. Landowner Contact Information

Landowner's Name:

Name of owner(s) on title and spouse (if not on title).

Address of Landowner:

Mailing address

Phone:

Fax:

Email:

Contact Person(s):

If different from above, person(s) who are primary and secondary contacts for the Property, otherwise delete.

Address of Contact Person(s):**Phone:****Fax:****Email:****2. Property Information****Details of Conservation Easement Agreement:**

Indicate whether the conservation easement agreement is a donation, purchase, split receipt, and whether the property is an Ecological Gift under Environment Canada's Ecological Gift Program and if so, provide the Ecological Gift Reference Number.

Property Address:

The street address of the property.

Legal Description:

A description of the property as indicated on the title deed and/or in the conservation easement agreement. Lot and concession numbers etc;

Surface Area (acres and hectares):

Approximate or as noted by legal survey.

Directions to the Property:

Provide driving directions to the property from nearest major centre.

Access Details for the Property:

Provide any information about point(s) of access to the property, whether by foot or car etc. For conservation easement agreements, any special access information for monitoring.

Official Plan (OP) Land Use Designation(s):

State OP or OP amendment date, the Schedule and designation e.g. RU – Rural and cite the policy associated with this designation (i.e. Section 3.1 RURAL permitted uses include).

Zoning of Property:

Provide By-Law Number and date; state the Zone that covers the property and permitted uses.

Maps: -

National Topographic System (NTS) maps (1:50,000) and Ontario Base Maps (OBMs) (1:10,000) can be used here to illustrate where the property is situated in the context of the landscape. These maps typically show broad patterns of forest cover, rivers, streams, elevation, roads, buildings and other features. Information relating to property specific baseline mapping will be discussed in subsequent sections of this report.

- [National Topographic System Map from NRC]
- [Ontario Base Map from MNR]

Other Information:

Include other pertinent details that may not be included in the sections above.

3. Description of the Conservation Values on the Property

In this section the “conservation values” protected by the conservation easement agreement are being described. Each conservation easement agreement is unique in the way it describes the conservation values or natural features on the property. Ensure that whatever language is used in the conservation easement agreement, the same language is used in the BDR. For example, if “conservation values” is the term used in the agreement, keep it consistent with the wording and titles in the BDR. If “natural features” are used in the agreement, use the same term in the BDR.

Site Description:

Include a description of the property including topography and natural features (terrestrial and aquatic) as well as reasons why the property is being protected.

Site Designations:

Indicate whether the property has any ecological significance, and if the property is part of any special designations (e.g. local Environmentally Sensitive Areas (ESAs), Areas of Natural and Scientific Interest (ANSIs), Provincially Significant Wetlands (PSWs) or conservation planning initiatives that may be on a local, regional, provincial scale. If the property is donated through Environment Canada’s Ecological Gift program, list Ecological Sensitivity Criteria as qualified by Environment Canada.

Habitat Characterization:

Describe current habitat types (vegetation community types) and ecological systems. Take representative pictures of each community and map ecosites/polygons on a property map.

Ecological Land Classification can be used to describe vegetation as it provides a classification system for identifying vegetation community types. Additional information is also provided on soil types and moisture regimes. For land trusts working in Southern Ontario, the ELC reference to use is the Ecological Land Classification for Southern Ontario (Lee et al., 1998).

Surficial and Bedrock Geology:

Identify surface and underlying geology.

Soils:

Identify soil series, soil survey and list significant soil properties – saline/nonsaline, texture, drainage, permeability, suitabilities.

Ecological Land Classification (ELC) for Southern Ontario (Lee et al., 1998) may be used to provide additional information on soil substrate types, moisture regimes, soil texture, rock type and soil drainage.

Wildlife Habitat:

Does the property have any specific habitat for certain terrestrial/non-terrestrial species and groups? Habitat for migrating species?

Species of Interest:

Specify any species of interest that may be important for monitoring and enforcement of the conservation easement agreement. List any endangered, threatened, rare and significant species, along with Biodiversity Rankings for each species.

Other Ecological or Heritage Values:

Include information on whether the property is a buffer, corridor, has archaeological or scenic value.

4. Property Data

In this section, specific information or data is collected for the BDR based on the conservation easement agreement restrictions. This data will be used to support future monitoring of compliance of the conservation easement agreement restrictions, therefore accuracy is a priority. If geo-referencing or GPS is being used to pinpoint location, ensure that the operator is trained and the GPS unit is being used properly to increase accuracy. All GPS recordings (i.e. UTM) should be taken when their accuracy level is the highest. For example, the user can consider averaging multiple readings. The level of accuracy should be recorded as well. Photos should be taken whenever necessary for documentation purposes. The direction of the photo should be recorded using the azimuth of a compass (i.e. facing southwest or facing 10 degrees).

Property data information will be used to develop the conservation easement agreement base map of all the property features which relate to the conservation easement agreement. See Part 7, Exhibit C for additional mapping comments.

Description of Property Perimeter Boundaries:

Indicate whether there is a legal survey for the boundaries of the property. Make reference to the legal survey and attach to BDR. Describe how other the boundaries have been delineated on the ground (i.e. iron bars, fences etc) and consider documenting with photographs. Record the UTM and level of accuracy. Include this information in Table 4.1 below. This will establish where the property perimeter boundaries are and how to locate them on the ground.

Table 4.1 Perimeter Boundaries

Boundaries	Present	Notes	UTM (accuracy)
Corner monuments/pins located and GPS			
Well marked blazed and GPS			
Survey. Date:			
Iron Bar			
Wooden Stakes			
Brushed			
Fence			
Other			

Description of Conservation Easement Agreement Zones:

Some conservation easement agreements use zones or areas within the property boundaries to determine which parts of the property will have certain restrictions of use (i.e. residential area, protected area.) It is important that these zones are described with a high level of accuracy. To achieve this it is recommended that a legal survey is performed by an Ontario Land Surveyor (OLS) as the best tool for legally enforcing the agreement in perpetuity.

Describe the areas or zones of the conservation easement agreement and how they have been delineated on the ground (i.e. iron bars, wooden stakes, fences etc, and consider documenting with photographs), location (i.e. GPS) or refer to the conservation easement agreement survey, if a legal survey was performed to determine the areas/zones. Include this information in Table 4.2 below.

Table 4.2 Conservation Easement Agreement Zones

Name of Zone	Boundaries	Present	Notes	UTM (accuracy)
	Corner monuments/pins located and GPS			
	Well marked blazed and GPS			
	Survey. Date:			
	Iron Bar			
	Wooden Stakes			
	Brushed			
	Fence			
	Other			

Improvements and Structures:

Usually improvements and structures are defined in a conservation easement agreement and include any human made, non portable structure or object such as bridges, lane ways, barns, viewing platforms, outhouses, dams, etc. Document the information in Table 4.3 below, as necessary. As mentioned in Table 5.1 - If the conservation easement agreement prohibits a change of building locations or an increase in existing building footprints within a defined "building area", or all of the restrictions apply to the whole property – (i.e. no residential boundary defined but there are buildings on the property) then the authors of the baseline/BDR will want very specific data on the location and size of the existing buildings (see Table 4.3 below). On the other hand, if there are no restrictions applicable to the "building area" or "residential area" then more basic information on the presence or absence and function of buildings may be all that is required with regard to that restriction.

Table 4.3 Improvements and Structures

Improvement	Function	UTM Location (Accuracy)	Size (m ²) /Notes	Height (m)	Principle Material	Condition 1	Photo #

1. Condition rating: Excellent – new condition; Good- some wear but functioning as intended with no structural or cosmetic faults; Poor – Barely functions as intended, structural and cosmetic faults; Dilapidated- no longer usable for the intended purpose.

Trails:

Trails are usually an important part of a conservation easement agreement, thus they require special documentation. Indicate on a map and in Table 4.4, the location of existing trails. GPS can be used to map trails at trail heads, trail intersections and access points. In order to properly map an entire trail you can take GPS readings of the trail every time it changes direction. If the trail curves, take sufficient points so the slope of the curve can be accurately mapped on a baseline map. Photograph a representative section of the trail or access point to indicate its average width and terrain base (i.e. compacted soil, gravel, woodchips). Describe the trail system, when it was established and its purpose.

Table 4.4 Trails

Trail	Purpose	Avg. Width	Substrate	UTM (Accuracy)	Photo #

This section is adapted from NCC, 2006 –Baseline Documentation Report

5. Conservation Easement Agreement Restrictions

In the context of a conservation easement agreement, remember that the paramount purpose of the baseline is to support the monitoring of compliance and enforcement of conservation easement agreement restrictions. Accordingly, the baseline authors should ask themselves with respect to each conservation easement agreement restriction: How will someone monitoring this property know if this conservation easement agreement restriction has been violated? If the land trust collects additional information on a property that is considered important to understanding the property but “extraneous” to the purposes of monitoring and enforcing the conservation easement agreement, this information can be stored in an additional “baseline file” but does not have to be included in the BDR.

Restrictions may relate to the entire property or may be specific to zones within the property. Regardless, the documentation of property data that it is relevant to each restriction needs to be methodical, supported by photographs and geo-referencing points.

The following table demonstrates how the conservation easement agreement restrictions should be listed along with the information that will be used to support them.

List of Restrictions from Conservation Easement Agreement

Restriction X.X (reference from Conservation Easement Agreement)

Insert the actual restriction from the conservation easement agreement verbatim into the BDR. Do not include summaries or paraphrases as this could cause confusion or misinterpretation. These restrictions should also be listed verbatim in future monitoring reports as a checklist for compliance.

Information Related to the Restriction: *What is the current condition of the property that relates to this particular restriction? Refer to Table 5.1 for ideas on which types of information to document. Also, include any current uses or reserved rights that the landowner may have in relation to this restriction.*

Include references to relevant property specific photographs and GPS coordinates that directly relate to each restriction. In particular, reference information about improvements, structures, trails or boundaries that may have been described in Part 4 of this template. Ensure that all relevant information is accurately located onto the conservation easement agreement map.

If evidence shows there is a current pre-existing condition, document details (i.e. what is the issue, what is the source, whether it was caused by landowner or third-party actions), take photographs and GPS the location. For the purposes of the BDR it is important to state acceptance of it as a pre-existing condition or rectify the condition before the conservation easement agreement is signed (For example, if the property has an existing dump site and dumping is one of the restrictions, the dumpsite could be cleaned up before the conservation easement agreement is signed).

Repeat above for all restrictions

Types of Restrictions and Data Collection (for Discussion Purposes Only)

The following table (Table 5.1) looks at typical restrictions⁵ contained in natural heritage conservation easement agreements and provides the types of baseline information required. It is important to note that if one of the characteristics in this checklist is not observed on the property, you should record the absence of that characteristic in the report. Do not simply neglect to mention it. For example, if there were no built structures on the property, include a sentence in the report which reads “No human made structures were observed on the property”.

Please note that this is not an inclusive list of restrictions, as there are other types of restrictions that may be contained in a conservation easement agreement that are not included here.

Table 5.1

General Types of Conservation Easement Agreement Restrictions “The Owner Shall Not”....	Types of Information to Consider for Data Collection	Additional Considerations
<u>Subdivision</u> <i>sever or subdivide the Lands;</i>	✓ Copy of existing legal survey.	✓ Notify the local municipal planning department, Land Division Committee and Heritage Committee of this conservation easement agreement and covenant so they are aware of the “no subdivision” restriction should an application for consent under Section 53 of the Planning Act ever be submitted for approval.
<u>Buildings and Structures</u> <i>construct, erect, maintain or allow the construction, erection or maintenance of any building or structure, including without limitation transmission tower or lines, fences and signs, on the Lands;</i>	✓ Describe purposes of each built feature (i.e. bridges, wells, sheds, fences, hydro towers) and location (i.e. GPS) on a baseline map. ✓ If relevant, specify each using dimensions, quantities and materials if relevant, and attach photos.	✓ If the conservation easement agreement prohibits a change of building locations or an increase in existing building footprints within a defined “building area”, or if all the restrictions apply to the whole property – (i.e. no residential boundary defined but there are buildings on the property) then the authors of the baseline/BDR will want very specific data on the location and size of the existing buildings. On the other hand, if there are no restrictions applicable to the “building area” or “residential area” then more basic information on the presence or absence and function of buildings may be all that is required with regard to that restriction.

⁵ Adapted from the Natural Heritage Conservation Easement Agreement TEMPLATE of the Ontario Heritage Trust, 2006.

General Types of Conservation Easement Agreement Restrictions “The Owner Shall Not”....	Types of Information to Consider for Data Collection	Additional Considerations
<u>Roads, Parking Areas</u> <i>construct, improve or allow the construction or improvement of any road, parking lot, dock, aircraft landing strip or other such facility, except for the maintenance of existing foot trails, fire lanes or other accesses;</i>	<ul style="list-style-type: none"> ✓ Indicate on a baseline map the location (i.e, GPS) of existing trails and access points. Consider using GPS to map trails. ✓ Photograph a representative section of the trail or access point to indicate its width and terrain (i.e. compacted soil, gravel, woodchips). ✓ Describe the trail system, when it was established and its purpose. 	<ul style="list-style-type: none"> ✓ Consider using sound field procedures for photographing changes in vegetation and soils. This will facilitate future monitoring through repeat photography. One method is the PhotoPoint process developed by Frederick Hall (2001, 2003),
<u>Motorized Vehicles & Mountain Bicycles</u> <i>use or operate or allow the use or operation of mountain bicycles or motorized vehicles on the Lands including without limitation snowmobiles, all-terrain vehicles, motorcycles, motorboats or personal watercraft;</i>	<ul style="list-style-type: none"> ✓ Indicate the locations of trails and access points. ✓ Photograph, GPS and describe any evidence of past use by motorized vehicles such as tire ruts or soil compaction. 	
<u>Mobile Homes</u> <i>use or allow the Lands to be used as a trailer or mobile home park, parking or storage area;</i>	<ul style="list-style-type: none"> ✓ Indicate whether there is the presence or absence of existing sites for mobile homes, trailers, parking or storage. ✓ If there are existing sites, fully describe them, GPS locations, take photographs and map them. 	
<u>Dumping</u> <i>dump or allow the dumping of soil, rubbish, ashes, garbage, waste or other unsightly or offensive materials of any type or description;</i>	<ul style="list-style-type: none"> ✓ Indicate whether there is the presence or absence of existing sites where materials have been dumped. ✓ If there are existing sites, fully describe them, GPS locations, take photographs and map them. 	<ul style="list-style-type: none"> ✓ This may require documenting anecdotal information from the landowner on past practices
<u>Pesticides</u> <i>use or allow the use of pesticides, insecticides, herbicides, chemicals or other toxic materials of any type or description;</i>	<ul style="list-style-type: none"> ✓ Describe existing locations (i.e. GPS) and uses of chemical materials on the property. 	<ul style="list-style-type: none"> ✓ This may require documenting anecdotal information from the landowner on past practices

General Types of Conservation Easement Agreement Restrictions "The Owner Shall Not"....	Types of Information to Consider for Data Collection	Additional Considerations
<p><u>Grading, Topography</u></p> <p><i>change or allow any changes in the general appearance or topography of the Lands, including and without limiting the generality of the foregoing, the construction of drainage ditches, tile drains, retaining walls, dams or ponds or any similar undertakings, as well as the dumping, excavation, dredging or removal of loam, gravel, soil, rock, sand or other materials;</i></p>	<ul style="list-style-type: none"> ✓ Photograph, GPS and map all existing ditches, ponds, streams, wetlands, and other water bodies (both permanent and seasonal). ✓ For streams, indicate on the map the location of major bends, pools, runs and riffles. Describe the materials on the bottom of the stream (e.g. gravel, sand), the width and depth, direction and speed of flow and any flora and fauna they support. ✓ For wetlands, indicate their class and significance as well as any significant flora and fauna they support. ✓ For ponds, indicate if they are natural or human-made, their source (i.e. spring-fed, surface runoff, in-stream etc) their depth, how often they dry up, their shape, and the flora and fauna they support. ✓ Photograph, GPS and map any retaining walls, dams or other structures. ✓ Include a topographic map and describe the topography of the land. Emphasize any unique or ecologically important features. Describe the drainage pattern of the property. Identify and recharge or discharge areas on the property such as springs. ✓ Describe, photograph and GPS any evidence of past dredging grading or soil removal. 	<ul style="list-style-type: none"> ✓ The focus in this data collection is to thoroughly document recent disturbances. As this is a "no disturbance" clause, any violations would be relatively visible and should be easy to see in annual monitoring visits. However, this task is made more difficult if recent construction activity occurred prior to the conservation easement agreement. ✓ Ecological Land Classification (Lee <i>et al.</i>, 1998) can be used to classify aquatic systems. ✓ Consider using sound field procedures for photographing changes in vegetation and soils. This will facilitate future monitoring through repeat photography. One method is the PhotoPoint process developed by Frederick Hall (2001, 2003),

General Types of Conservation Easement Agreement Restrictions “The Owner Shall Not”....	Types of Information to Consider for Data Collection	Additional Considerations
<u>Vegetation</u> <i>remove, destroy or cut or allow the removal, destruction or cutting of trees, shrubs or other vegetation;</i>	<ul style="list-style-type: none"> ✓ Indicate the location and size of any woodlots. ✓ Describe any disturbed logging areas or pre-existing evidence of cutting. ✓ Map the major vegetation communities (i.e. ELC) on the property and show their boundaries. ✓ Describe these communities (indicate location, dominant species, and the functions they serve such as linkage, attenuation of water flow, habitat, and so on). ✓ List the rare, unusual or sensitive flora and fauna which have been reported in the area by the landowner and by past studies as well as the species you observe on the property. What is the status of these species locally, regionally and provincially? ✓ Describe the natural and human-made habitat on the property. How common is this habitat in the ecological region where the property is situated? 	<ul style="list-style-type: none"> ✓ If a particular plant species is not protected by the conservation easement agreement through the restrictions, it may not be, necessary to provide specific measurements of that species in the baseline. However, the land trust may want to document endangered, threatened, rare and significant species and it may want to maintain their exact location confidential. ✓ Relation to existing forest management plans (i.e. MFTIP) ✓ Ecological Land Classification (Lee <i>et al.</i>, 1998) can be used to classify vegetation communities. ✓ Consider using sound field procedures for photographing changes in vegetation and soils. This will facilitate future monitoring through repeat photography. One method is the PhotoPoint process developed by Frederick Hall (2001, 2003),
<u>Plants and Animals</u> <i>plant or allow the planting or other introduction of non-native plant or animal species within the Lands</i>	<ul style="list-style-type: none"> ✓ Describe the location and type of non-native vegetation observed on the property. 	<ul style="list-style-type: none"> ✓ This is useful information in the formulation of a future stewardship plan for the site
<u>Hunting, Fishing and Trapping</u> <i>use or allow the Lands to be used for commercial or sport hunting, fishing or trapping;</i>	<ul style="list-style-type: none"> ✓ Describe any evidence of past hunting, fishing and trapping. 	<ul style="list-style-type: none"> ✓ This may require documenting anecdotal information from the landowner on past practices
<u>Firearms</u> <i>use or allow the use of firearms on the Lands;</i>	<ul style="list-style-type: none"> ✓ Describe any evidence of prior firearms use. ✓ Spent shells should be removed but their location should be noted in the BDR for monitoring purposes 	<ul style="list-style-type: none"> ✓ This may require documenting anecdotal information from the landowner on past practices

General Types of Conservation Easement Agreement Restrictions “The Owner Shall Not”....	Types of Information to Consider for Data Collection	Additional Considerations
<p><u>Conservation of Water, Soil, Biota</u></p> <p><i>undertake or allow others to undertake any activities, actions or uses detrimental or adverse to water conservation, erosion control, soil conservation or the preservation of native plant and animal species; and</i></p>	<ul style="list-style-type: none"> ✓ Identify any water features with name, type (e.g. pond, lake, stream, river, wetland type, vernal pool), approximate size or distance with directional description of its location within the property and direction of flow; whether location is upstream or downstream of other activities; whether ephemeral or year-round; specify if constructed or natural. ✓ Describe the vegetation on any major slopes and along stream banks and other water features. ✓ Indicate whether water-taking is occurring. ✓ Indicate areas which are susceptible to erosion. ✓ Indicate any existing evidence of erosion. ✓ Photograph, GPS and map any recent incidences of vegetation removal 	<ul style="list-style-type: none"> ✓ Sometimes a restriction may relate to water quality which can be difficult to measure. Certain species may be important indicators of the ecological health of the property at the time the conservation easement agreement was registered. For example, the presence of aquatic invertebrates, fish, and amphibians in a water feature could be an indicator of good water quality, and especially useful if preserving water quality is an important element of the conservation easement agreement. ✓ Although all native plant species are protected by the conservation easement agreement through the restrictions, it may useful to provide specific measurements of certain endangered, threatened and rare species (using scientific monitoring methods) in the baseline. This provides an accurate baseline for monitoring any trespass and removal for sales in the exotic species retail sales (orchids in particular) and bonsai market.
<p><u>Livestock</u></p> <p><i>Permit agricultural livestock to enter or to use the Lands and maintain the fencing along the boundaries of the Lands in a condition that will prevent agricultural livestock from entering onto the Lands.</i></p>	<ul style="list-style-type: none"> ✓ Indicate evidence of livestock use of streams and forests. 	

6. Letter of Acknowledgement for Baseline Documentation Report

This section is to contain signatures (and dates) for the landowner(s) to verify that they agree that the contents of the BDR (including maps and photographs) are an accurate representation of the property, including its physical features and current uses, at the time of the conservation easement agreement registration. Consult legal advice for whether witness signatures are required etc. They should also acknowledge that they received a signed copy of the report.

It is best to have the BDR completed and signed at the time the conservation easement agreement is registered on title when all of the parties are focused on the issues and available to complete the supporting documentation. For any number of reasons however (including seasonal limitations in the field) it may not be possible to have a completed BDR at the time the conservation easement agreement is registered on title. In these circumstances, the conservation easement agreement may include an interim baseline documentation report or a summary of the best available information on the conservation values and condition of the property, together with an acknowledgement that it will be replaced by a full report at a specified later date (i.e. to be completed within 6 months). See the beginning of Section 2 for suggested fields for a BDR summary.

Moreover, land trusts should document the Landowner's acceptance of the contents of the complete BDR when it is finished, either by obtaining their signature on it or, failing that, by confirming (by letter to the landowner) that they do not have any objections to its contents.

7. Lists of Potential Maps, Photos or Data Sheets Attached to Master Copy of Report

List below the attachments which can include, but may not be limited to the following. Ensure that these attachments are referenced in the report, as necessary, and in fact attached to the document.

Exhibit A: **Registered Survey of the [NAME OF] Property and/or Survey of the Conservation Agreement Zones within the Property**

Exhibit B: **Legal Description of the [NAME OF] Property**

May want to attach a copy of the registered title deed

Exhibit C: **Conservation Easement Agreement Base Map**

It is common for land trusts to create a map of the property with all of its features and register it on title with the conservation easement agreement in addition to including it in the BDR. The conservation easement agreement map is an extremely important visual aid in understanding the features of the property (both natural and constructed). It can also be assumed to be a spatial representation of the property, and could be used in an evidentiary manner to support and defend the conservation easement agreement. Therefore, it should be ensured that the conservation easement agreement map that is produced contain reference to important features and zones of the property, accurately and with the necessary detail, especially those features and zones that relate to the restrictions and reserved rights.

There are many different ways to create a map for a conservation easement agreement. Some land trusts use legal surveys, some use orthographical photos or aerial photography as a base for their mapping and others use hand drawn illustrations. However, when there are different zones of protection within the property and when the conservation values necessitate highly accurate designations which are clearly identifiable on the ground an additional legal survey performed by an Ontario Land Surveyor (OLS) is recommended as the best tool for legally enforcing the conservation agreement in perpetuity.

Besides performing a legal survey, there are other spatial tools which can be used to determine areas or points of interest or photo sites on conservation easement agreement lands, which can then be referenced on the map. However it is important to note that without performing a legal survey, there may be large degrees of error involved. Geo-referencing (i.e. GPS coordinates) is another option however there can be large degrees of human and/or technological error associated with the user and the equipment being used. Other methods may include using a measurement tool, such as a measuring wheel. In any case, the land trust must assess the most accurate and feasible way to spatially document the zones and features of the conservation easement agreement, to maximize clarification both on the map and on the ground. Always remember that the perimeter boundaries of the property under conservation easement agreement should always be dictated by an official legal survey.

If the land trust is going to register their conservation easement agreement map on title with the agreement, is best to have the map in black and white, as colour maps are not always accepted by the registration office. For maps included as part of the BDR and contained in the registered with the agreement, colour may be used. Ensure that basic mapping conventions are followed, such as providing a scale, date, directional orientation, author/photographer identification, etc.

Mapping should spatially reference any important features on the ground, especially those which are pertinent to the conservation easement agreement. For example, a conservation easement agreement may have a restriction which states that "no new trails or roads can be created, but that existing ones can be maintained". In this case, the map should clearly indicate the width (i.e. using metric or imperial units), composition (dirt, gravel, grass) and position (location on the map) of the existing trails so that any future modification of these trails can be compared back to the original description. Symbolization on the map must reflect this need, so it is suggested that the shape, texture, value, and hue of all elements in the black and white spectrum be utilized. In addition to this, representational photographs of the trail can be taken. This is just one example of how the BDR and the map should directly relate to the conservation easement agreement restrictions and reserved rights in the agreement.

Exhibit D: Ortho photography of the [NAME OF] Property

Photo should be labeled with date of imagery, scale, direction arrow and other pertinent information. Aerial photos can be referenced with year, roll, flight line, numbers and scale.

Exhibit E: Ground Photos and Ground Photo Table of the [NAME OF] Property

Each photo should be labeled with date and time, description of photo reference site including direction of photo (using compass), location where photo was taken (using compass GPS coordinate), description of how to find the photo location, name of photographer, details of equipment used as well a unique identifier so that in the future photos (digital, negatives and/or hardcopy) can be retrieved from files if necessary. It is also recommended to include a map of photo reference sites for future photo monitoring.

Include a reference table of the ground photos which organizes the information as stated above and provides a description of the purpose of each photo.

Exhibit F: Property Map Showing Natural Features & Description

A map of the property showing boundaries of ANSIs, ESAs, PSWs etc as well as vegetation communities.

Exhibit G: Zoning Schedule for the [NAME OF] Property (from the Municipality)

**Exhibit H: Summary Life Science Checklist & Description or Natural Areas Report
(From MNR Natural Heritage Information Centre (NHIC) Website)**

Other Attachments as Necessary:

E.g. Surficial Geology Map, Soil Map, Tree Planting Plans, Management Agreements, Leases etc.

APPENDIX C: Sources of Information on Natural Areas in Ontario

TYPE OF INFORMATION	DATA SOURCES
Rare species and communities	NHIC, COSEWIC, COSSARO, Species at Risk Recovery Teams
Natural Areas, Wetlands, ANSIs	NHIC, OMNR Districts, CAs, Nature Clubs, municipalities, special policy areas
Significant Woodlands	Ontario Nature, municipalities
Important bird habitats	Bird Studies Canada, Canadian Wildlife Service
Significant Aquatic Habitats	NCC, OMNR, CAs
Significant Wildlife Areas	OMNR Districts
Core areas and regional corridors	NHIC, NCC

Source: Environment Canada, Beyond Islands of Green. 2005 Table 6, p.29

Chapman, L.J. and D.F. Putnam. The Physiography of Southern Ontario, Ontario Geological Survey, 1984. Textbook: A concise description of Southern Ontario's geology and historical development

Lee, Harold, Wasyl Bakowsky, John Riley et al. Ecological Land Classification for Southern Ontario. SCSS Field Guide FG-02. North Bay: Ontario Ministry of Natural Resources. Natural Heritage Information Centre, 1998.

Websites:

Canadian Soil Information System (CanSIS)

Website: sis.agr.gc.ca/cansis/

GIS data/information and publications relating to soils in Canada.

Canadian Wildlife Federation – Invasive Species Database

Website: www.cwf-fcf.org/invasive/chooseSC.asp

Search database for information on invasive species.

Ecological Gifts Program

Website: www.cws-scf.ec.gc.ca/egp-pde/

Information on Canada's Ecological Gift program for donations of ecologically sensitive land.

Geological Survey of Canada

Website: gsc.nrcan.gc.ca/index_e.php

This site has a geoscience data repository and various other resources to search from.

Land Information Ontario <http://www.lio.mnr.gov.on.ca/en/index.html>

MNR's Geographic Information Branch is responsible for this site which provides more than 200 spatial data layers for Ontario. It contains such information as

- ✓ Property boundaries and boundaries of cities and towns
- ✓ Zoning, land-use assessments and mining rights information

- ✓ Population information (demographics and census data)
- ✓ Topographic features (e.g. elevation, contours, streams, etc)
- ✓ Information about water, soils, plants, trees, fish and wildlife
- ✓ Water and air quality information
- ✓ Roads and civic addressing data
- ✓ Structures built on the land such as utilities and buildings

Ontario Geological Survey (OGS)

Website: www.mndm.gov.on.ca/mndm/mines/ogs/Default_e.asp

For information on geological, geochemical and geophysical data for Ontario.

Natural Heritage Information Centre (NHIC), Ministry of Natural Resources

Website: nhic.mnr.gov.on.ca/nhic.cfm

For information on natural areas, species information including rare species information.

Visitor has capability of searching for information based on various criteria.

Ontario Heritage Trust (OHT)

Website: www.heritagetrust.on.ca

For information on programming for natural, built, and cultural heritage in Ontario.

Ontario Land Trust Alliance (OLTA)

Website: www.ontariolandtrustalliance.org

Information on and for Ontario Land Trusts. Also has a members-only section to the website (password required).

U.S. Based Resources

Publications:

Ground-based Photographic Monitoring Standards

Hall, Frederick C. 2001. Ground-based photographic monitoring. Gen. Tech. Rep. PNW-GTR-503. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 340 p.

Website: www.fs.fed.us/pnw/pubs/gtr503

Photo Point Monitoring Handbook:

Part A - field procedures. General Technical Report PNW-GTR-526, by Hall, Frederick C. United States Department of Agriculture.

Website: www.fs.fed.us/pnw/pubs/gtr526/

The Conservation Easement Handbook. 2nd Edition, by the Land Trust Alliance.

Website: www.lta.org/publications/

Websites:

Natureserve

On-line searches of plant communities and animals in North America (includes Canada).

Website: www.natureserve.org/explorer/

U.S. Land Trust Alliance (LTA)

Website: www.lta.org

Information and publications on land trusts in the U.S. Website has a members-only section (password required).