Fully Accounting for Canada's Conservation Lands:

Assessing the Protection and Conservation Value of Lands Managed by the Conservation Authorities and Partners in Ontario

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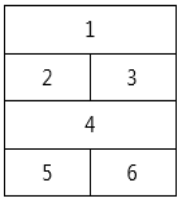
Recommended Citation: Gray, P. A., T. J. Beechey, C. J. Lemieux, A. G. Douglas, G. Bryan and J. Sherwood. 2017. Fully Accounting for Canada's Conservation Lands: Assessing the Protection and Conservation Value of Lands Managed by Conservation Authorities and Partners in Ontario. Ontario Centre for Climate Impacts and Adaptation Resources (OCCIAR), MIRARCO/Laurentian University, Sudbury, Ontario, Canada.



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1 - Minesing Wetlands (photo credit: Nottawasaga Valley Conservation Authority)
2 - East Duffins Headwaters (photo credit: Toronto and Region Conservation Authority)
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4 - Forest managed by the Grey-Sauble Conservation Authority (photo credit: Tom Beechey)
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About

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Acknowledgements

We thank Conservation Authority (CA) staff for participating in the evaluation of selected CA properties: Gayle Wood and Hendrik Amo (Nottawasaga Valley CA); Kim Smale, Peter Dragunas, and Krista Fazackerley (Catfish Creek CA); Steve Knechtel, Travis York, and Tom Beaubiah (Cataraqui CA); Richard Wyma, Kevin Money, and Tom Dufour (Essex Region CA); Brian Denney, Andy Bowler, and Sinem Kilic (Toronto and Region CA); Dan Marinigh and Terry Wiegard (Otonabee Region CA); Marlene MacKinnon and Rhonda Bateman (Sault Ste. Marie CA); and, John Cottrill and Chris Hachey (Grey Sauble CA). Thanks to Rick Wilson (Conservation Ontario) for initial feedback and discussion. Thanks to Dan Kraus and an anonymous reviewer at the Nature Conservancy of Canada, Claudia Haas (Government of Nunavut), Heather Lazaruk (Government of Alberta), and Dave MacKinnon (Canadian Council on Ecological Areas) for reviewing an earlier version of the manuscript.

We thank Steven Woodley for his advice about the relationship of all 20 Aichi Targets to natural heritage areas and the general use of the term 'partially protected'. Ogilvie, Ogilvie and Company collaborated with OCCIAR to organize and facilitate the 28 March 2017 workshop in Barrie. We thank Robb Ogilvie for serving as the workshop designer and facilitator, and Annette Morand for her valuable contributions as the workshop coordinator. We thank representatives from a number of organizations and agencies for participating in the March workshop and for their valuable input: Conservation Authorities - Kim Barrett (Conservation Halton), Hajnal Broz (Conservation Sudbury), Jamie Davidson Conservation (Central Lake Ontario CA), Deanna Cheriton (Toronto and Region CA), Noah Gaetz (Toronto and Region CA), Chris Hachey (Grey Sauble Conservation), Kyra Howes (Nottawasaga Valley CA), Jessie James (Otonabee Conservation), Brian R. Kemp (Lake Simcoe Region CA), Heather Lynn (Credit Valley Conservation),

Brian McDougall (St. Clair Region CA), Don Pearson (Lower Thames Valley CA), Cathy Quinlan (Upper Thames River CA), Troy Storms (North Bay-Mattawa CA), Alyson Symon (Mississippi Valley CA), Byron Wesson (Nottawasaga Valley CA), Richard Wyma (Essex Region CA). Conservation Ontario - Kim Gavine and Rick Wilson. Environment Canada and Climate Change - Christian Asselin, Graham Bryan (Canadian Wildlife Service), Andrea Kettle (Canadian Wildlife Service), Jocelyn Sherwood (Canadian Wildlife Service). Ministry of Natural Resources and Forestry - Laura Bjorgan (Protected Areas Section), Rob Davis (Protected Areas Section), Karen Hartley (Protected Areas Section), Jim Mackenzie (Ontario Natural Heritage Information Centre), Kim Taylor (Natural Heritage Information Centre). Nature Conservancy of Canada - Wendy Cridland. Office of the Environmental Commissioner of Ontario - Rebekah Church. Ontario Biodiversity Council - Steve Hounsell. Ontario Nature - Caroline Schultz. We also thank Annette Morand (OCCIAR) for applying her excellent formatting skills to the report and administration of this project.

SUMMARY

This project informs the development of a methodology to assess the protection status of conservation lands and waters managed by Ontario's Conservation Authorities, and to comment on the potential contribution of these properties to Canada's Biodiversity Goals and Targets and the Convention on Biological Diversity (CBD) Aichi 2020 Target commitments, particularly but not limited to Target 11.

The study area encompasses more than 6,400 land parcels totalling more than 150,000 hectares managed by 36 Conservation Authorities located in southern Ontario and parts of northern Ontario. These properties are catalogued in a database facilitated and held by Environment and Climate Change Canada, Canadian Wildlife Service (Ontario Region) (ECCC-CWS) and compiled by Conservation Ontario (CO) and Conservation Authority (CA) members.

Every property is unique, subjected to an eclectic mix of anthropogenic and natural forces, and managed with CA-specific policies often complemented with site-specific management plans. This project was organized into five areas of work including:

1) An exploration of the definition of protection and related measures;
2) An evaluation of the Conservation Authorities database and its capacity for assessing protection status and the International Union for the Conservation of Nature (IUCN) protection categories;
3) Development of a screening technique to evaluate protection status;
4) A test of the screening technique on a sample of CA properties; and
5) A workshop to discuss project progress and the potential contribution of lands and waters managed by CAs and partners to Canada's commitment to the Aichi Biodiversity Targets.

A number of ideas and suggestions are identified in the report. Some were discussed and evaluated at the workshop including use of a formal screening technique (with 'standard' criteria developed by the Canadian Council on Ecological Areas [CCEA]) to assess protection status, integration of

a visual diagnostic key in the CA database that will enable the CAs to identify the appropriate IUCN category for protected areas, opportunities to use CA case studies in the forthcoming CCEA Guidebook, and the value of recognizing important cultural and ecological values on CA properties that do not meet the IUCN definition of protected area (i.e., an Area of Natural and/or Cultural Value [ANCV]) .

ACRONYMS

ANCV – Area of Natural and/or Cultural Value
ANSI – Area of Natural and Scientific Interest
CA – Conservation Authority
CARTS – Conservation Areas Reporting and Tracking System
CASIOPA – Centre for Applied Science in Ontario's Protected Areas
CBD – Convention on Biological Diversity
CCAD – Canadian Conservation Areas Database
CCEA – Canadian Council on Ecological Areas
CO – Conservation Ontario
COP – Conference of the Parties
ECCC-CWS – Environment and Climate Change Canada - Canadian Wildlife Service
EDHPAC – East Duffins Headwaters Public Advisory Committee
EDHPSC – East Duffins Headwaters Project Steering Committee
GIS – Geographic Information System
IBP – International Biological Programme
ICCA – Indigenous Peoples' and Community Conserved Territories and Areas
IUCN – International Union for the Conservation of Nature
MS – Microsoft
NCC – Nature Conservancy of Canada
NCP – National Conservation Plan
NGO – Non-governmental Organization
OEABCM – Other Effective Area-based Conservation Measure (referenced as OECM in this report)
OMNRF – Ontario Ministry of Natural Resources and Forestry
ONHIC – Ontario Natural Heritage Information Centre
PA – Protected Area
PRFO – Parks Research Forum of Ontario
PSW – Provincially Significant Wetland
WCPA – World Commission on Protected Areas
WWF – World Wildlife Fund

CONTENTS

1.0 INTRODUCTION

Environment and Climate Change Canada-Canadian Wildlife Service (ECCC-CWS) is responsible for non-aquatic species and habitats of federal interest, and part of this commitment is to contribute to the *National Conservation Plan* (NCP) and provide full accounting of the nation's conservation lands. Historically, only parks and reserves created and protected under statute and held by provincial/territorial or federal governments were considered protected. However, a number of other conservation tools that contribute to the protected area estate have been applied for many years and merit acknowledgement, including indigenous conservation lands, properties of non-governmental organizations (e.g., Nature Conservancy of Canada and Ducks Unlimited properties), federal lands not counted in the past (e.g., National Capital Commission properties), Conservation Authority lands, and land trusts. Many of these properties enhance the protected area estate and will help Canada meet its Aichi 2020 targets.

This project is designed to employ a Conservation Authority lands database (Conservation Ontario 2015) to inform development of a methodology to assess potential protection/conservation status, to test the methodology on selected CA properties, and to comment on the potential contribution of these properties to biodiversity conservation and to Canada's Aichi Target commitments.

Eugenia Falls Conservation Area, Eugenia, Ontario (photo credit: Grey Sauble Conservation Authority)

2.0 BACKGROUND

"*Biological diversity means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems*" (CBD 1992).

Biodiversity is the web of life, and the retention of maximum biodiversity is essential for long-term ecological sustainability, including human health and well-being. Worldwide, most nation states are involved in biodiversity conservation. At the Earth Summit in Rio de Janeiro in 1992, Canada signed on with other parties, now including 195 member parties and the European Union, who have committed to a global effort to conserve biodiversity under the *United Nations Convention on Biological Diversity* (CBD 1992). Further, global guidance on conservation initiatives issues from the *Strategic Plan for Biodiversity 2011-2020* (CBD 2010) formulated and accepted by member states, including Canada, at Aichi, Japan in 2011 (Standing Committee on Environment and Sustainable Development 2017).

Little Cataraqui Creek Conservation Area, Kingston, Ontario (photo credit: Cataraqui Region Conservation Authority)

Protected areas are universally accepted as a critical means to conserve biodiversity. Aichi Target 11 endorses this approach and calls on all signatories to incorporate 17% of their terrestrial land base and inland waters and 10% of their marine and coastal waters into their protected areas network by 2020. In addition, the Aichi target speaks to the quality of landscapes and waterscapes:

"By 2020, at least 17 percent of terrestrial and inland water, and 10 percent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes" (IUCN 2010).

Such networks are comprised of protected areas as defined by the IUCN (see Dudley 2008) and areas protected by 'other effective area-based conservation measures' (OEABCMs; acronym shortened to OECMs by the IUCN) in the Aichi *Strategic Plan for Biodiversity* (CBD 2010). All of Canada's 19 biodiversity goals and targets for 2020 (ECCC 2016) support many of the 20 Aichi targets. For example, Canada's Target 1 states that:

"*By 2020, at least 17 percent of terrestrial areas and inland water, and 10 percent of coastal and marine areas, are conserved through networks of protected areas and other effective area-based conservation measures*" (ECCC 2016).

While Canada's Target 1 statement outlines a clear commitment to Aichi Target 11, it makes little reference to the quality of landscapes and waterscapes in the protected area estate. However, the question of quality was clarified by a government

of Canada representative at a CCEA workshop in February 2013 who stated that Aichi Target 11 and Canada's Target 1 are intended to encompass exactly the same kinds of areas, so that guidance developed to interpret Aichi Target 11 will be equally applicable to Canada's proposed Target 1 (CCEA 2013).

In 2013, the CCEA initiated work with federal, provincial/territorial agencies, non-governmental organizations (NGOs), and independent scientists and practitioners to develop guidelines to help evaluate additional lands and waters for their potential contribution as protected areas or as OECMs to Canada's network of protected areas.

To date, this initiative has generated draft guidelines for protected areas and OECMs, which are currently being tested with case study application of federal and provincial/territorial properties. It is anticipated that a number of case studies will be included in the forthcoming revision of the 2008 CCEA Guidebook.

As of 2015, 10.6% of Canada's terrestrial area was recognized as protected. In April 2016, in response to Aichi Target 11 and Canada's Target 1, federal, provincial, and territorial agencies responsible for parks agreed to establish a National Steering Committee to create a pathway that will help jurisdictions contribute to conserving at least 17% of Canada's terrestrial lands and inland waters by 2020 (Canada Parks Council 2016).

In support of this decision, seven expert working groups were established to gather information to inform discussions about the "Pathway to Canada Target 1". Topics include:

- Defining protected areas and other effective conservation measures.
- Indigenous conservation areas and equitable management from an indigenous perspective.
- Equitable management from a non-indigenous perspective.
- Guidance on assessing ecological representation.
- Guidance for connected and integrated parks and conservation areas.
- Guidance on measuring effective management.
- Identifying areas important for biodiversity and ecosystem services (Canadian Parks Council 2016).

The expert working groups are required to provide regular progress updates.

3.0 Study Area

The study area is encompassed by the 36 CAs located in southern Ontario and parts of northern Ontario (Figure 1). CAs are a unique creation among the many agencies and organizations involved with protecting natural areas and biodiversity throughout Ontario and Canada. The extent and significance of their combined holdings for potential biodiversity conservation rivals that of provincial and federal efforts in southern Ontario. Many sites within CA properties, such as Minesing Swamp, Greenock Swamp, Wainfleet Bog, Stone Road Alvar, and Springwater Forest may be seen as nationally significant because they protect representative and unique ecosystems and species at risk. Collectively, CA holdings encompass more than 6,400 parcels with a total area of more than 150,000 hectares, most of which is compositionally and/or functionally important for biodiversity conservation.

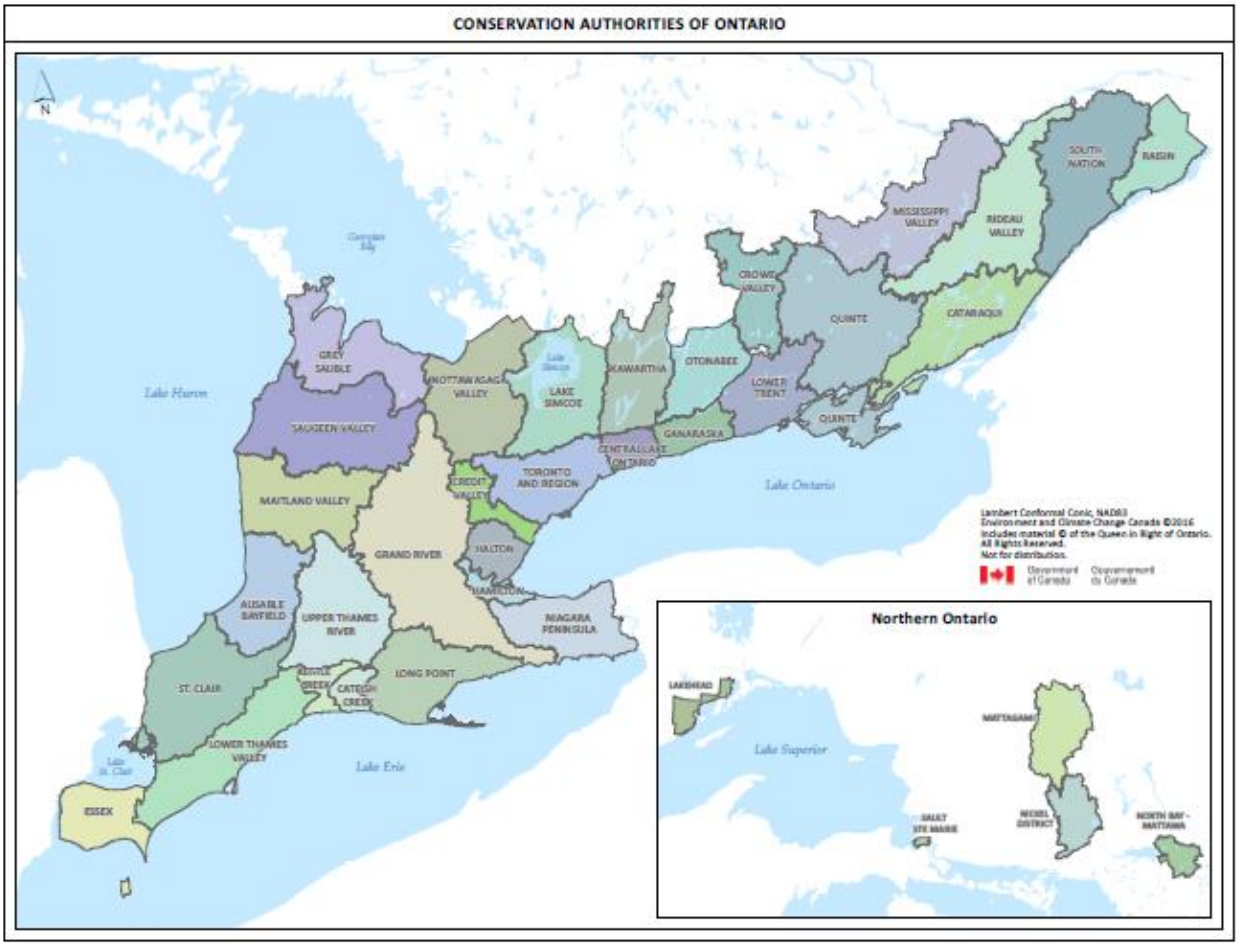


Figure 1: Boundaries of Ontario Conservation Authorities (map prepared by J. Sherwood).

Nashville Conservation Reserve, Vaughn, Ontario (photo credit: Toronto and Region Conservation Authority)

The unique organizational fabric of CAs enables them to be both nimble and robust in their dealings as conservation 'middlemen' across the public and private sectors. With this pedigree, the CA domain is rightly regarded as a conservation leader. Although these parcels represent only 1/10th of 1% of Canada's protected area estate, they are extremely important to the Target 11 commitment because they are located in or encompass ecosystems or parts of ecosystems in one of the country's most significantly modified landscapes. In addition, the CAs benefit from funding provided by NGOs (e.g., The NCC's *Other Qualified Organizations Program* and the WWF's *Species At Risk Fund*), and provincial and federal agencies (e.g., the *North American Waterfowl Management Plan* and the *Habitat Stewardship Program*) to protect important areas for biodiversity.

4.0 METHODS

The project was organized into five areas of work including:

1) An exploration of the definition of protection and related measures;
2) An evaluation of the CA database and its capacity for assessing protection status and the IUCN protection categories;
3) Application of a screening technique to evaluate protection status;
4) A test of the screening technique on a sample of CA properties; and
5) A workshop to review project progress and to discuss the potential contribution of lands and waters managed by the CAs and partners to Canada's commitment to the Aichi biodiversity targets.

4.1 Definition of Protected Area, Area of Natural and/or Cultural Value (ANCV), and Other Effective Area-based Conservation Measures (OECM)

The IUCN definition of protection was used as the basis for a comparison of the definitions and relationships between protected areas, ANCVs, and OECMs. ANCVs are essentially areas that do not qualify as protected areas, but do provide protection for some natural and cultural assets in various combinations. An OECM is a relatively new designation introduced at the 2010 Conference of the Parties to the *Convention on Biological Diversity* (COP10) (CBD 2010) and has since generated considerable confusion among the Parties.

The overall objective of this analysis was to re-affirm the definition of protected area, articulate the similarities and differences between protected areas and OECMs, and propose a preliminary classification for CA properties that do not qualify as protected areas, but do conserve significant natural and/or cultural values.

4.2 Comparison of the CA Database, CCEA Criteria, and the IUCN Classification System

The 6,400 parcels of land held in full or partial title that potentially qualify as protected areas or OECMs are described in a geospatial database sponsored by ECCC-CWS and compiled by Conservation Ontario (CO) and the CAs. It is not known how many conserved or protected areas in these parcels would qualify as Aichi Target 11 properties. The data describing each parcel were available for this project in MS Access, MS Excel, and the ESRI ArcGIS geospatial database, with or without GIS layers and other spatial attributes.

Content analysis was used to compare the CA database criteria (contained in an Excel spreadsheet prepared by Spatialworks 2014) to the CCEA protected area criteria (CCEA 2014, MacKinnon et al. 2015), and the IUCN protection categories (Dudley 2008). Options were explored for integrating criteria from the three sources. First, the purpose of each database attribute was identified and recorded (e.g., site identification, determination of protection status, and assignment of an IUCN category). Second, it was determined if protected area criteria and their inherent prescriptions in the CA database were consistent with criteria and prescriptions recommended by the IUCN (Dudley 2008) and the CCEA (MacKinnon et al. 2015) (Appendix A: Review and Comparison of the CA Database and the CCEA Criteria). Third, decision criteria, including prescriptive rules, in the CA database

were compared with the IUCN guidelines prepared by Dudley (2008) to assess robustness and consistency of the proposed classification scheme. Differences were identified, and recommendations were developed for a final set of screening rules (Appendix B: An Assessment of the Proposed Classification Scheme in the Spatialworks (2014) Report to Match a Protected Area to an IUCN Category).

4.3 Application of a Screening Technique to Evaluate Protection Status

On the basis of the review of the CA database, a screening technique derived from work completed by the IUCN over the course of many decades, and more recently the CCEA to assess the protection status of conserved areas (MacKinnon et al. 2015) was compiled to answer two questions:

- Is the property a protected area, an OECM, an ANCV, or not an ANCV?
- If a protected area, what is the property's IUCN classification?

Protection Status

Is the property a protected area, an OECM, an ANCV, or not an ANCV? The CCEA has developed a user-friendly reporting template that serves as an evaluation platform (screening tool) and provides for a descriptive and numeric record of an area's attributes (Appendix C). The CCEA template has four parts: 'Basic Information', 'Conservation Effectiveness', 'Effectiveness of Protection from Subsurface Resource Activity', and 'CARTS Database Reporting Outcomes - Summary' (see Figure 2).

It is important to note that the language for the OECM guidelines was under development at the time of preparing this report and was not used to assess CA properties. However, obvious similarities and differences were noted when available. It is anticipated that the OECM guidelines will be available for testing in late 2017.

For the purposes of this evaluation, the criteria developed by the IUCN (e.g., Dudley 2008) and the CCEA (e.g., CCEA 2008, 2014, MacKinnon et al. 2015) were used to help the CAs assess the potential 'conservation effectiveness' and 'effectiveness of protection from subsurface resource activity' for selected CA properties. MacKinnon et al. (2015) describe the decision-making process in steps.

The CCEA tool uses a green-yellow-red classification system to distinguish thresholds of protection of conservation values (see Figure 3 and Table 1).

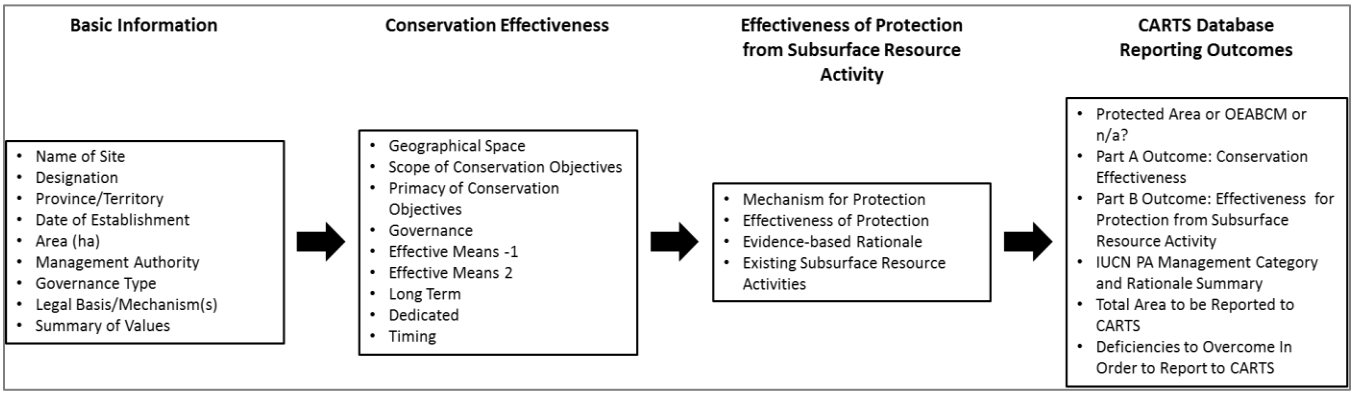


Figure 2: Components in the CCEA draft template for Canadian guidelines.

The steps are:

- Compare area (measure) against the descriptions in the screening tool.
- If the assessed area satisfies all of the criteria (i.e., all green) for 'Conservation Effectiveness' and 'Effectiveness of Protection from Subsurface Resource Activity', then it is a Target 11 area.
- If the area corresponds in a least one respect with a description in a red cell, it is not a protected area or OECM and should not be reported as an Aichi Target 11 site.
- If the area corresponds in at least one respect to a description in a yellow cell, there is a gap in effectiveness, and it may not qualify as an Aichi Target 11 site. If all apparent gaps in effectiveness can be demonstrated as not real, the area can be qualified as an Aichi Target 11 site. If the responsible organization is not committed to addressing the apparent gaps within a reasonable time frame, the site should not be reported as an Aichi Target 11 site.
- If the organization is committed to addressing all gaps within a reasonable time frame, the area can potentially be reported as an 'interim' or 'candidate' Aichi Target 11 site until all the gaps are addressed.

The CCEA sponsored background analyses (e.g., Bagshaw 2014) on a range of legal and ecological issues associated with subsurface rights and activities, and consulted widely on the indicators and measures that contribute to a 'standard' to help practitioners assess effectiveness of protection from subsurface resource activity. The standard is based on an agency's effectiveness at preventing:

- The granting of subsurface resource rights.
- The exercise of subsurface resource rights.
- Impacts on conservation values (Table 1; CCEA 2014).

Protection from subsurface resource activity was assessed on the basis of our interpretation of the *Mining Act*, CA response to an 11-question survey (Appendix D), and discussion about subsurface rights at the March 2017 workshop in Barrie.

If a CA property does not qualify as a protected area, the property's natural and/or cultural values may warrant some type of formal recognition. For the purposes of this report, a preliminary list of 'value themes' was created and integrated into the screening process (Figure 4). It is possible that some of these Areas of Natural and/or Cultural Value (ANCVs) may qualify as protected areas or OECMs at some point in the future.

IUCN Protected Area Classification

If a property qualifies as a protected area it can be assessed for IUCN protected area status using criteria and prescriptions outlined in Dudley (2008). A visual diagnostic key was created to help answer this question and allow practitioners to complete the CCEA template (Figure 4). The diagnostic key is based on Dudley (2008) and modified from Gray et al. (2009).

The Capacity of the CA Database and the CCEA Template to Serve as a Repository for Legal and Bio-geophysical Data

The capacity of the CA database and the CCEA template as a repository for legal, cultural, and bio-geophysical data and information, management effectiveness, photographs, and maps was investigated.

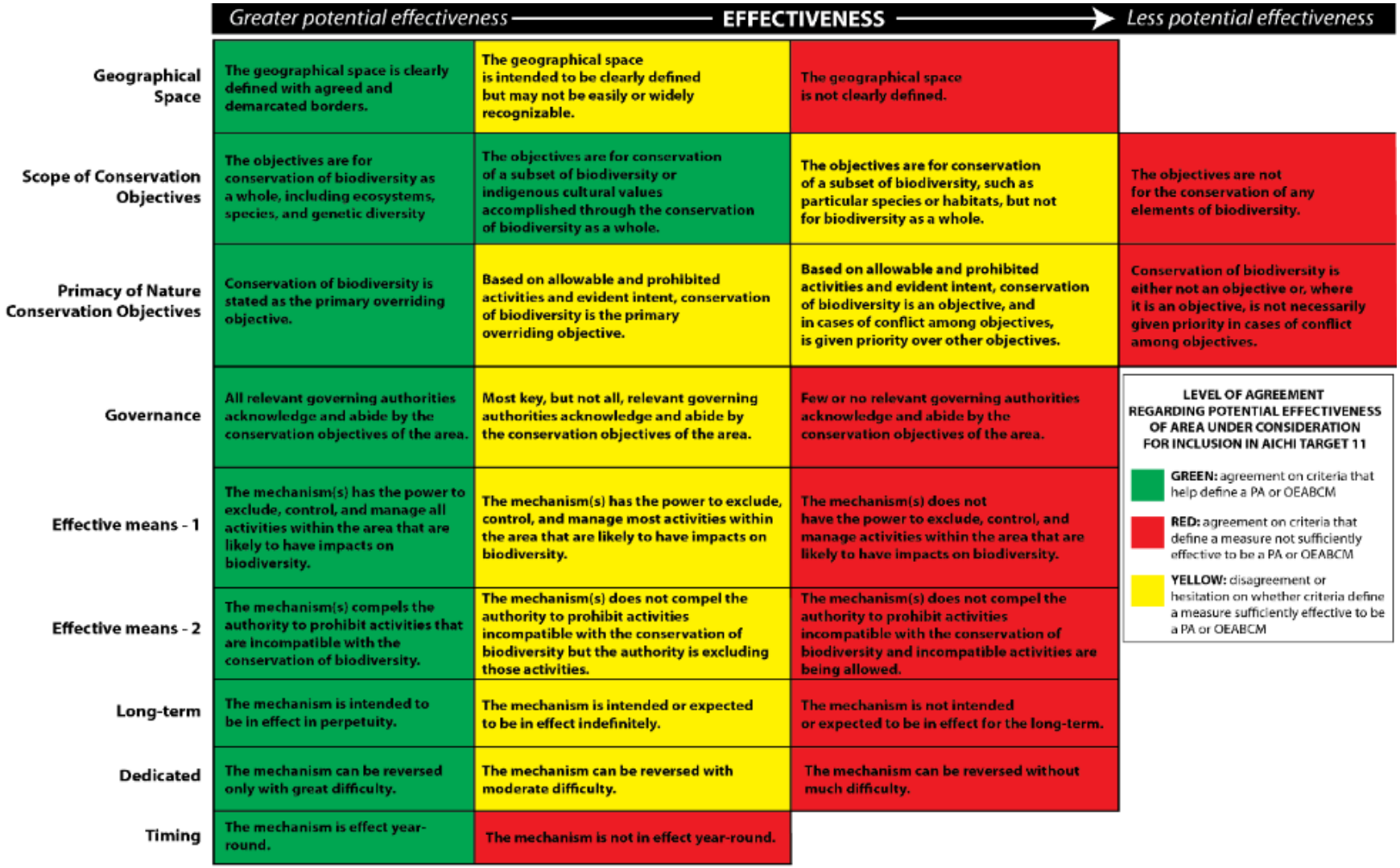


Figure 3: Conservation effectiveness screening tool developed by the CCEA to assess the protection status of Aichi Target 11 candidate sites (MacKinnon et al. 2015). At the time of writing this report, the CCEA screening tool was under development, and we expect that it will evolve over time. In addition, OECM criteria likely will be available in late 2017. Practitioners are advised to consult the CCEA webpage for the current version of the decision-screening tool, including subsurface rights (see Table 1).

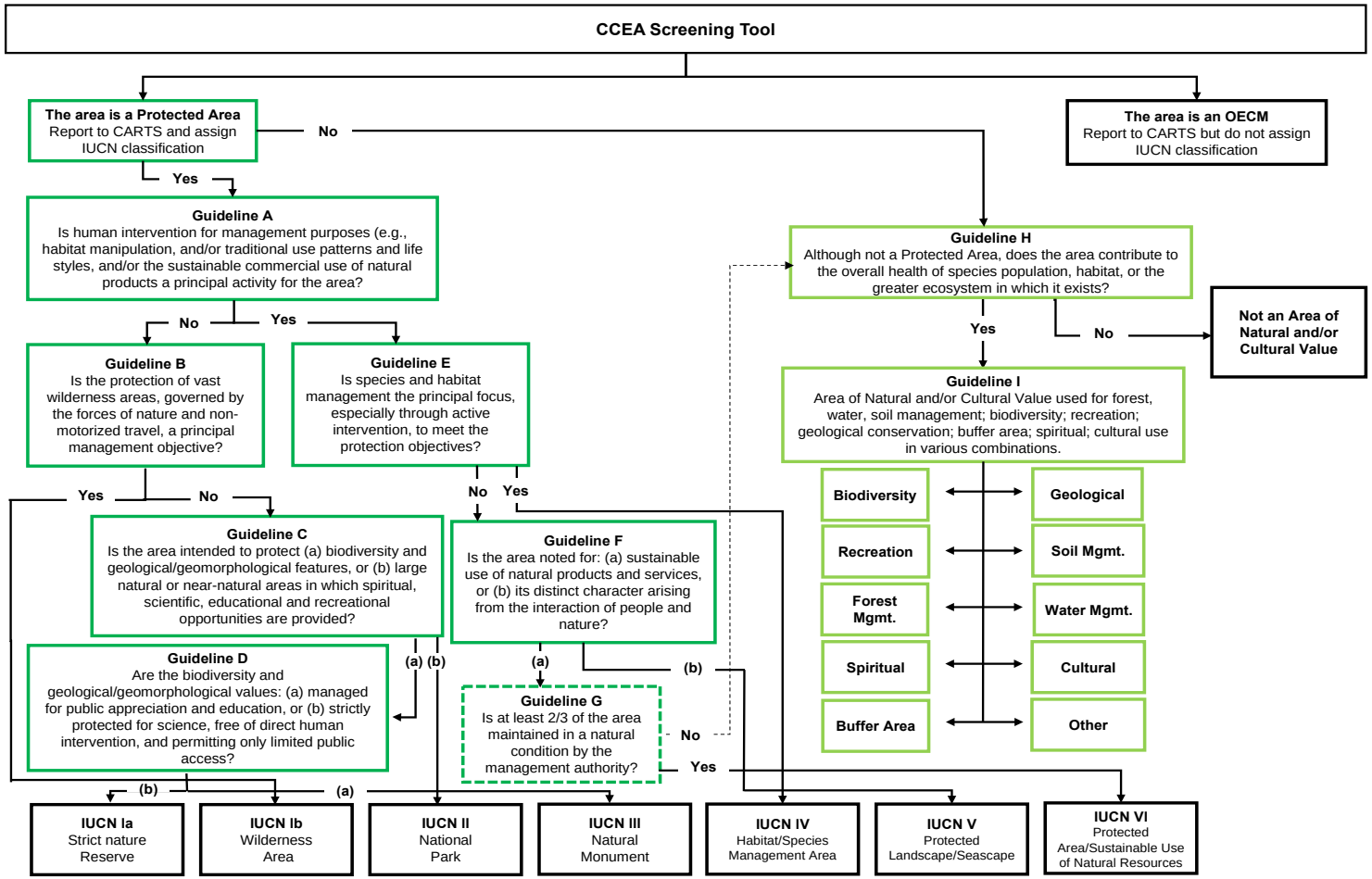


Figure 4: Protected Area, IUCN Category, Area of Natural and/or Cultural Value (ANCV), and Other Effective Area-based Measures (OECM) decision key. The user follows his/her line of answers about the area to identify the IUCN designation (modified from Gray et al. 2009). Note that a 'no' response to the question in Guideline G contradicts the higher level 'protected area' designation. However, the two-thirds rule presented by Dudley (2008: 23) is recommended to ensure that a portion of the area remains relatively intact: *"In general, IUCN recommends that a proportion of the area is retained in a natural condition (…this does not necessarily preclude low-level activity, such as the collection of non-timber forest products), which in some cases might imply its definition as a no-take management zone. Some countries have set this as two-thirds; IUCN recommends that decisions need to be made at a national level and sometimes even at the level of individual protected areas."*

Table 1: Conservation effectiveness of mechanisms for managing subsurface resources within protected areas and other effective area-based conservation measures (Canadian Council on Ecological Areas, 18 September 2014).

Conservation effectiveness of mechanisms for managing subsurface resources within protected areas and other effective area-based conservation measures (Canadian Council on Ecological Areas, 18 September 2014)						
Mechanism for Protection from Subsurface Mining Activity			**Effectiveness at preventing the granting of subsurface resource rights**	**Effectiveness at preventing the exercise of subsurface resource rights**	**Effectiveness at preventing impacts on conservation values**	**Recommended interpretation of outcome**
All subsurface rights are permanently acquired, withdrawn, or extinguished prior to or at the time of designation or establishment			Green	Green	Green	Best practice
Subsurface rights granted prior to designation or establishment are honoured until their lawful expiry or termination, after which they are permanently acquired or extinguished	Activities associated with the exercise of pre-existing rights are limited by law	Calling for no or insignificant impact on conservation values, and prohibiting access to, and impacts on, the surface and biotic zone	Green	Yellow	Green	Minimum standard
		Calling for no or insignificant impact on conservation values, but allowing access to the surface or biotic zone for non-destructive exploration activities	Green	Red	Yellow	May or may not meet minimum standard, depending on whether there is clear evidence of prevention of impacts and long-term effectiveness
		Potentially allowing for significant impacts on conservation values	Green	Red	Red	Below minimum standard
	Activities associated with the exercise of pre-existing rights are limited by policy or ministerial discretion	Calling for no or insignificant impact on conservation values and no access to, or impacts on, the surface and biotic zone	Green	Yellow	Yellow	May or may not meet minimum standard, depending on whether there is clear evidence of prevention of impacts and long-term effectiveness
		Calling for no or insignificant impact on conservation values, but allowing access to the surface and biotic zone	Green	Red	Yellow	May or may not meet minimum standard, depending on whether there is clear evidence of prevention

		for non-destructive exploration activities.				of impacts and long-term effectiveness
		Potentially allowing for significant impacts on conservation values	Green	Red	Red	Below minimum standard
	Activities associated with the exercise of pre-existing rights are limited by other effective means (e.g., influence, information-sharing, negotiation, agreements, partnerships, contracts, or easements)	Calling for no or insignificant impact on conservation values, and preventing access to, and impacts on, the surface and biotic zone	Green	Yellow	Yellow	May or may not meet minimum standard, depending on whether there is clear evidence of prevention of impacts and long-term effectiveness
		Calling for no or insignificant impact on conservation values, but allowing access to the surface or biotic zone for non-destructive exploration activities	Green	Red	Yellow	Below minimum standard, unless there is clear evidence of prevention of impacts and long-term effectiveness
		Calling for no or insignificant impact on conservation values, and discouraging access to, and impacts on, the surface and biotic zone	Green	Red	Yellow	Below minimum standard, unless there is clear evidence of prevention of impacts and long-term effectiveness
		Potentially allowing for significant impacts on conservation values	Green	Red	Red	Below minimum standard
	The exercise of pre-existing rights is not substantially hindered by policy, ministerial discretion, or other effective means, regardless of impacts on the conservation value of the area		Green	Red	Red	Below minimum standard
Subsurface rights are acquired by an organization/agency with a primary mandate for conservation, but only temporarily pursuant to the resource legislation under which they are granted			Red	Red	Red	Below minimum standard
Subsurface rights continue to be legally available, and subsurface rights may or may not have been granted	Activities associated with the exercise of any subsurface rights are limited by law	Calling for no or insignificant impact on conservation values, and prohibiting access to, and impacts on, the surface and biotic zone	Red	Yellow	Green	Minimum standard
		Calling for no or insignificant impact on conservation values, but allowing access to the surface or biotic zone	Red	Red	Yellow	Below minimum standard, unless there is clear evidence of prevention of impact and long-term effectiveness

prior to designation or establishment		for non-destructive exploration activities				
		Potentially allowing for significant impacts on conservation values	Red	Red	Red	Below minimum standard
	Activities associated with the exercise of any subsurface rights are limited by policy or ministerial discretion	Calling for no or insignificant impact on conservation values and no access to, and impacts on, the surface and biotic zone	Red	Yellow	Yellow	May or may not meet minimum standard, depending on whether there is clear evidence of prevention of impacts and long-term effectiveness
		Calling for no or insignificant impact on conservation values, but allowing access to the surface or biotic zone for non-destructive exploration activities	Red	Red	Yellow	Below minimum standard unless there is clear evidence of prevention of impact and long-term effectiveness
		Potentially allowing for significant impacts on conservation values	Red	Red	Red	Below minimum standard
	Activities associated with the exercise of any subsurface rights are limited by other effective means (.g., influence, information sharing, negotiation, agreements, partnerships, contracts, or easements)	Calling for no or insignificant impact on conservation values and no access to, and impacts on, the surface and biotic zone	Red	Yellow	Yellow	May or may not meet minimum standard, depending on whether there is clear evidence of prevention of impacts and long-term effectiveness
		Calling for no or insignificant impact on conservation values, but allowing access to the surface or biotic zone for non-destructive exploration activities	Red	Red	Yellow	Below minimum standard unless there is clear evidence of prevention of impact and long-term effectiveness
		Calling for no or insignificant impact on conservation values, and discouraging access to, and impacts on, the surface and biotic zone	Red	Red	Yellow	Below minimum standard unless there is clear evidence of prevention of impact and long-term effectiveness
		Potentially allowing for significant impacts on conservation values	Red	Red	Red	Below minimum standard
	The exercise of pre-existing rights is not substantially hindered by law, policy, ministerial discretion, or other effective means, regardless of impacts on the conservation values of the area		Red	Red	Red	Below minimum standard

Colour legend:

Green: Potential high level of effectiveness and low risk to conservation values over time.

Yellow: Potential medium level of effectiveness; concern that improper implementation of the mechanism poses a risk to conservation values over time.

Red: Potential low level of effectiveness/or high level of risk to conservation values over time.

Interpretative notes:

- "Surface" includes land surface, water surface and column, and sea floor, as appropriate.
- "Non-destructive exploration activities" means activities that do not alter, disrupt, or disturb the surface, habitats, or species of an area, and may include prospecting, geological mapping, geophysical and/or geochemical surveys involving only small manually collected and transported samples and flagging of trees; remote sensing; air photo interpretation; airborne geophysical or electromagnetic surveys; and 'zero-impact' seismic surveys involving no cutting of vegetation or use of vehicles.
- "No or insignificant impact" means that the in-situ conservation of biodiversity – i.e., the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings – is not compromised.
- "Conservation values" refers to biodiversity conservation values but can also include other values associated with the protection of natural areas, including export of clean water, flood mitigation, carbon storage, protection of groundwater quantity and quality, nutrient cycling, or other natural ecological or physical processes.
- "Biotic zone" refers to the three-dimensional space (surface area, height and depth) of an area which contains, or which has an influence on biota.
- "Law" means the system of rules which a particular country or community recognizes as regulating the actions of its members and which it may enforce by the imposition of penalties (Oxford English Dictionary).

Recommendation regarding the exercise of subsurface rights beneath an area from beyond its boundaries:

- Setbacks and other mitigative measures should be applied to any activities involving access to the subsurface from outside protected areas or OECMs such as those activities that do not cause impacts within these areas.

Statements on what tool is and is not intended to accomplish:

- This tool is intended to give recognition to all areas which are effectively protected against impacts from subsurface resource use, regardless of governance type, and to encourage the application of 'best practices' – i.e., practices which provide the greatest long-term security against such threats.
- This tool is not intended to encourage a 'race to the bottom' – i.e., the application of the least stringent standards that still meet the minimum qualifications of effectiveness – either with respect to the governance of existing areas or the establishment of new ones.

Outstanding question:

- What constitutes clear evidence of long-term effectiveness for prevention of impacts? To be determined through peer feedback.

4.4 Test the Screening Technique on CA Properties

The screening technique was tested on a sample of CA properties to verify if the methodology will assist practitioners in their work to complete authority-wide assessments of land parcels and help the CCEA assess the utility of the proposed guidelines and screening template for national application. The screening technique was evaluated with 14 properties managed by eight CAs in southern and northern Ontario. The 14 sites were selected in consultation with CA staff. CA staff agreed to complete an 11-question survey (Appendix D) about the protection mechanisms (described by the CCEA and presented in MacKinnon et al. 2015) used to manage the CA property being evaluated. The answers to these questions were used to populate the CCEA screening template for each of the 14 CA properties (Appendix E). Most questions simply required the respondent to place a check mark in the appropriate box. A few questions requested a short rationale.

Some but not all protected area programs are based on legislated commitments. Historically, property owners/managers in Canada (e.g., jurisdictions and private land owners) have self-identified protected areas, usually under the auspices of agency and/or organizational protected area goals and objectives and strategic plans. As a result, there are a variety of protected area management tools available in jurisdictions like Canada. Dudley (2008) identifies four generic governance/decision-making structures:

1) Governance by government;
2) Shared governance;
3) Private governance; and
4) Governance by indigenous peoples and local communities.

Grey Sauble Conservation Area, Owen Sound, Ontario (photo credit: Tom Beechey)

A common thread in all of these governance options is the involvement of people who live and work in or near potentially protected sites. And in many cases, individuals and/or groups of people working at local-regional levels (e.g., NGOs and CAs) are the key drivers and decision-makers in the identification, securement, classification, and management of protected areas.

In this geo-political context, CA respondents were reminded that ultimately, it is up to the land owner to identify the level and type of protection. Survey respondents were asked to review and modify the proposed text for inclusion in the CCEA template forms as necessary. In addition, each respondent was provided with a copy of the visual diagnostic key used to identify an IUCN protected area category or ANCV categories.

4.5 Complete a Workshop to Review Project Progress and Discuss the Potential Contribution of Lands and Waters Managed by the Ontario Conservation Authorities and Partners to Canada's Commitment to the Aichi Biodiversity Targets

The 28 March 2017 workshop in Barrie was attended by representatives from 15 Conservation Authorities, Conservation Ontario, Environment and Climate Change Canada, the Ministry of Natural Resources and Forestry, the Nature Conservancy of Canada, the Office of the Environmental Commissioner of Ontario, the Ontario Biodiversity Council, and Ontario Nature. The workshop was organized into three themes:

1) Summary of the results outlined in a draft version of this report.
2) Exploring the CCEA criteria and the pros and cons of employing an 'Area of Natural and/or Cultural Value' classification (also referred to as partially protected areas).
3) Next steps and other suggestions.

Detailed notes from the workshop were prepared and distributed to participants (see Morand and Ogilvie [2017] Appendix F – 'Facilitator's Summary' and Ogilvie [2017] Appendix G – 'Facilitator's Aide-Memoire').

Altona Forest, Pickering, Ontario (photo credit: Toronto and Region Conservation Authority)

5.0 Results and Discussion

5.1 Defining Conservation Designations

International Designations

The International Union for the Conservation of Nature (IUCN) is the official body governing the classification and accounting of areas that are established worldwide to protect and conserve biodiversity. In order to provide uniform treatment of such activities by all member states, IUCN has sanctioned two designations to recognize terrestrial and marine areas established to conserve biodiversity and to achieve complementary conservation objectives, namely 'Protected Areas' (PAs) and 'Other Effective Area-based Conservation Mechanisms' (OECMs).

Protected Areas

The IUCN designation of protected area provides the fundamental building block upon which strategies for the design, establishment, and management of terrestrial and marine areas are developed and employed in Canada and many jurisdictions around the world. A protected area is "*a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values*" (Dudley 2008).

In order to recognize and distinguish a range of complementary conservation objectives that are achieved in protected areas worldwide, the IUCN has established six categories of protected areas:

- Category Ia – Strict Nature Reserve: Category Ia properties are strictly protected areas set aside to protect biodiversity and also possibly geological/geomorphological features, where human visitation, use, and impacts are strictly controlled and limited to ensure protection of the conservation values. Such protected areas can serve as indispensable reference areas for scientific research and monitoring.
- Category Ib – Wilderness Areas: Category Ib protected areas are usually large unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition.
- Category II – National Park: Category II protected areas are large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational, and visitor opportunities.
- Category III – National Monument or Feature: Category III protected areas are set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, or geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value.
- Category IV – Species/Habitat Management Area: Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category.
- Category V – Protected Landscape/Seascape: A protected area where the interaction of people and nature over time has produced an area

of distinct character with significant ecological, biological, cultural, and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.

- Category VI – Protected Area with Sustainable Use of Natural Resources: Category VI protected areas conserve ecosystems and habitats, together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in a natural condition, where a proportion is under sustainable natural resource management and where low-level non-industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area (Dudley 2008).

Categories Ia, III, IV, V, and VI could be applicable to areas owned and managed by CAs. Based on these Phase I study results, it seems possible that a significant number of CA properties throughout Ontario could qualify for inclusion in one of these categories.

Other Effective Area-based Conservation Measures

Other Effective Area-based Conservation Measures (OECMs) is a relatively new designation developed through the *Strategic Plan for Biodiversity* under the United Nations *Convention on Biological Conservation* (IUCN 2010). OECMs were introduced to supplement the contribution of protected areas toward international efforts to achieve Aichi Target 11. Essentially, OECMs are areas established for the long-term with the expressed purpose of nature conservation to be achieved through effective management that yields positive conservation outcomes. Since its inclusion in the Aichi Target 11 objective, the OECM category has created considerable confusion and debate. In concert with published interpretations (e.g., IUCN 2012a, Lopoukhine and de Sosua Dias 2012, and Woodley et al. 2012), MacKinnon et al. (2015) report that the primary differences between protected areas and OECMs are the governance mechanisms. To help clarify the protected area and OECM relationship, the CCEA published consensus statements on issues identified for OECMs (MacKinnon et al. 2015):

- Purpose of area-based measure/intention: There must be an expressed purpose to conserve nature (biodiversity) in OECMs. This purpose may be achieved as a co-benefit of other management purposes or activities.
- Long-term: OECMs must be managed for the long-term to be effective. Accordingly, the working definition of long-term is an expectation that conservation will continue indefinitely.
- Importance of nature conservation objectives: In cases of conflict with other objectives, nature conservation objectives shall not be compromised in OECMs.
- Nature conservation outcomes: OECMs should result in effective and significant nature (biodiversity) conservation outcomes. When there are existing measures/areas that are to be considered as OECMs, evidence of conservation outcomes should be used as part of the screening process.
- Strength of conservation measures: OECMs should have a management regime that is strong enough to ensure effective conservation. In addition, gaps will be addressed over time.

OECMs are not categorized in the IUCN classification scheme for protected areas. The very expression 'other effective' not 'other equally effective' makes it easier to reconcile them as a separate designation outside of the IUCN scheme. How-

ever, it is possible for an OECM to become a protected area if all protected area requirements are met (Jonas and MacKinnon 2016). Even though OECMs are not protected areas, they are managed according to effective conservation efforts and outcomes that complement protected areas. It is interesting to note that the OECM concept tends to embrace the values embodied in the long defunct IUCN Category VII (Natural Biotic Area/Managed Resource Area) where management was oriented toward the maintenance of habitat in order to protect culture and traditional ways of life, and IUCN Category VIII (Multiple Use Management Area/Managed Resource Area) where management favoured an ecosystem approach (e.g., protection at the watershed scale), zoning, and a commitment to sustained yield (IUCN 1978).

Although the OECM concept post-dates Dudley (2008) and the current version of the CCEA Guidebook (CCEA 2008) it will be addressed in the forthcoming revision of the CCEA Guidebook. The IUCN and the WCPA have organized a task force to "*develop guidance for IUCN members and CBD Parties on the definition of 'other effective area-based conservation measures'*", which provided an update at the CBD COP 13 in December 2016, Cancun, Mexico. Final guidance is expected in 2018 (CBD 2016). In addition, OECMs will be addressed in the next *Protected Planet Report*, and the *Global ICCA Support Initiative* focusing on governance of protected areas will be expanded to include OECMs. These results will be available in 2017 (IUCN and WCPA 2015). Based on the Phase I results of this study, some CA properties may qualify as OECMs.

Ontario Designations

In Ontario, the term 'Natural Heritage Area' has been adopted to recognize the entire suite of conservation lands and waters that are established and managed to conserve significant natural and cultural values including biodiversity and many other complementary features and processes. Altogether, more than 40 separate designations sanctioned by law, policy, or non-governmental activities are recognized as Natural Heritage Areas (Gray et al. 2009). Many Natural Heritage Areas in Ontario qualify as Protected Areas (e.g., national parks and provincial parks), and potentially Other Effective Area-based Conservation Measures (OECMs).

CAs and other management bodies such as the Niagara Escarpment Commission employ sophisticated management programs, rules, and regulations to control human activities in designated conservation areas and zones (Table 2). These areas are recognized as Natural Heritage Areas that are managed to protect all or parts of ecosystems (e.g., wetlands), species and habitat(s), geological assets (e.g., caves and waterfalls), places that provide spiritual experiences (e.g., hiking trails and vistas), recreational opportunities in a natural setting (e.g., hiking and canoeing), educational opportunities, sustainable forest management, and soil erosion mitigation sites.

Some CA properties do not qualify for protected area status and cannot be assigned to an IUCN category, and others likely will not qualify as OECMs. Even so, many of these properties provide some form of protection for a variety of natural and cultural values, and many still (re)present a significant opportunity for jurisdictions to bolster their commitments to the protection of connected blueways and greenways. These areas are variously named and referred to as having partial protection in marine (e.g., Lester and Halpern 2008, Sciberras et al. 2013) and terrestrial (e.g., Gray et al. 2009) ecosystems. While such areas may function as 'partially protected areas', and in some cases may be referred to as such, this terminology is not favoured since it may create ambiguity with

the IUCN schema and definitions for protected areas and OECMs.

Areas of Natural and/or Cultural Value

For the purposes of this report, we elected to use the term 'Area of Natural and/or Cultural Value' (ANCV) to refer to a second tier of conserved and managed areas that do not qualify as protected areas or OECMs, yet contribute to the protection of a variety of natural and cultural assets encompassed by CA properties and surrounding areas. The values tend to align across nine functions of CA properties (and there are undoubtedly more) that may merit some form of recognition and classification for their contribution to ecosystem health: 'Biodiversity', 'Geology', 'Buffer Area', 'Forest Management', 'Soil Management', 'Water Management', 'Recreation', 'Spiritual', 'Cultural', and 'Other'. Collectively, these areas help to sustain biodiversity and provide supportive ecological functions and services that contribute to conservation efforts aimed at achieving many of the Aichi Biodiversity Targets that complement Target 11. None of the functions are mutually exclusive because CA rules and regulations that enable recreational, educational, and spiritual experiences complement rules and regulations that protect biodiversity and enable soil, water, forest, and buffer area management (Table 2). Given that much of the discourse around protected areas, OECMs, and other sites seems somewhat exclusive to broader goals designed to maintain functioning networks of conserved lands and waters, there is merit in exploring and recognizing the collective contribution of these networks of areas to ecosystem health and well-being through their provision of ecological functions and services, including:

- People more aware of biodiversity values.
- Biodiversity integrated into development.
- Sustainable production and consumption.
- Sustainable harvest of fisheries.
- Sustainable agriculture, aquaculture, and forestry.
- Pollution brought to safe levels.
- Invasive species control.
- Climate impacts on biodiversity minimized.
- Extinctions of threatened species prevented.
- Ecosystem services restored and safeguarded.
- Ecosystems' resilience and contribution to carbon management is enhanced.
- Science and knowledge shared (Leadley et al. 2014).

Because ANCVs contribute to the attainment of many of the 20 Aichi targets and affect many issues and commitments of CAs, it is important that they receive formal recognition. As parallel assessments to designate PAs and OECMs are completed in other jurisdictions in Canada and elsewhere, and practitioners identify the need to recognize the many other conservation areas that do not qualify for PA or OECM designation, it is likely that the collective findings will prompt the development of a common approach across Canada to recognize, label, report, and track the values in such areas. In the meantime, ANCVs have been designated in this study to recognize these areas in CA holdings until such time as a formal Canadian designation is adopted.

Table 2: Examples of rules, regulations, and guidelines used to manage human activity on properties managed by the CAs and the Niagara Escarpment Commission. A dot indicates that the management agencies retain the ability to mitigate the threat. The threat list and associated management options was developed on the basis of a review of IUCN (2012b), ORCA (2012), EDHPSC and EDHPAC (2013), and MNRF (2017).

Threats	Niagara Escarpment Plan (MNRF 2017)	East Duffins Headwaters Management Plan (EDHPSC and EDHPAC 2013)	Otonabee Regional CA Watershed Planning and Regulation Policy (ORCA 2012)
Alteration of water and moisture regimes	●	●	●
Installation of tile drainage, or road construction	●	●	●
Soil compaction	●	●	
Housing development/development for agricultural uses	●	●	●
Development adjacent to habitat	●	●	●
Development and conversion of land	●	●	●
Use of herbicides, livestock grazing, tree planting, depositing fill	●		●
Mineral aggregate/peat extraction	●	●	
Construction of new infrastructure (buildings, roads, trails, etc.)	●	●	●
Upgrades and/or maintenance of existing infrastructure	●	●	●
New infrastructure that increases access to critical habitat	●	●	●
Forest clearing and fragmentation	●	●	●
Diameter-limit tree harvest or high-grading	●		
Trampling from adjacent trail use		●	
Operation of off-road vehicles	●	●	●
Recreation vehicles	●	●	●

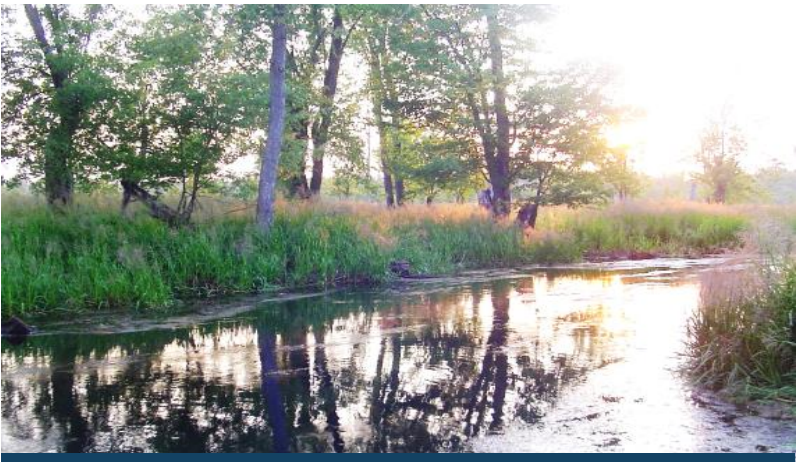
Use of vehicles and motor boats within or close to wetlands	●	●	
Trail creation and access	●	●	
Dumping of organic and inorganic debris	●	●	●
Natural vegetation removal within wetland habitats	●	●	●
Loss of habitat (e.g., draining and filling of backshore wetlands)	●	●	●
Regulated water levels	●	●	●
Insects and disease	●	●	●
Radical alterations to normal hydrological regimes (e.g., infilling)	●	●	●
Compression, covering, inversion, or excavation/extraction of soil	●		●
Infilling, excavation, or draining of wetlands	●	●	●
Soil run-off, increased water turbidity, or nutrient influx	●	●	●
Disruption of natural dynamic processes and lakeshore habitats		●	●
Activities that increase slumping and slope instability	●	●	●
Contamination of habitat (e.g., pollution)	●		●
Invasive plants and animals		●	
Deposition of deleterious substances (including snow)		●	●
Indiscriminate application of fertilizers and pesticides			●

5.2 Comparison of the CA Database and the CCEA Screening Criteria

The CA lands database is intended to support strategic planning and management of natural and cultural values. And the aim of this project was to determine if the database can be used to identify sites that may qualify as Protected Areas or OECMs, and assign an IUCN category to sites that qualify as protected areas.

Determining Protected Area Status

Introduced by R.F. Dasmann in the 1970s, many jurisdictions around the world have adopted the IUCN protected area classification system (CCEA 2008, Dudley 2008). In the late 1980s, many of Ontario's protected areas were included and classified in the National Registry of Ecological Areas issued by the CCEA (Gray and Rubec 1989). Subsequently, this approach was incorporated into the *Canadian Conservation Areas Database* (CCAD) established by Environment Canada (now ECCC) in collaboration with the CCEA. More recently, the *Conservation Areas Reporting and Tracking System* (CARTS), the successor to CCAD, is now being applied and improved by the CCEA (2015) in collaboration with ECCC.



Minesing Wetlands, Angus, Ontario (photo credit: Nottawasaga Valley Conservation Authority)

Successful application of the IUCN classification system is predicated on the use of standard guidelines to ensure consistent reporting and for comparing protected area programs in other jurisdictions around the world (Bishop et al. 2004, CCEA 2008, Dudley 2008, and many others). The Spatialworks (2014) database employs a decision key/tool based on a classification scheme developed by EUROPARC-España (2006). The classification scheme is based on management objectives that are specific to a particular IUCN category or groups of categories. The diagnostic key is used to examine a proposed site's management objectives in order to assign an IUCN category (EUROPARC-España 2006).

The EUROPARC-España (2006) key is descriptive, not prescriptive. Prescriptive rules were added to the decision key in the Spatialworks (2014) report. Accordingly, the utility of the prescriptive statements contained in the Spatialworks report was examined. Results suggest that they do not adequately define the degree of human intervention ('Cls_human'), control of property access ('Cls_Access'), and management of natural resources on the property ('Cls_Rsrc') attributes and consequently force the user to guess, which mitigates against consistent decision-making and defensibility (Appendices A and B). Three remedial options are apparent. Remedial option one involves an exercise to explicitly define each prescriptive statement in the 'Cls_Human', 'Cls_Access' and 'Cls_Rsrc' categories described in Appendices A and B. This would require a significant review of Dudley (2008) and many other IUCN-related documents, an assessment of measures in a Canadian context, and consultation. The second option is to omit the prescriptive keywords introduced in Spatialworks (2014) and use the descriptive statements in the EUROPARC-España (2006) decision key. The recommended option, option 3, involves

the adaptation and adoption of a visual diagnostic key based on:

- The IUCN definition of protected area provided in Dudley (2008).
- A combination of definitions and objectives for each IUCN category contained in EUROPARC-España (2006) and Dudley (2008).
- One quantifiable selection criterion (Dudley 2008) to help the user assess potential IUCN Category VI protected areas.

The visual diagnostic key provides a strategic tool that reflects a detailed assessment of individual properties, suitable for determining or at least estimating their IUCN status. Option 3 requires use of additional attributes that will need to be added to and populated in the CA lands database (see Appendix A). The visual diagnostic decision key asks a succinct series of questions comprised of important words and concepts that reflect IUCN definitions and objectives, and permit the user to follow the answers to identify an IUCN category (Figure 4). Likely, successful application of this tool will require time and additional resources to secure and include the required data and information in the CA database.

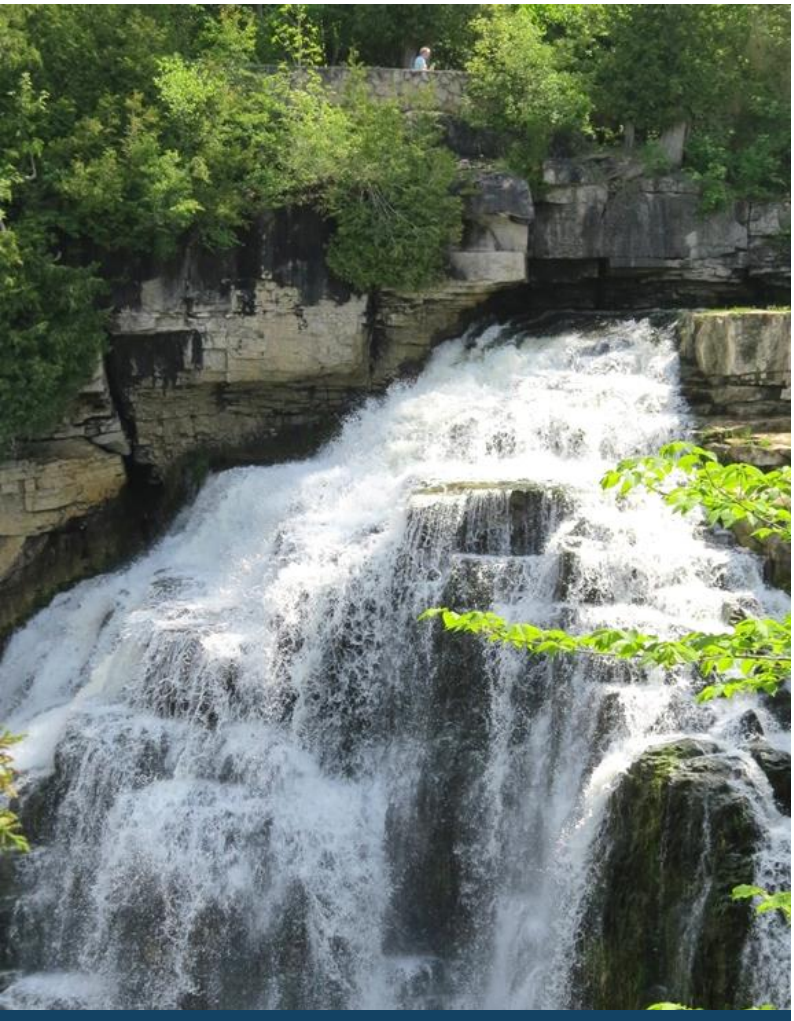
The visual diagnostic key assembled for this report also includes categories for sites that do not meet screening criteria standards for a Protected Area or an IUCN category (i.e., OECMs and ANCVs). Inclusion of these other categories is intended to assist practitioners describe and rationalize other tools and techniques that contribute to the maintenance of biodiversity and the ecosystems upon which they depend.

While the IUCN classification system is user-friendly, well defined, and tested by Dudley (2008) and others, it does require that the user spend time and effort to understand the process and its mechanics in the context of the geo-bio-political system in which he/she works. Given workloads and differing levels of expertise, this is not always possible, and the visual diagnostic key provides a tool that does not require extensive knowledge of the mechanics of the IUCN classification scheme. Advantages of the diagnostic key include use of language and definitions that are consistent with the IUCN (i.e., Dudley 2008) and others (e.g., EUROPARC-España 2006), a strong visual product, and an efficient decision tool that generates defensible results. For example, the key allows the practitioner to consistently apply definitions, objectives, and quantifiable criteria.

Altona Forest, Pickering, Ontario (photo credit: Toronto and Region Conservation Authority)

Identifying Sites That May Contribute to Aichi Target 11 Commitments

The ECCC–CWS (Ontario Region) collaborates with the NCC on an analysis that identifies areas of potential high conservation value in Ecozones BCR12 and BCR13 (Figure 5) by summarizing and scoring habitat/biodiversity values based on guidelines provided in *How Much Habitat is Enough* (Environment Canada 2013). For example, in the Mixedwood Plains Ecozone (BCR13) 1,709 discrete sites have been identified by aggregating 2 ha hexagons that have high values for forest, wetland, open country, species at risk, and migratory birds.



Inglis Falls Conservation Area, Owen Sound, Ontario (photo credit: Grey Sauble Conservation Authority)

These sites are classified into 773 'High Value Biodiversity Sites' (>20ha) and 936 'Secondary Biodiversity Sites' (<20ha). In the Boreal Hardwood Transition Ecozone (BCR12) 2,337 discrete sites have been identified by aggregating 5 ha hexagons that have high values for forest, wetland, open country, species at risk, and migratory birds. These sites are classified into 1,480 'High Value Biodiversity Sites' (>50ha) and 857 'Secondary Biodiversity Sites' (<50ha). There are 839 CA parcels that intersect discrete sites (either 'High Value Biodiversity' or 'Secondary Biodiversity Sites'), and 218 CA parcels that intersect an ANSI Life Science site.

If there is an immediate need to provide a preliminary or coarse estimate of CA lands that may contribute to Canada's Aichi Target 11 commitment, the current CA lands database could be used to identify short-term priorities. Once the new CCEA attributes are introduced into the database and populated, the preliminary proxy results used to identify potential priority protected areas could be evaluated in sufficient detail to confirm protection status and assign an IUCN classification category where appropriate. This approach brings information technology know-how to bear on the need to identify large CA tracts driven by a sense that 'bigger is better' from both representational and functional perspectives. Going forward, agencies could elect to implement a two-phased approach to meet short-term priorities and long-term application:

- Immediate/short-term priorities and use of the CA Lands database to prioritize potential CA lands that may contribute to Aichi Target 11: Notwithstanding the limitations of the CA lands database to identify protected areas and the associated IUCN categories, if there is an immediate need to provide a preliminary or coarse estimate of CA lands that may contribute to Canada's Aichi Target 11 commitment,

the current CA lands database could be used to: 1) contribute to a GIS spatial analysis designed to identify and map potential properties, and 2) contribute to a multi-sourced proxy system based on supporting information contained in the CA lands database, other databases, agency files, grey literature, and input from experts with on-site expertise. This proxy information could then be used to help practitioners answer the questions in the diagnostic visual key (see Figure 4). It is recommended that the 'Cls_IUCN' attribute (see #19, Table A1, Appendix A) be retained and used to record any 'interim' results generated by application of the visual diagnostic decision key. Given the available information in the CA lands database, any interim aggregate estimates of the contribution of CA properties to Aichi or other targets will be coarse. Assessment of individual properties using existing data and evaluation techniques in the CA lands database is not recommended without caution and the engagement of the property owners and managers in the estimate. In the long-term, this uncertainty can be mitigated with the addition of the CCEA protected area screening tool attributes (#30-54 in Appendix A) to the CA lands database. Subsequently, the priority areas could be evaluated in sufficient detail (see long-term use of the CA lands database below) to confirm protection status and assign formal IUCN classification (see #51, Table A1, Appendix A).

- Long-term use of the CA lands database: Use of the CCEA decision screening tool (see Figure 3 and Table 1) and the IUCN diagnostic key (Figure 4) will help practitioners populate the new attributes #30-54 (Table A1) in the CA lands database. It is important to note that future CCEA modifications to the screening tool will need to be incorporated into the CA database.

Feversham Gorge Conservation Area, Feversham, Ontario
(photo credit: Grey Sauble Conservation Authority)

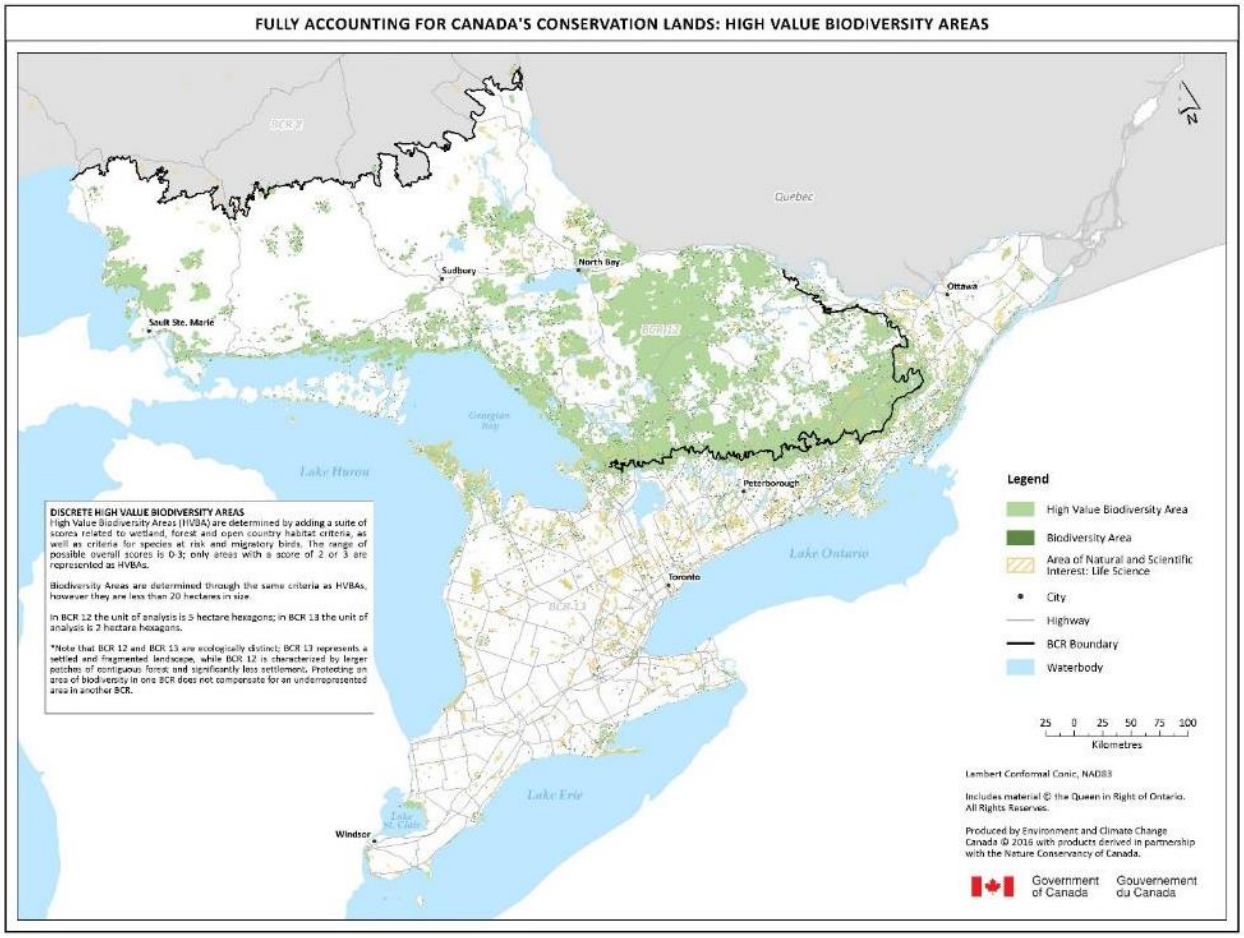


Figure 5: ECCC has worked with the NCC in a biodiversity area analysis of southern Ontario (CA parcels with high value biodiversity sites underneath and ANSI Life Science sites on top) (map prepared by J. Sherwood).

5.3 Develop/Adopt a Decision Screening Technique

A decision is a personal enterprise usually based on a mix of values, preferences, experiences, and knowledge (Harris 2012). These personal decisions often are made in the context of a 'standard of judgement' that reflects broader societal values and preferences prescribed in policy, planning, and action. For example, the value of natural heritage conservation as a living endowment with long-term dividends for future generations has gained considerable currency in recent decades, and is embodied in various global-local initiatives including the attainment of the Aichi 2020 targets. Many international (e.g., IUCN) and national organizations (e.g., CCEA) sponsor 'standards of judgement' and use evidence-based science to identify and protect natural and cultural assets in support of a commitment to ecological sustainability. In concert with its member organizations and agencies, the CCEA has sponsored development of a natural heritage assessment technique to help Canada address its commitment to Aichi Biodiversity Target 11 and to help agencies and organizations mainstream new and innovative approaches to natural heritage protection into decision-making.

The jurisdiction decides whether to report it as a protected area, an OECM, an ANCV, or not an ANCV based on a comparison with the IUCN definition of protected area. These generic steps draw attention to the need for clear and concise guidance on effective management standards going forward. Ingredients of an effective management regime for protected areas, OECMs, and ANCVs could include:

1) A clear definition/ documentation of the biodiversity values to be conserved (i.e., species, habitats, ecosystems, successional states);
2) A management plan that sets out a clear goal and objectives vis à vis the conservation of defined diversity values;
3) A requirement for monitoring and reporting at set intervals (e.g., 5/10 years) to document and verify achievement of desired outcomes; and
4) Ongoing revision and renewal.

A competent reporting template can serve as an evaluation platform and simultaneously provide a permanent descriptive and quantitative record of an area's attributes. The template developed by the CCEA was selected because it has significant potential and is being tested across Canada with the aim of having the final product adopted as the national standard.

Every candidate property is unique, subjected to an eclectic mix of anthropogenic and natural forces, and managed according to a site-specific management plan based on policy standards that may or may not be evenly applied by agencies and organizations. Therefore, an effective screening tool will employ a 'standard' when one exists, allow the practitioner to note the unique conditions that contribute to the final decision about protection status, and permit the inclusion of support materials and decision aides. The CCEA template/screening tool has the potential to provide this kind of flexibility and at the same time generate accurate entries for CARTS. This will serve as a powerful tool for Conservation Authorities.

While the use of this approach may be the most accurate method, particularly for CARTS, it is important to note that it requires sufficient data, expert analyses, and time. Going forward, ongoing peer review of sites recommended for inclusion has also been identified as an important part of the decision-making process.

5.4 Test the Screening Technique

Eight CAs (Nottawasaga Valley CA, Catfish Creek CA, Cataraqui CA, Essex Region CA, Toronto and Region CA, Otonabee Conservation, Grey Sauble CA, and the Sault Ste. Marie CA) participated in a test of the protected area screening technique adapted for the project (Figure 6). As expected, some CA properties potentially qualify as protected areas and others do not (Table 3). Given the nature of the CA properties, the sophistication of management planning processes, and the level of commitment to biodiversity protection contained in the plans, the variation in protection status was greater than expected. CA responses to the survey were consistent in some fields (i.e., geographic scale, scope of conservation objectives, governance, and timing of protection), but variable in others, particularly with respect to primacy of nature conservation objectives, long-term commitment (e.g., in perpetuity or not), and strength of the commitment (i.e., dedication) (Table 4).

This variation could be an artifact of survey design and language (Appendix D); differing perceptions and/or application of CA policies; lack of clear direction in the *Conservation Authorities Act* about the disposition of protected areas, including strength of commitment; and lack of zoning procedures to demarcate areas with significant natural and/or cultural values. Perhaps the designation

and management of protected areas should be explored as part of the current review of the *Conservation Authorities Act* (see Government of Ontario 2016). In addition, a number of other issues and associated recommendations emerged, including legal description of properties, priorities for populating the CA database, the CARTS tool, biodiversity documentation and accounting, interagency collaboration, and communications.

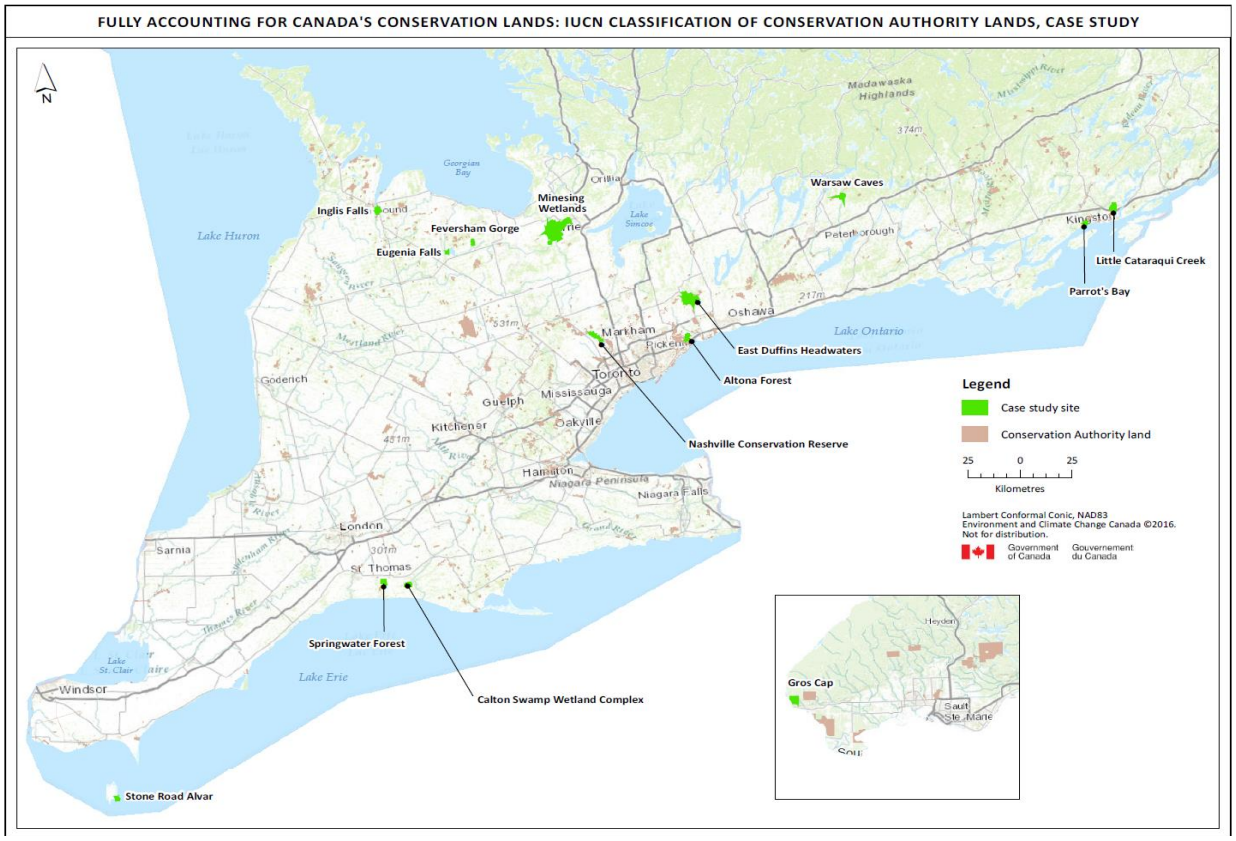


Figure 6: Location of CA properties evaluated using a proposed protected area screening technique developed by the Canadian Council on Ecological Areas (map prepared by J. Sherwood).

Table 3: Conservation Authority case study properties.

Conservation Authority	CA Property Name	Date Established	Area (ha)	Proposed IUCN Protection Status [*Candidate Status Suggested Based on CCEA Criteria]	Themes in Areas of Natural and/or Cultural Values Managed by CAs
Nottawasaga Valley	Minesing Wetlands	1970	6,000	IV	----
Catfish Creek	Calton Swamp Wetland Complex	1972-2005	84	IV*	----
	Springwater Forest		150	IV	----
Cataraqui	Little Cataraqui Creek	1966-1967	393	----	Biodiversity Water Management Forest Management Recreation

	Parrott's Bay	1980s - 2006	117.0	----	Biodiversity Recreation Spiritual Cultural Buffer
Essex Region	Stone Road Alvar	1987-1989	36.4	III*	----
Grey Sauble	Inglis Falls	1960	211	III*	----
	Feversham Gorge		14	III*	----
	Eugenia Falls		26	III*	----
Toronto and Region	East Duffins Headwaters		1,460	IV*	----
	Nashville Conservation Reserve		820	V*	----
	Altona Forest	1991	53	IV*	----
Otonabee Conservation	Warsaw Caves	1962	245.8	----	Geology Biodiversity Recreation
Sault Ste. Marie	Gros Cap	1973	62.1	----	Biodiversity Geology Recreation Cultural

Zoning in CA Properties

The planning and management framework for CA properties does not embrace a standardized zoning system for protected areas that would help to segregate distinct sub-areas and management compartments along a protection gradient. Such a system would make it easier to identify tracts protected and managed to a high standard for biodiversity conservation. Many Conservation Areas, indeed many protected areas managed by different agencies throughout Ontario, have been variously zoned and managed in accordance with a specific set of objectives. In other cases, conservation properties are treated as a single administrative and/or ecological unit with varying degrees of protection, kinds and degrees of development, and multiple uses sprinkled throughout. To simply assign such an area in its entirety to the 'best fit' in the IUCN scheme can mask and distort the actual contribution that sub-areas make to biodiversity conservation and the overall accounting of the area contributing to specific objectives reflected across the six categories of IUCN designations.

As the 'best fit' will generally err in favour of the lowest common denominator, sub-areas dedicated to science and research aligned with Category I IUCN designations may be under-counted. Conservation Authorities may want to explore options for a zone classification system. The Canadian Conservation Areas Database (CCAD), the predecessor to CARTS, did accept reporting of sub-areas (i.e., zones) within protected areas where these aligned with IUCN categories, but this scale of reporting was not rigidly adopted. The issue needs to be re-visited in the CARTS schema. This issue was addressed in some detail by Dudley (2008) and noted by CCEA (2008) and Gray et al. (2009) as well. In the absence of zoning, one relatively simple option would be to subtract the area covered with roads, facilities, and other infrastructure (with a buffer) that compromises biodiversity from the total area of the CA property.

Legal Description and Demarcation

Clarification is required about the manner in which areas are physically delineated. It is assumed that all CA holdings are legally described with registered metes and bounds surveys on title. While this satisfies legal requirements and enables an accurate paper tally of area (ha) property-by-property and system-wide, it may not satisfy requirements that demonstrate effective management. Many CA properties do not appear to be demarcated on the ground with flagging, signage, fencing, blazing, or survey cut lines (in wooded landscapes) making it difficult to discern inappropriate access and encroachments that may be contrary to and in violation of an area's conservation objectives. In the case of management zones within a CA property, such areas have no legal description (unless aligned with a legally described parcel or parcels) and again no on-the-ground demarcation. Encroachments may be less of a concern in areas with internalized zones, since in-area surveillance and controls may be more stringent than for the Conservation Area as a whole.

Conservation Authority Policy Standards

Unlike most provincial and national protected area programs that employ more uniform policies and standards to guide zoning and conservation efforts across their systems, CAs differ considerably in their approach. For example, there is variation in terminology, policies, and regulations among CAs respecting efforts to conserve biodiversity and natural areas. The *Conservation Authorities Act* offers little to no statutory basis for conservation properties, and the body of regulations under the *Act* provides only very broad guidance and governance for the management of conservation properties. In the future, CAs may want to explore common themes.

Long-term Protection

In the absence of statutory 'in perpetuity' clauses, protection and management of CA properties may be subject to periodic amendments more easily than for more rigidly protected sites that come under provincial or federal legislation, which may require ministerial, cabinet, or parliamentary sanction. These considerations are important in tallying areas that meet the intent of the *Convention on Biological Diversity* (CBD 1992) and the Aichi *Strategic Plan for Biodiversity* (CBD 2010). Without long-term certainty, the only recourse is to invoke a formal procedure for CAs to monitor and report any significant changes that enhance or degrade the protection status of sites registered in CARTS. CAs may want to explore use of explicit statements about long-term protection. It would be interesting to know the prevalence of land dispositions in CA properties. If very few cases exist (especially of lands managed for biodiversity), then the chances of long-term protection are greater.

Little Cataraqui Creek Conservation Area, Kingston, Ontario
(photo credit: Cataraqui Region Conservation Authority)

Table 4: CCEA criteria ranks and protection status of selected Ontario Conservation Authority properties (note that G = agreement on criteria that help define a PA or OECM, Y = disagreement or hesitation on whether criteria define a measure sufficiently effective to be a PA or OECM, and R = agreement on criteria that define a measure as not sufficiently effective to be a PA or OECM).

Conservation Area Property	CCEA Criteria										Proposed Protection Status IUCN [*Candidate Status Suggested] or Area of Natural and/or Cultural Value (ANCV)
	Geographical Space	Scope of Conservation Objectives	Primacy of Nature Conservation Objectives	Governance	Effective Means -1	Effective Means - 2	Long term	Dedicated	Timing	Subsurface Rights	
Altona Forest	G	G	Y	G	Y	G	G	Y	G	G	IUCN IV*
Calton Swamp	G	G	G	G	G	G	Y	G	G	G	IUCN IV*
East Duffins	G	G	Y	G	Y	G	G	Y	G	G	IUCN IV*
Eugenia Falls	G	G	Y	G	G	G	Y	G	G	G	IUCN III*
Feversham Gorge	G	G	Y	G	G	G	Y	G	G	G	IUCN III*
Gros Cap	G	G	G	G	G	Y	Y	G	G	R	ANCV
Inglis Falls	G	G	Y	G	G	G	Y	G	G	G	IUCN III*
Little Cataraqui Creek	G	G	Y	G	G	Y	Y	R	G	G	ANCV
Minesing Wetland	G	G	G	G	G	G	G	G	G	G	IUCN IV
Nashville Conservation Reserve	G	G	G	G	Y	G	G	Y	G	G	IUCN V*
Parrott's Bay	G	G	Y	G	G	Y	Y	R	G	G	ANCV
Springwater Forest	G	G	G	G	G	G	G	G	G	G	IUCN IV
Stone Road Alvar	G	G	Y	G	Y	G	G	Y	G	G	IUCN III*
Warsaw Caves	G	Y	R	G	Y	Y	Y	G	G	G	ANCV

Priorities for Screening the Protection Status of CA Properties

CA holdings are widely varied in their goals, objectives, size, and location. Some of the larger CAs are responsible for extensive holdings, including operational Conservation Areas with multiple objectives, substantial tracts managed strictly for conservation, and other substantial areas that are also important for nature conservation but have no identified operating functions. At the other end of the spectrum, some CAs are responsible for smaller, often isolated parcels that may have lesser conservation value. Going forward, it is recommended that the first priority be to screen, assess, and categorize the larger areas that make the most important contributions to nature conservation. Where such areas have an approved management plan, with clearly defined management zones, the zones dedicated primarily to nature conservation should be the reporting unit, or at least be described in the overall description of the area in the reporting template. In cases where a larger area with nature conservation as a declared goal lacks a management plan, it should likewise be prioritized for assessment and reporting.

Small isolated parcels may be the most complicated to deal with for several reasons. In many cases, these sites are poorly documented with little or no information about property characteristics, including biodiversity and ecological features. In some cases, certainty about the long-term protection of such tracts may be less than that for larger properties with documented ecological and cultural significance, and where commitments to biodiversity conservation have been forcefully declared and implemented. Thirdly, small isolated patches may be more readily viewed as tradable lands or disposable assets in difficult financial times.

Conservation properties not held in fee simple such as easement and agreement lands may pose additional problems for assessing and reporting. For example, agreement lands may be protected for only short periods (e.g., five years) and there is little legal recourse if a landowner opts out. It is likely that few if any of these sites will qualify as protected areas, and many will be problematic as OECMs as well. In general, agreement lands will seldom schedule prohibitions and uses that are strict enough to qualify for inclusion in the IUCN/OECM realm of classification.

Easements are a more powerful protection tool because they are in effect in perpetuity (usually written with 999 year terms) and the owner can be taken to court if easement restrictions are violated. In fact, easements may be harder to extinguish than the delisting of a protected area by a government agency. The strength of an easement depends on the schedule of prohibitions and restrictions.

Clearly, easements, covenants, and agreements are often custom-tailored and require careful case-by-case assessment and consideration to determine their contribution to biodiversity conservation. In addition, there will be privacy issues with access, management, and use of these lands that will further complicate their inclusion. While many of these properties do have conservation value, further guidance is required on how they might qualify as Areas of Natural and/or Cultural Value.

Conservation Areas Reporting and Tracking System (CARTS)

CARTS should be holistic and comprehensive. The words in the title imply coverage of conservation areas in a broad, more encompassing sense, not PARTS implying only protected areas. This interpretation would also enable the inclusion of Areas of Natural and/or Cultural Value with biodiversity,

geology, viewscapes, and cultural assets in the CARTS database.

Registration Process and Update Protocol

The screening and registration of CA properties and other sites is not a one-time effort, rather the initiation of a process subject to periodic review and updating over time. Assuming that a final screening technique will be available to distinguish protected areas, ANCVs, and OECMs, an initial screening and registration of areas will initiate the process. Over time, this process may be subject to revision(s) necessitating re-assessment of registered areas. Revisions could include changes in the criteria for OECMs, changes in the IUCN classification scheme, and changes in the CARTS schema.

Newly established or rescinded OECMs and protected areas will require periodic input to update national tallies and status reports. In addition, the properties already registered will require periodic updating to reflect changes in character and status that may include:

Northern Holly Fern (*Polystichum lonchitis*), Grey Sauble Conservation Authority, Owen Sound, Ontario (photo credit: Tom Beechey)

- Acquisition and addition of land/water.
- Disposition of land/water.
- Completion of a management plan.
- Major amendment to a management plan.
- Major development (e.g., installation of a campground and a parking area) that reduces the size of the registered conservation property.
- Significant change in management regime for biodiversity conservation whether in the prescribed plan or not.
- Significant adjacent development, such as a subdivision, industrial development or a gravel pit that may affect the integrity of the area.
- Documented loss of species at risk or other significant biodiversity elements/systems that the area was established to protect.

The CARTS protocol should include guidelines on the adaptation/adoption and use of the protected area screening tool (template) and the reporting process. Given the significant variability in the type and condition of candidate properties, the process should utilize an independent screening mechanism, such as a peer-review committee, to assess and certify questionable nominations. A flagging process could be developed that requires sponsors of nominated properties to tag areas where they feel an independent assessment (2nd opinion) may be warranted. In addition, a peer-review committee could insert a level of quality control through implementation of a process to randomly evaluate nominated properties.

Updates on sites could be completed as required through the application of the above criteria and protocol, or maybe more efficiently completed on a pre-scheduled interval or other basis. For example, CARTS updates are completed annually with updated reports posted on the CCEA website.

Since the Province (OMNRF/Ontario Parks) is currently the conduit for Ontario's input and maintenance of CARTS, candidate properties sponsored by NGOs, CAs, and other agencies and organizations could use this system as well. Such a process already exists in Manitoba, where the provincial government oversees the input of NGO sites in the Province.

The property assessment and registration protocol needs to include approved screening tools, criteria, and reporting templates and addenda, such as a base map and biodiversity documentation. The CCEA template (screening tool) could be equipped with the software to accommodate decision aides and property data and information (Figure 7).

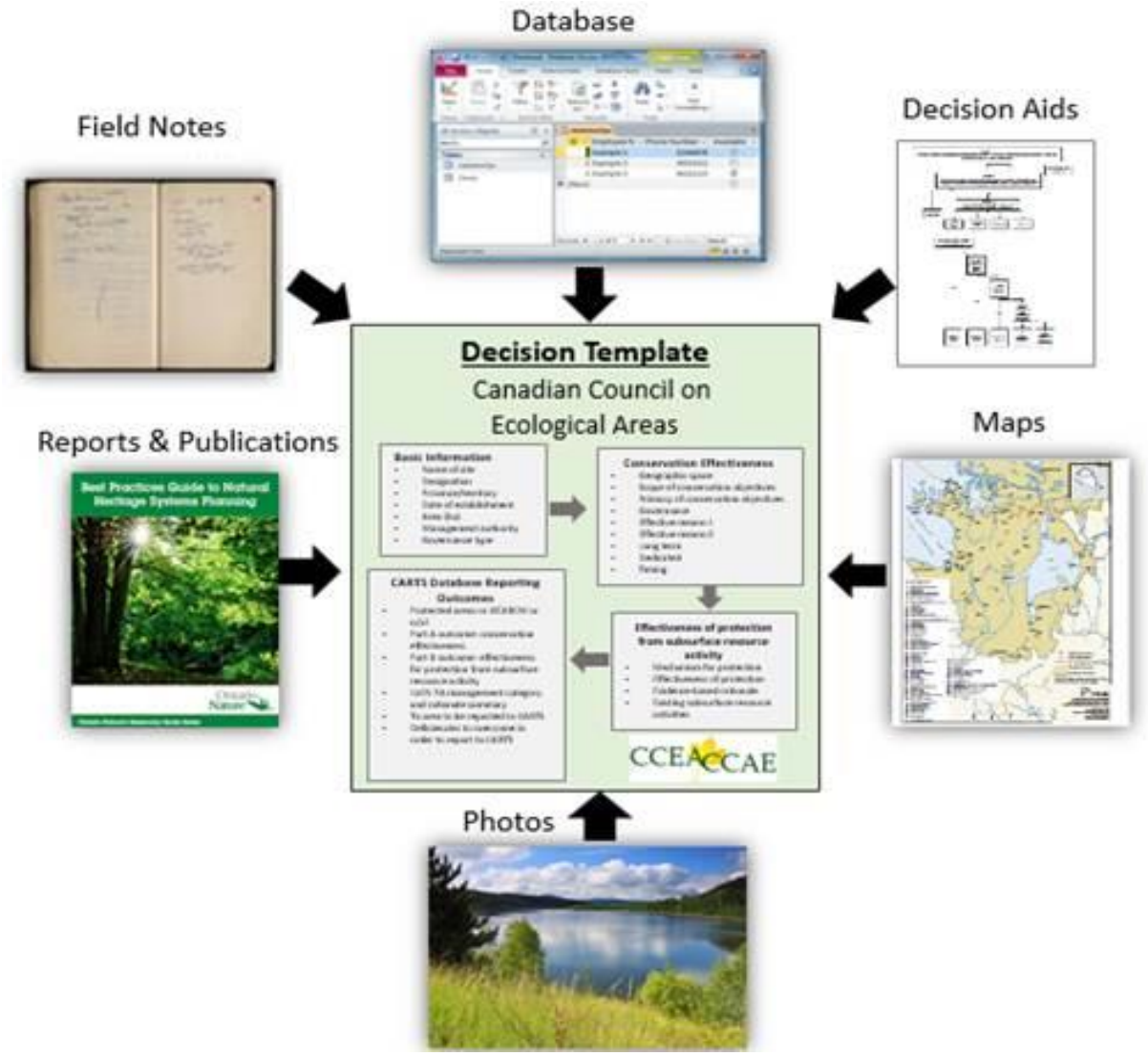


Figure 7: Options for an enhanced screening tool for the identification and maintenance of CARTS properties.

Biodiversity Documentation and Accounting: The Aichi Challenge

There are three dimensions inherent to fulfilling Canada's commitment to Aichi Target 11. The first involves the inventory, screening, and assessment of protected areas and complementary designations of lands and waters that can contribute to the achievement of the numerical targets for terrestrial and marine realms. Often, efforts abroad and in Canada have been focused on this activity. The ECCC/NCC collaborative project to complete biodiversity area analyses in southern Ontario is an excellent example. The CCEA screening tool and its forthcoming guidebook on assessing conservation areas together with CARTS and ECCC-CWS efforts (Ontario Region and Canada-wide) to inventory areas that contribute to the target are important steps that will help document and rationalize properties for inclusion as protected areas or OECMs.

The second important dimension of the Aichi challenge is to document the management effectiveness of properties to determine their individual and collective contribution to biodiversity conservation. Going forward, screening tools could be used to document biodiversity representation, ecological integrity, management, monitoring, and reporting, which are all important elements in defining the current and ongoing contribution of properties. While this type of documentation is beyond the scope of this study, future projects to design methods to enhance CCEA's screening tools to identify protected areas and legitimize OECMs would be helpful. This work could include improved documentation of the character of inventoried lands and waters in the CA domain in terms of their contribution to representing Ontario's ecosystems, flora, and fauna.

Thirdly, future documentation of biodiversity in protected areas and OECMs needs to be in tune with established efforts and databases already in place to avoid redundancy and duplication of effort. For many CA holdings, multiple databases already exist including those sponsored by CAs, regional governments, OMNRF, ECCC-CWS, and others. The surveys and designation of ANSIs, wetlands, species at risk, floodplains, and other ecological assets have generated a vast storehouse of descriptive information and mapping already available for many CA properties and other conservation lands and waters still to be assessed for consideration as a designation that will help Canada meet its Aichi target commitments.

The *Natural Areas Conservation Database* and *Element Occurrence* databases assembled by the Ontario Natural Heritage Information Centre (ONHIC) are probably the best one-stop information gathering portals for property documentation and they should be looked at carefully as the central repository for biodiversity documentation before embarking on any new ventures that may duplicate what is already in place.

The Bigger Aichi Biodiversity Picture

A recent posting for CARTS on CCEA's website indicates that the network of protected areas representing terrestrial ecosystems and inland waters in Ontario is just over 10%. Although it is not clear whether or how Canada is apportioning its commitment to the national target of 17% of its terrestrial and inland waters and 10% of its marine base, a proportionate share among the provinces and territories seems like a reasonable working construct. Of note, is the target in *Ontario's Biodiversity Strategy*:

"By 2020, at least 17 percent of terrestrial and aquatic systems are conserved through well-connected networks of protected areas and other effective area-based conservation measures" (Ontario Biodiversity Council 2011).

In addition to designating new areas to the protected area estate, Canada could potentially increase the area protected by better accounting for existing conservation lands (Butchart et al. 2015). Cataloguing existing conservation lands and waters that can count toward meeting the Aichi commitment is a logical first step. The screening process tested in this project provides a universal approach that integrates CCEA and IUCN protected area standards and classification. Applying this type of consistent approach across the entire suite of CA holdings, other protected areas, and other conservation lands and waters in Ontario will provide an initial count of the number and area of sites that may qualify for inclusion in accounting for Aichi, and is necessary to ensure protected areas are representative of Canada's biodiversity.

Gros Cap Conservation Area, Sault Ste. Marie, Ontario (photo credit: Sault Ste. Marie Regional Conservation Authority)

Recognizing that Aichi is all about cataloguing areas that contribute to biodiversity conservation, a second logical step is to assess and describe how the entire network of catalogued sites actually contributes to biodiversity conservation. Multi-level collaboration between agencies and organizations and access to comprehensive data and information systems such as the one sponsored by the ONHIC is critical to this assessment. If shortfalls in numerical accounting and biodiversity representation are revealed through the cataloguing and assessment of existing properties, this type of evaluation will position ECCC-CWS and partners to pursue spatial planning designed to identify additional sites that can be used to meet the numerical target and enhance biodiversity representation across the system. This step should include 'representation' and 'integrity' perspectives mindful that stressors, including climate change, need to be integrated into adaptive approaches of planning and managing conservation lands and waters.

Partitioning of ecosystems at various scales is an important aspect of this work. Protected areas in the provincial domain are already approximately organized according to ecoregions and ecodistricts. Tabulating all other areas in the same context will standardize treatment in the province and provide consistency in reporting to CARTS. This work could build on the results from completed projects like the *Big Picture* assessment for the Carolinian Region (Carolinian Canada Coalition 2008), the *Bigger Picture* assessment for all of southern Ontario completed by the ONHIC in the 1990s (e.g., Sorrill et al. 2001), and ongoing projects like the ECCC-NCC biodiversity assessment project. These products would assist with identifying candidate sites for addition to the PA/OECM

network that best contribute to biodiversity representation and/or ecological integrity.

With ongoing global warming ecosystem classifications derived from bioclimatic characteristics such as vegetation type and temperature (e.g., ecozones and ecoregions) will change (Parry et al. 2007). Therefore, it is likely that jurisdictions will need to redefine ecological boundaries at time intervals that reflect new biotic and climatic realities, or modify and adopt classification systems that are based on enduring features (Gray et al. 2015).

In future, it may be advantageous to also account for and protect natural heritage values within the context of physiographically-based classification systems such as watersheds that employ features like surficial geology, height of land, and water flow (Francis 2008, McKenney et al. 2010, Gross et al. 2016). Given their role under the auspices of the *Clean Water Act* and the *Conservation Authorities Act*, and their long standing focus on watershed-scale decision-making, CAs are well positioned to plan and manage their conservation lands estate from a variety of socially and ecologically meaningful perspectives.

In tandem with this, systems assessment efforts to protect new areas will need to be bolstered. For the most part, candidate properties in the provincial domain will coincide with Crown lands with the Province overseeing any efforts to protect them. The bigger challenge will be in the south, where intensified efforts and new initiatives may be required to secure private lands. ECCC may have an important role to play here through its Ecogifts program. And the Province and many NGO partners will continue to play valuable roles in securing natural areas through fee simple acquisition, conservation easements, agreement lands, and other means.

Spreading the Word: Communication is Important

Since Canada signed on to Aichi in 2011, less than 1% has been added to its protected areas network, and now, more than halfway through the initiative, the outstanding commitment is daunting. Despite the significance of this undertaking, awareness and understanding of it is limited. Outside of the core conservation community of practitioners and researchers, many agency and organization staff and the public at large have little to no understanding of this initiative. Lack of understanding about the importance of biodiversity conservation in the context of global issues such as species loss, habitat conversion, invasive species, pollution, and climate change is challenging. This is complicated by a general lack of awareness of the role of instruments such as the *UN Convention on Biological Diversity* (CBD 1992) and the *Aichi Strategic Plan* (CBD 2010) for biodiversity conservation. Going forward, communication about threats to biodiversity and available mitigation tools and techniques should be a central part of Canada's efforts to meet its Aichi target commitments.

Conventional approaches involve development of a communications plan that sets out the fabric, messaging, and processes to be employed in reaching target audiences. In this instance, core messaging would entail communicating the rationale for biodiversity conservation, the threats to biodiversity, the role of protected areas and other conservation properties in safeguarding biodiversity, the *UN Biodiversity Convention* and the subordinate *Aichi Strategic Plan for Biodiversity*, Canada's commitment to these international instruments, the state of Canada's protected areas network with a defined pathway for Canada to meet its goal, and cheerleading to build support among all factions that can play a role in meeting this challenge. Such a framework would provide ECCC-

CWS (Ontario Region) a niche to inform and engage provincial and regional partners in a cohesive fashion. Such a thrust is in keeping with the collaborative spirit of the current federal and provincial governments. In addition, it would contribute to Canada's work in support of Aichi Target 1, which is focused on awareness.

Federal-Provincial Coordination in Ontario

Efforts to meet the Aichi challenge cross-cut all jurisdictional lines in Ontario, up to three tiers of government (municipal, provincial, and federal) and many NGO programs and initiatives dealing with biodiversity conservation. Gray et al. (2009) document more than 40 designations (many overlapping on the same area) that contribute to the conservation of biodiversity. Provincial efforts alone are complex, ranging from provincial parks and other provincially regulated lands and waters to multiple designations including wetlands, Areas of Natural and Scientific Interest (ANSIs), and species at risk. On the private side, many NGOs including the Nature Conservancy of Canada, Ducks Unlimited Canada, Ontario Nature and affiliated groups, Carolinian Canada, and local land trusts add to the mix.

Historically, the Province has been central to many of these initiatives either directly through statutory mandated programs or less directly through the provision of guidance, financial and logistical support, and expertise to foster and catalyze complementary conservation activities. Efforts involving the survey and designation of significant natural areas in the provincial interest, involvement in joint land acquisition initiatives, provision of conservation land tax rebates, financial support for CAs, reform of the *Planning Act* with delegated authority for regional governments, reform of the *Conservation Authorities Act* (focused on governance, funding mechanisms, and roles and responsibilities), establishment of the Ontario Natural Heritage Information Centre, and scientific support by the CCEA, Parks Research Forum of Ontario (PRFO) and the Centre for Applied Science in Ontario's Protected Areas (CASIOPA) all embody conservation stakes with direct relevance to Canada's efforts to meet the Aichi challenge. Of note are similar organizations in other Canadian jurisdictions such as the Parks and Protected Areas Research Forum of Manitoba and the British Columbia Protected Area Research Forum that can help Canada meet its Biodiversity Target 1 and Aichi Target 11 commitments.

These broad-based inter-jurisdictional efforts provide a unique opportunity for ECCC-CWS (Ontario Region) to engage with OMNRF in a coordinated effort to collaborate with other parties on Aichi Target 11 and some of the other 19 Aichi 2020 targets. As noted, this initiative criss-crosses all jurisdictions in Ontario and provides an unprecedented opportunity to engage important collaborators in a common conservation cause. In a way, it could provide a forum much like the Natural Heritage League did in the 1980s to establish a unified coalition that could rally around Aichi and yield ecological, social, and economic benefits beyond 2020.

6.0 Summary of Recommendations and Questions

It is recommended that ECCC-CWS (Ontario Region) share the following recommendations and questions with respective partners and clients working at national, provincial, and municipal levels of planning and management:

Distinguish between protected areas and OECMs: Sponsor a Canada-wide workshop to interpret past and recent discussions, decisions, and position papers, and develop clear and concise guidelines to help practitioners distinguish between protected areas and OECMs.

Definition of values in Areas of Natural and/or Cultural Value: Consult with CAs about values in ANCVs and the themes (categories) depicted in the visual diagnostic key (see Figure 5). Questions include: Are these themes appropriate? Are there other themes? Do the themes capture the suite of values that have been defined? If not, what nomenclature might be more appropriate?

Priorities: Prioritize the screening, assessment, and categorization of the larger properties with multiple objectives and substantial tracts managed for conservation. There is greater potential that these lands may contribute to the Aichi targets.

Immediate/short-term priorities and use of the CA Lands database to prioritize potential CA lands that may contribute to Aichi Target 11: Notwithstanding the limitations of the current version of the CA database to identify protected areas and the associated IUCN categories, if there is an immediate need to provide a preliminary estimate of CA lands that may contribute to *Canada's Biodiversity Goals and Targets* (Target 1) and the *Convention on Biological Diversity* Aichi 2020 Target 11 commitment, it could be used to contribute to a GIS spatial analysis designed to identify and map potential properties, and contribute to a multi-sourced proxy system based on supporting information contained in the CA database, other databases, agency files, grey literature, and input from experts with on-site expertise.

Little Cataraqui Creek Conservation Area, Kingston, Ontario (photo credit: Cataraqui Region Conservation Authority)

Long-term use of the CA lands database: In the long-term, it is recommended that the nine prescriptive conservation effectiveness attributes (#31-39), 'Outcome: Conservation Effectiveness' (#40), the eight subsurface rights attributes (#41-48), 'Overall Summary of Outcome: Relationship to CARTS' (#49), Protection Status' (#50), 'IUCN Designation' (#51), 'Area of Natural and/or Cultural Values (ANCV) Assessment (#52), 'Legal Basis/Mechanism' (#53), and 'Summary of Essential/Relevant Natural, Social, and Cultural Values

on the Property' (#54) be added to the CA database and used in conjunction with the visual diagnostic key (see Figure 5) to confirm protection status as one of 'Protected Area', 'Other Effective Area-based Conservation Measures', 'Area of Natural and/or Cultural Value' (one of 10 categories – 'Biodiversity', 'Geology', 'Recreation', 'Soil Management', 'Water Management', 'Forest Management', 'Spiritual', 'Buffer Area', 'Multiple Use', and 'Other'), or 'Not an ANCV'.

Provide feedback to the CCEA: It is recommended that ECCC apprise the CCEA of the results of the deliberations undertaken during this study to help clarify the definition and use of OECMs, and refine the screening tool (decision techniques and the template).

Zoning: Re-visit the use of zoning to identify and report protected areas in CARTS. Explore options for a zone classification system to enhance the accuracy of protected area assignment to IUCN categories.

Legal description and demarcation: Clarify expected requirements for the description and physical demarcation of protected areas.

Gros Cap Conservation Area, Sault Ste. Marie, Ontario (photo credit: Sault Ste. Marie Regional Conservation Authority)

Common elements of protected areas management: Are there common elements of policy, planning, and management of protected areas owned and managed by CAs that could be identified as practices associated with protected or other conservation lands?

Long-term protection: Explore options for the use of explicit statements about long-term protection of CA properties to increase the chances of achieving protected area status.

CA Lands database and CARTS – 'Area of Natural and/or Cultural Value': Explore opportunities to include Areas of Natural and/or Cultural Value (ANCV) themes in the CA lands database and the CARTS database.

CARTS – screening tool: Introduce guidelines on the adaptation/adoption and use of the protected area screening tool (reporting template) and the reporting process into the CARTS protocol.

Additional resources to document biodiversity: Additional resources to describe biodiversity assets on CA properties would help practitioners assess the protection and conservation status of properties and identify gaps. This includes supporting ongoing efforts such as ONHIC databases, reports and publications, and utilizing the expertise of agency staff, field ecologists, and academics.

Language guidelines: For those interested in managing to an IUCN or another standard of protection/ conservation threshold, develop a language guide to assist interested CA planners and practitioners in their work to produce management plans and policy statements. The guide could contain, for example, suggestions about how best to communicate the strength and scope of commitments, policies, and actions.

Implement key biodiversity area analyses: Draw on the expertise of organizations and agencies to develop and implement an Ontario/Canada-wide spatial planning program for protected areas based on biodiversity assessment and analyses. For example, NCC, ECCC, and ONHIC staff have garnered expertise in spatial planning processes and frameworks that can be or are based on ecologically meaningful units such as terrestrial ecoregions and ecodistricts, watersheds, and marine regions.

Ecological integrity: Develop or adapt measures of ecological integrity, including a threat index for adjacent uses, for use on CA properties.

Communications package: It is recommended that agencies such as ECCC and partners draw on existing extension materials, and develop new materials where necessary to promote understanding and commitment to the 2020 Aichi targets.

Identify and communicate about available databases: There are many municipal-regional, provincial, and national databases and repositories for reports and publications that can be readily accessed and used in support of protected area assessment. These assets could be summarized and provided to CAs, partners, and other agencies and organizations involved in protected area classification and planning.

Inter-agency coordination: The lengthy and complex task of evaluating areas for their protected status and inclusion in the Aichi Target 11 list requires commitment and coordination by agencies working at municipal, regional, provincial/territorial, national, and international levels of planning. It is recommended that a federal-provincial steering committee be established to oversee the collaboration and coordination of this initiative.

Link the database and decision tools: Link the screening tool to the CA lands database and add repository categories for reports and publications, maps, photographs, and field notes.

Training: Develop and implement a training program in the application of the screening technique for ECCC/CA staff and partners.

Peer review: Establish a peer review process for quality control and a self-reporting process to review and validate threshold/borderline nominations for protected area status, as necessary.

Case study: Assess the value of including some of the CA case studies in the CCEA guidebook and seek permission from the relevant CAs.

Review of the *Conservation Authorities Act*: Suggest that the future designation and management of protected areas be explored.

7.0 Summary of Workshop Outcomes

Some of the report recommendations were addressed by workshop participants in response to a series of questions posed during the final session (see Appendix F for all participant comments about the following eight outcome statements):

Finish the 2016 Draft Report

Next step: Canvass participants about their comfort level with the 2016 draft report, finish it, and distribute it.

Outcome: Approved with minor edits/ revisions.

Develop a Common Set of Guiding Statements

Next step: Are the CAs in a position to explore options for a common set of statements to help practitioners identify protected areas, particularly with respect to Primacy of Nature Conservation Objectives, Effective Means-1, Effective Means-2, Long-Term, and Dedication? Summarize the results of the discussion and address any recommendations from the Workshop.

Outcome: The group agreed on the value of a common language on screening assessment, etc. but no decision was made as to who should do it and who would fund it.

Complete Integration of the CCEA Attributes into the CA Database

Next step: Integrate the 24 new CCEA attributes into the CA lands database and populate them with data.

Outcome: No decision at this point in time.

Link the Database Decision Tools

Next step: Explore the merit and feasibility of linking database decision tools. For example, link the screening tool to the CA lands database and add repository categories for reports and publications, maps, photographs, and field notes.

Outcome: It is a great idea, but hard to tackle.

CA Case Studies in the CCEA Guidebook

Next step: Is there value in including some CA case studies in the CCEA guidebook? If so, decide who does it, select examples, and seek permission from the relevant CAs.

Outcome: Agreement, it is worth doing this.

Areas of Natural and/or Cultural Values (also referred to as Partially Protected Areas)

Next step: If there is value in recognizing important cultural and/or ecological values encompassed in areas that do not qualify as protected areas (i.e., ANCVs), what are the next steps? Definition and description of categories? Current examples of application? Options for application?

Outcome: Agreement.

Complete Phase II

Next step: Employ the Phase I methodology to assess the merits of clustering adjacent smaller properties and screening them as larger properties (Phase II project).

Outcome: Agreement.

Workshop and/or Webinar Series

Next step: Explore interest and feasibility of a regional or Canada-wide workshop or series of webinars (part of the Pathway Approach?) to apprise practitioners on the development of definitions and criteria that help practitioners distinguish between protected areas and OECMs. Perhaps under the auspices of the Pathway Project?

Outcome: Agree there is a need for it (Morand and Ogilvie 2017).

8.0 Concluding Remarks

Canada has just over 10% of its land mass and 1% of its marine and coastal waters included in terrestrial and marine protected areas, respectively. The combined terrestrial and marine protected areas represent about 8% of the entire terrestrial/marine base of the country. Canada's commitment to meeting Aichi Target 11 by 2020 is a truly significant conservation challenge. Calling for the inclusion of 17% of Canada's land mass and 10% of its marine base to be included in the national network of protected areas and OECMs by 2020 is a huge undertaking that greatly surpasses the *Endangered Spaces* challenge completed in the 1990s (e.g., WWF 1995). Since Canada signed on to Aichi in 2011, less than 1% has been added to its protected areas network, and now, more than halfway through the initiative, the outstanding commitment is daunting with an area approximately three times larger than the British Isles still needed to meet the national target. This initiative by Conservation Ontario, Conservation Authorities, and Environment and Climate Change Canada exemplifies the type of multi-tier collaboration necessary to meet Aichi 2020 target commitments. Ongoing work to populate the CA and CARTS databases will potentially make a significant contribution to meeting that target. The CCEA's work to test and assess its screening tool template in jurisdictions across Canada is an excellent endeavour, particularly as it relates to its application as a national standard with the aim of having the final version adopted by agencies and organizations engaged in establishing and managing protected areas and other conservation sites.

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APPENDIX A: REVIEW AND COMPARISON OF THE CA DATABASE AND THE CCEA CRITERIA

A number of categories in the CA database help practitioners organize and store important data and information. For example, the CAs use a suite of attributes to identify properties, provide legal descriptions, and area (ha) calculations. These attributes should be retained in the database.

Similarly, the ECCC-CWS is working to develop a national database with a suite of common fields to support data and information roll-up across Canada, and these should be retained. We do not feel that the protected area screening criteria contained in the current version of the CA database help practitioners develop verifiable and defensible protected area and IUCN designations. For example, attribute #20 ('Cls_Human') is intended to denote the degree of human intervention on the property using four options (i.e., none, minimal, moderate, and high). Unfortunately, these prescriptive criteria are not defined and force the user to guess, which mitigates against consistent decision-making and defensibility. On the other hand, CAs may find these attributes useful for other types of evaluations. Accordingly, we recommend that the current ensemble of attributes contained in the Spatialworks (2014) report be retained and the criteria and standards developed by the IUCN (Dudley 2008) and the CCEA (CCEA 2014, MacKinnon et al. 2015) be added to the CA database and used to verify protected area status and IUCN category.

For example, to evaluate conservation effectiveness, it is recommended that the nine values described by the CCEA ('Geographical Scale', 'Scope of Conservation Objectives', 'Primacy of Nature Conservation Objectives', 'Governance', 'Effective Means-1', 'Effective Means-2', 'Long-term', 'Dedicated', and 'Timing'; see MacKinnon et al. 2015) be incorporated into the CA database (see #31-39). Currently the CA database contains four attributes with similar titles and/or descriptions used in some of the nine CCEA attributes (Figure A1). Notable omissions include 'Governance', 'Effective Means-1' and 'Effective Means-2', 'Dedicated', and 'Timing' of protection. Attribute #40 ('Outcome: Conservation Effectiveness') should be added as well.

The CA lands database does not contain any attributes that address conservation effectiveness of mechanisms for managing subsurface resources within protected areas and other effective area-based conservation measures, and these should be added (e.g., #41-49) (see CCEA 2014). Suggested additions also include 'Protection Status (#50), 'IUCN Designation' (#51), 'Area of Natural and/or Cultural Value' (#52), 'Legal Basis for Mechanisms' (#53), and a 'Summary of Essential/Relevant Natural, Social, and Cultural Values Found on the Property' (#54).

Attributes in the current version of the CA database and recommended new attributes are described in Table A1 and assigned an identification number. The following observations and suggestions expand on the information provided in Table A1:

Attribute #11 – 'Own_Manage'

This attribute is an important part of the summary template. It is recommended that the list of examples be expanded (see Table A1).

Attribute #15 – 'Con_Term'

The categories used to describe conservation term duration ('Permanent', 'Interim' [becoming permanent], 'Long-Term', 'Short-term', 'Indefinite') are not defined and difficult to apply in the assessment of the status of the protected area. This forces the user to guess, which mitigates against consistent decision-making and defensibility.

In order for an area to qualify as protected, the management mechanism must be in effect in perpetuity (CCEA 2008, Dudley 2008, MacKinnon et al. 2015). It is recommended that the 'Long-term' attribute (#33) developed by the CCEA (MacKinnon et al. 2015) be added to assess management mechanisms (see Table A1). If there is another use for 'Con_Term' by the CAs, it should be retained in the CA database.

Attribute #19 – 'Cls_IUCN'

The intent of the 'Cls_IUCN' attribute in the CA lands database is to enable the user to identify an IUCN designation based on his/her assessment of the protected area using an algorithm comprised of a number of prescriptive attributes (i.e., 'Cls_Human' (#20), 'Cls_Access' (#21), 'Cls_Use' (#22), 'Cls_Rsrc' (#23), and 'Cls_Scope' (#25). Unfortunately, the attributes in the algorithm do not generate consistent and defensible recommendations about protected area status and IUCN classification (see Appendix B for the analysis). And while the proposed new attributes #31-54 (see Table A1) developed by the CCEA will provide consistent and defensible results, the data required to populate these new attributes may not be available in the short-term (i.e., by 2020).

Perhaps in the interim, some of the information contained in attributes #20-27 could be used in combination with information contained in hard-copy files, the grey literature, and the expertise and personal experience of conservation managers as proxies to identify potential protected areas and assign a preliminary IUCN protected area category with the aid of the visual diagnostic key (see Figure 4). Attribute #19 could be used to record these interim results.

Attribute #20 – 'Cls_Human'

The use of this attribute stems from Spatialworks (2014) adoption of the EUROPARC-España (2006) decision key. Even though the key is descriptive, Spatialworks elected to incorporate a prescriptive component using 'Cls_Human' and other attributes. Unfortunately, the prescriptive criteria are not defined and force the user to guess, which mitigates against consistent decision-making and defensibility. However, if there are other uses for this attribute, it should be retained in the database.

Attribute #21 – 'Cls_Access'

The use of this attribute stems from Spatialworks (2014) adoption of the EUROPARC-España (2006) decision key. Even though the key is descriptive, Spatialworks elected to incorporate a prescriptive component using 'Cls_Access' and other attributes. Unfortunately, the statements imply no control of access to properties in IUCN Category III, IV, V and VI areas when that is not necessarily the case. This forces the user to guess, which mitigates against consistent decision-making and defensibility (see Appendix B). However, if there are other uses for this attribute, it should be retained in the database.

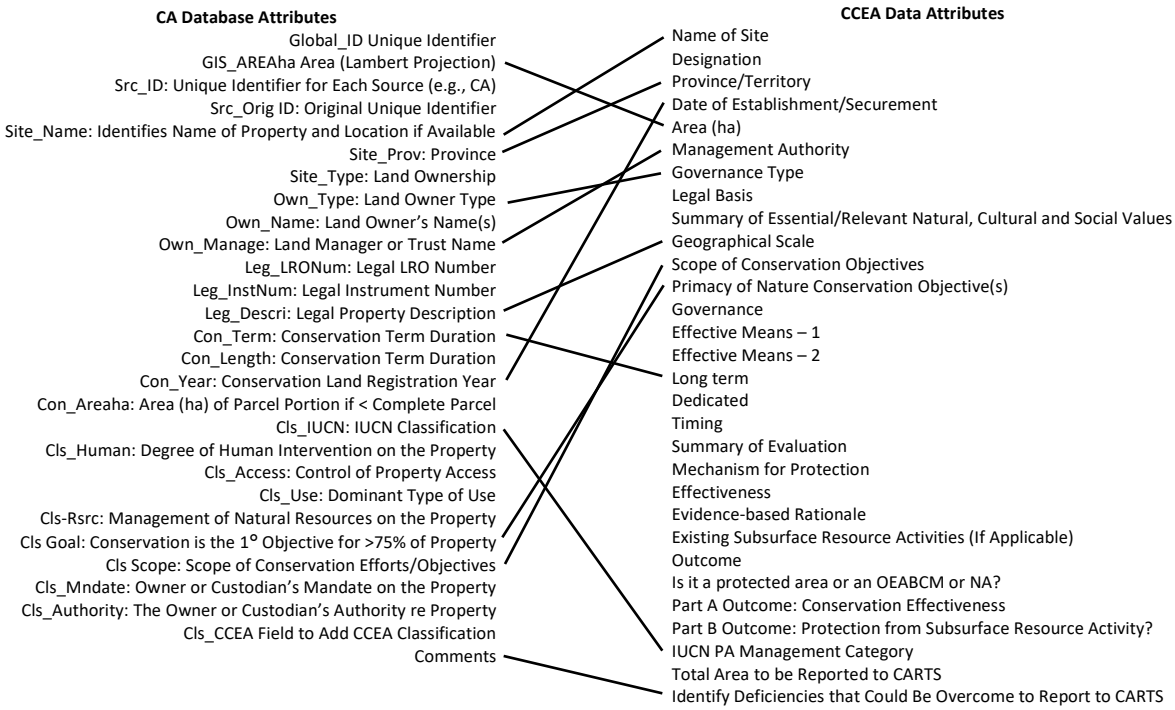


Figure A1: Comparison of the CA database and the CCEA data and information attributes.

Attribute #22 – 'Cls_Use'

The use of this attribute stems from Spatialworks (2014) adoption of the EUROPARC-España (2006) decision key. The criteria are explicit, although some enhancement to the text is recommended if the attribute is retained (see Appendix B).

Attribute #23 – 'Cls_Rsrc'

The use of this attribute stems from Spatialworks (2014) adoption of the EUROPARC-España (2006) decision key. Even though the key is descriptive, Spatialworks elected to incorporate a prescriptive component using 'Cls_Rsrc' and other attributes. The 'Cls_Rsrc' criteria are not well defined. There are no definitions and it is not possible to distinguish between minimal uses (traditional use), small-scale, moderate-scale and large-scale uses (sustainable use) in its current format. This forces the user to guess, which mitigates against consistent decision-making and defensibility (see Appendix B). However, if there are other uses for this attribute, it should be retained in the CA database.

Attribute #24 – 'Cls_Goal'

The Spatialworks (2014) attribute 'Cls_Goal: Conservation is the Primary Objective for >75% of the Property' (#24) and the CCEA attribute 'Primacy of Nature Conservation Objectives(s)' (#35) have similar intent. While the description used in the Spatialworks database is prescriptive, the language used in the values column is not as helpful as the language used by the CCEA.

In addition, it is important to note that while the primary management objective must be applicable to at least 75% of the protected area, activities in the remaining 25% of the area must be compatible with the primary purpose of conservation

(Dudley 2008). It is recommended that the proposed new attribute (#35) be used to assess conservation effectiveness. However, if there are other uses for the 'Cls_Goal' attribute (#24), it should be retained in the database.

Attribute #25 – 'Cls_Scope'

The Spatialworks (2014) attribute 'Cls_Scope: Scope of Conservation Objectives' (#25) and the proposed new attribute 'Scope of Conservation Objectives' (#36) have similar titles but different intent. 'Cls_Scope' values are designed to help the user identify the appropriate IUCN category for a protected area. On the other hand, the CCEA's language is designed to contribute to a decision about whether or not an area actually qualifies as a protected area or an OECM. Spatialworks (2014) applied the CCEA colour scheme presumably to denote the strength of the protection commitment. The use of the colour scheme for this attribute in Spatialworks (2014) is inappropriate because at this stage in any evaluation, all the areas should qualify as protected areas. However, if there are other uses for this attribute, it should be retained.

Attribute #26 – 'Cls_Mndate'

The Spatialworks (2014) 'Cls_Mndate' attribute focuses on the condition of single, multiple, and competing mandates. A new element in Dudley (2008) not present in the 1994 (IUCN 1994) definition of a protected area is 'management effectiveness', which the 'Cls_Mndate' attribute does not address. However, if there are other uses for the 'Cls_Mndate' attribute, it should be retained in the database.

Attribute #27 – 'Cls_Auth'

'Cls_Auth' describes the extent of the owner's or custodian's authority on the property, which could be determined through legislative review.

Attribute #28 – 'Cls_CCEA'

The 'Cls_CCEA' attribute does not reflect the CCEA process described by CCEA (2014) and MacKinnon et al. (2015), and should not be referenced as a CCEA tool. However, agencies could elect to use this attribute to record the results of preliminary evaluations using GIS tools to define large areas and ad hoc assessments using Spatialworks (2014) attributes (i.e., 'Cls_Human' [#20], 'Cls_Access' [#21], 'Cls_Use' [#22], 'Cls_Rsrc' [#23], and 'Cls_Scope' [#25] in conjunction with hardcopy file reports, grey literature, on-site expertise, and the visual diagnostic key (see Figure 4) to prioritize areas that may qualify as Aichi Target 11 sites.

Given that the results of this preliminary evaluation are not based on CCEA attributes, it is recommended that the title of this attribute be changed to 'Interim Assessment of Protection'. Once these potential sites are identified, the proposed new attributes #31-54 based on Dudley (2008), CCEA (2014), and MacKinnon et al. (2015) could be used to evaluate conservation effectiveness and confirm IUCN status where appropriate. The results of the final evaluation could be recorded in attribute #51 ('IUCN Designation').

Attribute #30 (New) – Site 'Designation'

The CCEA uses a 'Designation' category in the IUCN protected area and OECM screening template (Appendix C). Given the plethora of designations that have been developed over the years (see Gray et al. 2009), this is a useful identifier for practitioners working on various protected area management issues.

Canada is signatory to a number of international treaties, conventions, and agreements including Ramsar Sites (1971 Convention on Wetlands of International Importance especially as Waterfowl Habitat), Biosphere Reserves, World Heritage Sites (1972 Convention Concerning the Protection of

the World Cultural and Natural Heritage, Paris), and Important Bird Areas (IBA).

In addition, Canada and the provinces/territories launched the Canadian Heritage Rivers program in 1986. Ontario also uses ANSIs to identify important earth and life science areas. It is recommended that an attribute for complementary designations be added to the database (Table A1)

Attribute #31 (New) – 'Dedicated'

As one of the nine criteria used to evaluate conservation effectiveness, 'Dedicated' connotes a measure of the strength of a management authority's commitment to protect an area, often through development and application of legislation and associated policy and regulations (CCEA 2008, Dudley 2008, Gray et al. 2009, MacKinnon et al. 2015).

In application, this category is based on the principal that the management mechanism can be reversed only with great difficulty. For example, an area established through an Act of Parliament (e.g., National Park) is a robust commitment to protection because it is based on formal consultation, management planning, and legislative process. Many private land and NGO reserves that are managed to protect biodiversity and ecosystem health can be assigned high rank as well (Gray et al. 2009). There is no comparable attribute for 'Dedicated' in the Spatialworks (2014) database, and it is recommended that this attribute be added (see Table A1).

Attribute #32 (New) – 'Geographical Space'

The Spatialworks (2014) attribute 'Leg_Descri: Legal Property Description' (#14 in Table A1) and the proposed CCEA attribute 'Geographical Space' (#32) refer to the same thing but from different perspectives. While 'Leg_Descri: Legal Property Description' is an important legal parameter and should be retained in the database, it does not reflect the definition used by the CCEA ("*The geographical space is clearly defined with agreed and demarcated borders*"; MacKinnon et al. 2015). Therefore, it is recommended that the 'Geographical Space' attribute be added to the database (Table A1).

Attribute #33 (New) – 'Long-term Protection'

The Spatialworks (2014) attribute 'Con_Term: Conservation Term Duration' (#15) and the CCEA attribute 'Long-term' (#33) have similar intent, but the 'Con_Term' criteria used in the database are not defined and difficult to interpret. The 'Con_Term' criteria include 'Permanent', 'Interim' (becoming permanent), 'Long-term', 'Short-term', 'Indefinite', and 'Unknown'.

Protected areas should be managed in perpetuity (CCEA 2008, Dudley 2008) and the CCEA uses a working definition focused on the expectation that conservation of areas included under Aichi Target 11 as protected areas and OECMs will continue in perpetuity (MacKinnon et al. 2015). While the 'Con_Term' attribute may have other uses, it is recommended that the CCEA criteria developed for the 'Long-term' attribute (intended to endure in perpetuity) be added to the database (Table A1).

Attribute #34 (New) – 'Timing of Protection'

Some areas are protected year-round while others are only protected for selected periods. For example, while Wilderness Zones in Ontario Provincial Parks are protected year-round, Migratory Bird Sanctuaries in Ontario are not and do not qualify for protected area or OECM status. The CCEA classification system requires that the management mechanism be in effect year-round in order for an area to qualify as protected (MacKinnon et al.

2015). There is no 'Timing' attribute in the Spatialworks (2014) database, and therefore it is recommended that a 'Timing of Protection' attribute be added (Table A1).

Attribute #35 (New) – 'Primacy of Nature Conservation Objective(s)'

The Spatialworks (2014) attribute 'Cls_Goal: Conservation is the Primary Objective for >75% of the Property' (#24) and the CCEA attribute 'Primacy of Nature Conservation Objectives(s)' (#35) have similar intent. While the description used in the Spatialworks database is prescriptive, the language used in the values column is not as helpful as the language and categories used by the CCEA. In addition, it is important to note that while the primary management objective must be applicable to at least 75% of the protected area, activities in the remaining 25% of the area must be compatible with the primary purpose of conservation (Dudley 2008). It is recommended that the CCEA attribute 'Primacy of Nature Conservation Objective(s)' be added to the database (Table A1).

Attribute #36 (New) – 'Scope of Conservation Objectives'

The Spatialworks (2014) attribute 'Cls_Scope: Scope of Conservation Objectives' (#25) and the CCEA attribute 'Scope of Conservation Objectives' (#36) have similar titles but different intent. 'Cls_Scope' values are designed to help the user identify the appropriate IUCN category for a protected area. The CCEA's 'Scope of Conservation Objectives' attribute is designed to help practitioners assess the inclusiveness, breadth, and scale of the authority's management programs to evaluate conservation effectiveness.

Spatialworks (2014) applied a colour scheme presumably to denote the strength of the protection commitment. However, use of the colour scheme for this attribute (i.e., to identify an IUCN category) is inappropriate because at this stage in any evaluation, all of the areas being considered should qualify as protected. Two suggestions are relevant here: 1) add 'Scope of Conservation Objectives' (#36) to the database for use in conjunction with the other eight conservation effectiveness attributes to assess protection status, and 2) use the diagnostic key (see Figure 4) to populate the 'IUCN Designation' attribute (#51) to help managers.

Attribute #37 (New) – 'Effective Means-1'

The Spatialworks (2014) 'Cls_Mndate' (#26) focuses on the condition of single, multiple, and competing mandates. A new element in Dudley (2008) not present in the 1994 (IUCN 1994) definition of a protected area (used in Spatialworks 2014) is 'management effectiveness', which the CCEA addresses with two attributes entitled 'Effective Means'. 'Effective Means-1' describes the power of the management authority to exclude, control, and manage all activities within the area that are likely to impact biodiversity (MacKinnon et al. 2015). This is normally completed under the auspices of legislation, policy, and regulations such as government statutes and formal policy statements by the owner, such as an NGO (see #53). The 'Effective Means-1' statement is succinct and prescriptive. It is recommended that the CCEA 'Effective Means-1' be added to the database (Table A1).

Attribute #38 (New) – 'Effective Means-2'

'Cls_Auth' (#27) describes the extent of the owner's or custodian's authority on the property, which could be determined through legislative review. 'Effective Means-2' compels the management authority to prohibit activities deemed incompatible with biodiversity conservation (MacKinnon et al. 2015). The language used by the CCEA (i.e., *"….compels the authority to prohibit…."*)

is strong and direct. Often the boundaries of compatibility with natural assets such as biodiversity are prescribed in legislation, policy and regulation, and are useful guides in the protected area evaluation process (see #53). It is recommended that the CCEA 'Effective Means-2' attribute be added to the database (Table A1).

Attribute #39 (New) – 'Governance'

'Governance' connotes a management regime with one or more measures strong enough to ensure effective conservation and remediation of any conservation gaps that might occur (MacKinnon et al. 2015). Governance types include all those recommended by Dudley (2008), including governance by government, shared governance, private governance, and governance by indigenous peoples and local communities. Examples of these governance types are provided in Spatialworks (2014) attribute 'Own_Type: Land Owner Type' (see #9, Table A1) and complement this proposed new 'Governance' attribute to determine conservation effectiveness (Table A1). It is recommended that the CCEA 'Governance' attribute be added to the database and the decision-making tool (Table A1).

Attribute #40 (New) – 'Outcome: Conservation Effectiveness'

Conservation effectiveness is determined through application of the CCEA screening tool. Protection status results from an evaluation of the nine CCEA prescriptive attributes (i.e., 'Dedicated' [#31], 'Geographical Space' [#32], 'Long-term Protection' [#33], 'Timing of Protection' [#34], 'Conservation of the Primary Objective' [#35], 'Conservation Objectives' [#36], 'Effective Means-1' [#37], 'Effective Means-2' [#38], and 'Governance' [#39]). Attribute measures are based on a green-yellow-red ranking system. It is important to note that the combined results from the assessment of conservation effectiveness (#31-39) and the interpretation of subsurface rights (#41-47) is used to determine protection status (see #50). It is recommended that this attribute be added to the CA database Table A1).

Attribute #41 (NEW) – 'Subsurface Activity – Mechanism for Protection: Granting Rights'

This variable is focused on the effectiveness at preventing the granting of subsurface resource rights. This is a text attribute that allows the user to describe current prescriptions associated with the granting of rights (CCEA 2014). It is recommended that this attribute be added to the CA database (Table A1).

Attribute #42 (New) – Subsurface Effectiveness – Granting Rights'

The effectiveness at preventing the granting of subsurface resource rights is ranked according to a three-point scale:

- Green: Potential high level of effectiveness and low risk to conservation values over time.
- Yellow: Potential medium level of effectiveness; concern that improper implementation of the mechanism poses a risk to conservation values over time.
- Red: Potential low level of effectiveness/or high level of risk to conservation values over time CCEA 2014).

It is recommended that this attribute be added to the CA database (Table A1).

Attribute #43 (New) - 'Subsurface Activity – Mechanism for Protection: Exercise of Rights'

This variable is focused on the effectiveness at preventing the exercise of subsurface resource rights.

This is a text attribute that allows the user to describe current prescriptions associated with the exercise of subsurface rights. It is recommended that this attribute be added to the CA database (Table A1).

Attribute # 44 (New) – 'Subsurface Effectiveness – Exercise of Rights'

The effectiveness at preventing the exercise of subsurface resource rights is ranked according to a three-point scale:

- Green: Potential high level of effectiveness and low risk to conservation values over time.
- Yellow: Potential medium level of effectiveness; concern that improper implementation of the mechanism poses a risk to conservation values over time.
- Red: Potential low level of effectiveness/or high level of risk to conservation values over time.

It is recommended that this attribute be added to the CA database (Table A1).

Attribute #45 (New) – 'Subsurface Activity – Mechanism for Protection – Impacts Prevented'

This variable is focused on the effectiveness at preventing impacts on conservation values. This is a text attribute that allows the user to describe current prescriptions associated with the prevention of impacts related to subsurface activity. It is recommended that this attribute be added to the CA database (Table A1).

Attribute #46 (New) – 'Subsurface Effectiveness – Preventing Impacts'

The effectiveness at preventing impacts resulting from subsurface activity is ranked according to a three-point scale:

- Green: Potential high level of effectiveness and low risk to conservation values over time.
- Yellow: Potential medium level of effectiveness; concern that improper implementation of the mechanism poses a risk to conservation values over time.
- Red: Potential low level of effectiveness/or high level of risk to conservation values over time.

It is recommended that this attribute be added to the CA database (Table A1).

Attribute #47 (New) – 'Existing Subsurface Resource Activities'

This attribute allows the practitioner to create a statement about existing and/or historical subsurface resource activities and/or impacts. It is recommended that this attribute be added to the CA database (Table A1).

Attribute #48 (New) – 'Outcome: Interpretation of Subsurface Rights'

This attribute allows the practitioner to identify and rank the recommended interpretation of the assessment of subsurface rights. The practitioner ranks the evaluation according to one of:

- Best Practice
- Minimum Standard
- Minimum Standard with Rationale
- Below Minimum Standard But with Clear Evidence
- Below Minimum Standard

It is recommended that this attribute be added to the CA database (Table A1).

Attribute #49 (New) – 'Effectiveness Outcome: Interpretation of Subsurface Rights'

On the basis of an evaluation of subsurface rights using the guide prepared by the CCEA (2014) (described in attributes #41-48), the practitioner selects one of two options:

- PAs or those areas within PAs that meet Best Practice or Minimum Standard should be reported to CARTS
- PAs or those areas within PAs that are below Minimum Standard should not be reported to CARTS

It is important to note that the combined results from the assessment of conservation effectiveness (#31-39) and interpretation of subsurface rights (#41-47) is used to determine protection status (see #50). It is recommended that this attribute be added to the CA database (Table A1).

Attribute #50 (New) – 'Protection Status'

The protection status is determined through application of the CCEA screening tool. Protection status results from a combined evaluation of conservation effectiveness (#31-40) and the interpretation of subsurface rights attributes (#41-49). The nine prescriptive conservation effectiveness attributes are: 'Dedicated' (#31), 'Geographical Space' (#32), 'Long-term Protection' (#33), 'Timing of Protection' (#34), 'Primacy of Nature Conservation Objectives' (#35), 'Scope of Conservation Objectives' (#36), 'Effective Means-1' (#37), 'Effective Means-2' (#38), and 'Governance' (#39). The nine subsurface rights attributes are: 'Mechanism for Protection – Granting Rights' (#41), Subsurface Effectiveness' (#42), Mechanism for Protection – Exercise of Rights' (#43), 'Subsurface Effectiveness – Exercise of Rights' (#44), 'Mechanism for Protection – Impacts Prevented' (#45), 'Subsurface Effectiveness – Preventing Impacts' (#46), and 'Existing Subsurface Resource Activities' (#47).

In concert with the diagnostic key (see Figure 4), protection status is identified as one of 'Protected Area', 'Other Effective Area-based Conservation Measures', 'Area of Natural and/or Cultural Value', or 'Not an Area of Natural and/or Cultural Value'. It is recommended that this attribute be added to the CA database (Table A1).

Attribute #51 (New) – 'IUCN Designation'

If the property qualifies as a protected area, the IUCN visual diagnostic key (see Figure 4) allows the practitioner to assign an IUCN designation based on his/her assessment of the IUCN category descriptions and indicators. It is recommended that the 'IUCN Designation' attribute be added to the database and populated with decisions aided by the diagnostic key that asks a succinct series of questions comprised of key words and concepts that reflect IUCN definitions and objectives and permit the practitioner to follow the answers to the appropriate IUCN category. It is recommended that this attribute be added to the CA database (Table A1).

Attribute #52 (New) – 'Area of Natural and/or Cultural Values' (ANCV)

An ANCV denotes a second tier of conserved and managed areas that do not qualify as protected areas or OECMs, yet contribute to the overall protection of the variety of natural and cultural assets encompassed by CA properties and in the surrounding areas. The values tend to align across nine functions of CA properties (and there are undoubtedly more) that may merit some form of recognition and classification for their contribution to ecosystem health: 'Biodiversity', 'Geologi-

cal', 'Recreation', 'Soil Management', 'Water Management', 'Forest Management', 'Spiritual', 'Cultural', 'Buffer Area', and 'Other'. It is recommended that this attribute be added to the CA database (Table A1).

Attribute #53 (New) – 'Legal Basis Mechanisms'

Many aspects of protected area, OECM, and ANCV management (e.g., 'Governance', 'Effective Means', and 'Dedication') are completed under the auspices of legislation, policy, and regulations such as government statutes and formal policy statements by the owner, such as an NGO. Given that a 'Legal Basis Mechanisms' attribute does not exist in the Spatialworks (2014) database, it is recommended that one be added (Table A1). It is recommended that this attribute be added to the CA database (Table A1).

Attribute #54 (New) – 'Summary of Essential/Relevant Natural, Social, and Cultural Values Found on the Property'

The information sheet proposed by CCEA contains an attribute that permits the user to include a summary of the overall context of the area and its connection to the conservation of biodiversity and other natural/cultural features. This is a useful attribute for protected area managers who are required to summarize areas for reports and status updates, and brief policy and management staff. It is recommended that this attribute be added to the database (see Table A1). It is recommended that this attribute be added to the CA database (Table A1).

Table A1: List of Spatialworks (2014) attributes and CCEA attributes (CCEA 2014, MacKinnon et al. 2015) with suggestions to retain, modify, or add attributes and criteria. See text for explanations of the suggestions.

#	Attribute	Description	Possible values	Purpose of Attribute	Suggestion
1	Global_ID	Unique Identifier for inclusion in National Database. Combination of Province, Src_ID, and numeric Src_Orig ID (e.g., PIN from Teranet Data).	Unique value for each parcel (e.g., ON_CA1_103567).	Site Id	Retain
2	GIS_AREAha Area	Area of the parcel as calculated in the OMNR Lambert projection.	Floating point area values in hectares.	Information for Summary Templates	Retain
3	Src_ID	Unique identifier for each source (e.g., Conservation Authority). Key link to source name table.	Unique value for each source (e.g., CA1).	Site Id	Retain
4	Src_Orig_ID	Original unique identifier within source dataset. Generally these will be unique coming from Teranet data but could potentially have duplicates across sources (e.g., Global_ID created to avoid duplicates). Maintained for linkages back to original source datasets if required.	Unique value within each source with potential duplicates across sources (e.g., 103567, 103567, 103568).	Site Id	Retain
5	Src_Areaha	Documented or recorded area of the site (e.g., from reports or calculations in native projection of input data).	Floating point area values.	Information for Summary Templates	Retain
6	Site_Name	Identifies name of property and location if available/applicable.	Common name for property if other than owner and address (e.g., Eastern Farms Natural Lands).	Site Id	Retain
7	Site_Prov	Province or Territory where site is located.	Ontario	Site Id Information for Summary Templates	Retain

8	Site_Type	Land ownership type.	1. Fee Simple 2. Conservation Easement 3. Other	Information for Summary Templates	Retain
9	Own_Type	Land owner type.	1. Conservation Authority 2. Private Individual 3. Private Corporation 4. Charitable Organization including NGO 5. Municipal Government 6. Other	Information for Summary Templates	Retain
10	Own_Name	Land owner's name(s).	Text description (e.g., GRCA, Joe Smith, etc.).	Site Id Information for Summary Templates	Retain
11	Own_Manage	(Management Authority) Land manager or trust name if different than owner (e.g., conservation easement).	Text Description (e.g., Nature Conservancy of Canada, MVCA, and OMNRF).	Information for Summary Templates	Retain and modify
12	Leg_LRONum	Legal LRO number.	Integer	Site Id	Retain
13	Leg_InstNum	Legal instrument number.	Alphanumeric value (e.g., LT11782).	Site Id	Retain
14	Leg_Descr	Legal property description.	Text description (e.g., Parcel 25-1, Lot 8, Concession 13).	Site Id	Retain
15	Con_Term	Conservation term duration type.	1. Permanent 2. Interim, becoming permanent 3. Long-term 4. Short-term 5. Indefinite 6. Unknown		Use for preliminary evaluation but do not use for final assessment of protected status and IUCN designation.
16	Con_Length	Conservation term duration in years if known.	Integer value of number of years.	Information for Summary Templates	Retain
17	Con_Year	Date of establishment - Conservation land registration year or year of registration of partial interest.	Integer value of year.	Information for Summary Templates	Retain

18	Con_Areaha	Area (ha) of known conservation portion of the parcel if less than the complete parcel area.	Floating point area value in hectares.	Assign an IUCN Category Information for Summary Templates	Retain
19	Cls_IUCN	Classification – IUCN Category if known on input (and to hold classification results).	1. Ia 2. Ib 3. II 4. III 5. IV 6. V 7. VI 8. Unknown	Assign an IUCN Category Information for Summary Templates	Retain and modify the title to 'Preliminary IUCN Category'.
20	Cls_Human	Degree of human intervention on the property.	1. None 2. Minimal 3. Moderate 4. High 5. Unknown		Do not use for final assessment of protected status and IUCN designation but retain if CA has another use for this attribute.
21	Cls_Access	Control of property access.	1. Access strictly controlled 2. Access partially controlled 3. Access uncontrolled 4. Unknown		Do not use for final assessment of protected status and IUCN designation but retain if CA has another use for this attribute.
22	Cls_Use	Dominant type of use.	1. Primarily research visits 2. Primarily low impact recreation 3. Vehicle-based recreation 4. Mix of natural areas, tourism, agriculture and forestry uses 5. Mix of natural areas, tourism, agriculture and forestry uses 6. Unknown		Do not use for final assessment of protected status and IUCN designation but retain if CA has another use for this attribute.
23	Cls_Rsrc	Management of natural resources on the property.	1. None 2. Minimal, traditional use 3. Small-scale, sustainable use 4. Moderate-large scale, sustainable use		Do not use for final assessment of protected status and IUCN designation but retain if CA has another use for this attribute.

			5. Unknown		
24	Cls_ Goal	Conservation is the primary objective for >75% of the property.	1. Primary objective 2. Multiple objectives, conservation equal priority 3. Other objectives dominate 4. Conservation not an objective 5. Unknown		Do not use for final assessment of protected status and IUCN designation but retain if CA has another use for this attribute.
25	Cls_Scope	Scope of conservation efforts/objectives from general biodiversity to a particular natural or cultural feature (e.g., waterfall, cliff, and/or cave).	1. Conservation of ecosystem biodiversity and genetic diversity 2. Conservation of limited groups or individual species and habitat 3. Conservation of a particular species or habitat 4. Conservation of a specific natural or cultural feature 5. Conservation of natural/scenic features and cultural values 6. Objectives not for conservation of elements of biodiversity 7. Unknown		Do not use for final assessment of protected status and IUCN designation but retain if CA has another use for this attribute.
26	Cls_Mndate	The owner or custodian's mandate on the property.	1. Conservation is sole mandate 2. Multiple mandates, conservation priority 3. Multiple competing mandates 4. No conservation mandate 5. Unknown	Information for Summary Templates	Do not use for final assessment of protected status and IUCN designation but retain if CA has another use for this attribute.
27	Cls_Auth	The owner or custodian's authority on the property.	1. Full/shared jurisdiction to control activities 2. Partial jurisdiction to control activity	Information for Summary Templates	Do not use for final assessment of protected status and IUCN designation but retain if CA has another use for this attribute.

			3. No jurisdiction to control activities 4. Unknown		
28	Cls_CCEA	Field to add CCEA classification.	1. GREEN (Left, greater potential effectiveness) 2. RED (Right, less potential effectiveness) 3. Unknown		Change the title to 'Interim Assessment of Protection' and use this attribute to record the results of short-term ad hoc analyses of available data and information. Replace GREEN – RED – Unknown with: 1. Protected Area (PA) 2. Other Effective Area-based Conservation Measures (OECM) 3. Area of Natural and/or Cultural Value (ANCV) 4. Not an ANCV.
29	Comments	Comments by original data source or CO staff during compilation for future reference.	Text description		Retain
30	(New) Site Designation	The CCEA uses a 'Designation' category in the screening template. Given the plethora of designations that have been developed over the years, this is a useful identifier for people working on various protected area management issues.	• Ramsar Sites • Biosphere Reserve • World Heritage Site • Important Bird Area (IBA) • Canadian Heritage River • Area of Natural and Scientific Interest (ANSI) • Provincially Significant Wetland (PSW)	Information for Summary Templates	Add
31	(New) Dedicated	As one of the nine management effectiveness attributes of a protected area or OECM used by the CCEA, 'Dedicated' connotes a measure of the strength of a management authority's com-	1. The management mechanism can be reversed only with great difficulty 2. The management mechanism can be reversed with moderate difficulty	Determine if it is an IUCN protected area or an OECM Information for Summary Templates	Add and use this attribute to complete a final assessment of the protection status

		mitment to protect an area, often through development and application of legislation and associated policy and regulations.	3. The management mechanism can be reversed without much difficulty		
32	(New) Geographical Space	The 'geographical space attribute reflects the definition used by the CCEA: "*The geographical space is clearly defined with agreed and demarcated borders*" (MacKinnon et al. 2015).	1. The geographical space is clearly defined with agreed and demarcated borders 2. The geographical space is intended to be clearly defined but may not be easily or widely recognizable 3. The geographical space is not clearly defined	Determine if it is an IUCN protected area or an OECM Information for Summary Templates	Add and use this attribute to complete a final assessment of the protection status
33	(New) Long-term Protection	Protected areas should be managed in perpetuity (CCEA 2008, Dudley 2008) and the CCEA uses a working definition focused on the expectation that conservation of areas included under Aichi Target 11 as protected areas and OECMs will continue in perpetuity (MacKinnon et al. 2015).	1. The management mechanism is intended to be in effect in perpetuity 2. The management mechanism is intended or expected to be in effect in indefinitely 3. The management mechanism is not intended or expected to be in effect for the long-term	Determine if it is an IUCN protected area or an OECM Information for Summary Templates	Add and use this attribute to complete a final assessment of the protection status
34	(New) Timing of Protection	Some areas are protected year-round while others are only protected for selected periods. The CCEA classification system requires that the management mechanism be in effect year-round in order for an area to qualify as protected (MacKinnon et al. 2015).	1. The management mechanism is in effect year-round 2. The management mechanism is not in effect year-round	Determine if it is an IUCN protected area or an OECM Information for Summary Templates	Add and use this attribute to complete a final assessment of the protection status
35	(New) Primacy of Nature Conservation Objective(s)	Conservation is the primary objective of managing a protected area or OECM.	1. Conservation of biodiversity is stated as the primary overriding objective	Determine if it is an IUCN protected area or an OECM Information for Summary Templates	Add and use this attribute to complete a final assessment of the protection status

			2. Based on allowable and prohibited activities and evident intent, conservation of biodiversity is the primary overriding objective 3. Based on allowable and prohibited activities and evident intent, conservation of biodiversity is an objective, and in cases of conflict among objectives, is given priority over other objectives 4. Conservation of biodiversity is either not an objective or, where it is an objective, it is not necessarily given priority in cases of conflict among objectives		
36	(New) Scope of Conservation Objectives	The CCEA's 'Scope of Conservation Objectives' attribute is designed to help practitioners assess the inclusiveness, breadth, and scale of the authority's management programs.	1. The objectives are for conservation of biodiversity as a whole, including ecosystems, species and genetic diversity 2. The objectives are for conservation of a subset of biodiversity or indigenous cultural values accomplished through the conservation of biodiversity as a whole 3. The objectives are for conservation of a subset of biodiversity, such as particular species or habitats, but not for biodiversity as a whole 4. The objectives are not for the conservation of any element of biodiversity	Determine if it is an IUCN protected area or an OECM Information for Summary Templates	Add and use this attribute to complete a final assessment of the protection status

37	(New) Effective Means-1	Effective Means-1 describes the power of the management authority to exclude, control, and manage all activities within the area that are likely to impact biodiversity (MacKinnon et al. 2015). This is normally completed under the auspices of legislation, policy, and regulations such as government statutes and formal policy statements by the owner, such as an NGO (see #40).	1. The management mechanism(s) has the power to exclude, control, and manage all activities within the area that are likely to have impacts on biodiversity 2. The management mechanism(s) has the power to exclude, control, and manage most activities within the area that are likely to have impacts on biodiversity 3. The management mechanism(s) does not have the power to exclude, control, and manage activities within the area that are likely to have impacts on biodiversity	Determine if it is an IUCN protected area or an OECM Information for Summary Templates	Add and use this attribute to complete a final assessment of the protection status
38	(New) Effective Means-2	Effective Means-2 compels the management authority to prohibit activities deemed incompatible with biodiversity conservation (MacKinnon et al. 2015). The language used by the CCEA (i.e., *"….compels the authority to prohibit…."*) is strong and direct. Often the boundaries of compatibility with natural assets such as biodiversity are prescribed in legislation, policy and regulation, and are useful guides in the protected area evaluation process (see Attribute #40).	1. The management mechanism(s) compels the authority to prohibit activities that are incompatible with the conservation of biodiversity 2. The management mechanism(s) does not compel the authority to prohibit activities incompatible with the conservation of biodiversity but the authority is excluding those activities 3. The management mechanism(s) does not compel the authority to prohibit activities incompatible with the conservation of biodiversity and incompatible activities are being allowed	Determine if it is an IUCN protected area or an OECM Information for Summary Templates	Add and use this attribute to complete a final assessment of the protection status

39	(New) Governance	'Governance' connotes a management regime with one or more measures strong enough to ensure effective conservation and remediation of any conservation gaps that might occur (MacKinnon et al. 2015).	1. All relevant governing authorities acknowledge and abide by the conservation objectives of the area 2. Most key, but not all, relevant governing authorities acknowledge and abide by the conservation objectives of the area 3. Few or no relevant governing authorities acknowledge and abide by the conservation objectives of the area	Determine if it is an IUCN protected area or an OECM Information for Summary Templates	Add and use this attribute to complete a final assessment of the protection status
40	(New) Outcome: Conservation Effectiveness	'Conservation Effectiveness' is determined through application of the CCEA screening tool. Protection status results from an evaluation of the nine CCEA prescriptive attributes (i.e., 'Dedicated' [#31], 'Geographical Space' [#32], 'Long-term Protection' [#33], 'Timing of Protection' [#34], 'Conservation of the Primary Objective' [#35], 'Conservation Objectives' [#36], 'Effective Means-1' [#37], 'Effective Means-2' [#38], and 'Governance' [#39]).	Protection status is identified as one of 'Protected Area', 'Other Effective Area-based Conservation Measures', 'Area of Natural and/or Cultural Value', or 'Not an Area of Natural and/or Cultural Value'	Information for Summary Templates	Add
41	(NEW) Subsurface Activity: Mechanism For Protection - Granting Rights	Effectiveness at preventing the granting of subsurface resource rights	Descriptive Text	Information for Summary Templates	Add
42	(NEW) Subsurface Effectiveness – Granting Rights	Effectiveness at preventing the granting of subsurface resource rights	• Green: Potential high level of effectiveness and low risk	Information for Summary Templates	Add

			to conservation values over time. • Yellow: Potential medium level of effectiveness; concern that improper implementation of the mechanism poses a risk to conservation values over time. • Red: Potential low level of effectiveness/or high level of risk to conservation values over time.		
43	(NEW) Subsurface Activity: Mechanism For Protection –Exercise of Rights	Effectiveness at preventing the exercise of subsurface resource rights	Descriptive Text	Information for Summary Templates	Add
44	(NEW) Subsurface Effectiveness – Exercise of Rights	Effectiveness at preventing he exercise of subsurface resource rights	• Green: Potential high level of effectiveness and low risk to conservation values over time. • Yellow: Potential medium level of effectiveness; concern that improper implementation of the mechanism poses a risk to conservation values over time. • Red: Potential low level of effectiveness/or high level of risk to conservation values over time.	Information for Summary Templates	Add
45	(NEW) Subsurface Activity: Mechanism For Protection – Impacts Prevented	Effectiveness at preventing impacts on conservation values	Descriptive Text	Information for Summary Templates	Add

46	(NEW) Subsurface Effectiveness – Preventing Impacts	Effectiveness at preventing impacts on conservation values	• Green: Potential high level of effectiveness and low risk to conservation values over time. • Yellow: Potential medium level of effectiveness; concern that improper implementation of the mechanism poses a risk to conservation values over time. • Red: Potential low level of effectiveness/or high level of risk to conservation values over time.	Information for Summary Templates	Add
47	(NEW) Existing Subsurface Resource Activities (If Applicable)	Description of current subsurface activities	This attribute allows the practitioner to create a statement about existing and/or historical subsurface resource activities and/or impacts.	Information for Summary Templates	Add
48	(NEW) Outcome: Interpretation of Subsurface Rights	Identify and rank the recommended interpretation of the outcome	• Best Practice • Minimum Standard • Minimum Standard with rationale • Below Minimum Standard But with Clear Evidence • Below Minimum Standard	Information for Summary Templates	Add
49	(NEW) Effectiveness for Protection from Subsurface Resource Activity	Effectiveness for protection from subsurface resource activity	• PAs or those areas within PAs that meet Best Practice or Minimum Standard <u>should be</u> reported to CARTS • PAs or those areas within PAs that are below Minimum Standard should <u>not be</u> reported to CARTS	Information for Summary Templates	Add

50	(New) 'Protection Status'	The protection status is determined through application of the CCEA screening tool. Protection status results from a combined evaluation of conservation effectiveness (attributes #31-40) and the interpretation of subsurface rights attributes #41-49. The nine prescriptive conservation effectiveness attributes are: 'Dedicated' (#31), 'Geographical Space' (#32), 'Long-term Protection' (#33), 'Timing of Protection' (#34), 'Primacy of Nature Conservation Objective(s)' (#35), 'Scope of Conservation Objectives' (#36), 'Effective Means-1' (#37), 'Effective Means-2' (#38), and 'Governance' (#39). The nine subsurface rights attributes are: 'Mechanism for Protection – Granting Rights' (#41), Subsurface Effectiveness – Granting Rights' (#42), 'Mechanism for Protection – Exercise of Rights' (#43), 'Subsurface Effectiveness – Exercise of Rights' (#44), 'Mechanism for Protection – Impacts Prevented' (#45), 'Subsurface Effectiveness – Preventing Impacts' (#46), and 'Existing Subsurface Resource Activities' (#47).	In concert with the visual diagnostic key (see Figure 4 in text), protection status is identified as one of 'Protected Area', 'Other Effective Area-based Conservation Measures', 'Area of Natural and/or Cultural Value', or 'Not an Area of Natural and/or Cultural Value'.	Information for Summary Templates	Add
51	(New) IUCN Designation	If the property qualifies as a protected area as a result of conservation effectiveness and effectiveness for protection from subsurface resource activity, the	IUCN categories are: 1. Ia 2. Ib 3. II 4. III	Information for Summary Templates	Add

		IUCN visual diagnostic key (see Figure 4 in the text) allows the practitioner to assign an IUCN designation based on his/her assessment of the IUCN category descriptions and indicators.	5. IV 6. V 7. VI 8. Unknown		
52	(New) Area of Natural and/or Cultural Values (ANCV) Assessment	An ANCV denotes a second tier of conserved and managed areas that do not qualify as protected areas or OECMs, yet contribute to the protection of the variety of natural and cultural assets encompassed by CA properties and surrounding areas.	The values tend to align across nine functions of CA properties (and there are undoubtedly more) that may merit some form of recognition and classification for their contribution to ecosystem health: 'Biodiversity', 'Geological', 'Recreation', 'Soil Management', 'Water Management', 'Forest Management', 'Spiritual', 'Cultural', 'Buffer Area', and 'Other' (see Figure 4 in the text)	Information for Summary Templates	Add
53	(New) Legal Basis /Mechanisms	Many aspects of protected area, OECM, and ANCV management (e.g., 'Governance', 'Effective Means', and 'Dedication') are completed under the auspices of legislation, policy, and regulations such as government statutes and formal policy statements by the owner, such as an NGO.	• Legislation • Regulation • Easement • Policy • Agreements • Strategies, Management Plans and Guidelines	Information for Summary Templates	
54	(New) Summary of Essential / Relevant Natural, Social, and Cultural Values Found on the Property	The Basic information form in the proposed CCEA screening tool contains an attribute that allows the practitioner to include a summary description of the property and its connection to the conservation of biodiversity and other natural/cultural features.	Usually derived from a literature review with cited references and personal communications	This is a useful attribute for practitioners who are required to generate summaries, dispatches, status updates, and policy briefings	Add

APPENDIX B: AN ASSESSMENT OF THE PROPOSED CLASSIFICATION SCHEME IN THE SPATIALWORKS (2014) REPORT TO MATCH A PROTECTED AREA TO AN IUCN CATEGORY

The 'Cls_IUCN' attribute (#19) in the Spatialworks (2014) database allows the user to assign an IUCN designation based on his/her assessment of the protected area using a number of prescriptive attributes (e.g., 'Cls_Human' [#20], 'Cls_Access' [#21], 'Cls_Use' [#22], 'Cls_Rsrc' [#23], and 'Cls_Scope' [#25]). Unfortunately, the attributes in the algorithm do not generate consistent and defensible recommendations about protected area status and IUCN classification (Table B1). It is suggested that the visual diagnostic key based on work of Dudley (2008) and others be used to identify the IUCN protected area category.

Table B1: An analysis of the criteria used in the proposed classification scheme in CA lands database to match a protected area to an IUCN category.

IUCN Category	Criteria Used in the Proposed Classification Scheme in the CA Land Database to Match a Protected Area to an IUCN Category				
	Human	Scope	Access	Use	Resource Use
Ia	None Minimal	Conservation of ecosystem biodiversity and genetic diversity	Access strictly controlled	Primarily research visits	None
Ib	None Minimal	Conservation of ecosystem biodiversity and genetic diversity	Access strictly controlled	Primarily low impact recreation	None
II	None Minimal	Conservation of ecosystem biodiversity and genetic diversity Conservation of limited groups or individual species and habitat	Access partially controlled	Primarily low impact recreation Vehicle-based recreation	None Minimal, traditional use
III	None Minimal Moderate High	Conservation of a specific natural or cultural feature	Access partially controlled	Primarily low impact recreation	None

			Access uncontrolled	Vehicle-based recreation	Minimal, traditional use
IV	Moderate High	Conservation of a particular species or habitat	Access partially controlled Access uncontrolled	Primarily low impact recreation Vehicle-based recreation	None Minimal, traditional use
V	Moderate High	Conservation of natural/scenic features and cultural values	Access uncontrolled	Mix of natural areas, tourism, agriculture and forestry	Small-scale, sustainable use
VI	Moderate High	Conservation of limited groups or individual species and habitat Conservation of natural/scenic features and cultural values	Access uncontrolled	Mix of natural areas, tourism, agriculture and forestry	Moderate-large scale, sustainable use
	Analysis				
	Human	Scope	Access	Use	Resource Use
	The categories are not well defined. They cannot be used without explicit boundaries, which have not been described and articulated. The current format forces the user to guess, which mitigates against consistent decision-making and defensibility.	The colour scheme is used incorrectly and should be turned off in the database. The language and descriptions used by Dudley (2008) are recommended.	These statements imply no access control in III, IV, V and VI category areas when that is not necessarily the case. There are examples of sites within these areas that can be managed with access control. For example, while provincial parks in the Niagara Biosphere Reserve qualify as Category II protected areas, the entire Biosphere Reserve has many attributes characteristic of a Category V protected area (Gray et al. 2009). Dudley (2008) explicitly references access control in only Ia and Ib.	The categories tend to work, but descriptions for IUCN categories V and VI need enhancement. These categories can be integrated into a suite of 5-6 succinct guiding questions to help the user identify the IUCN class to which the protected area can be assigned.	The categories are not well defined. The user will find it difficult to distinguish between minimal (traditional use), small-scale, moderate-scale and large-scale (sustainable use). This forces the user to guess, which mitigates against consistent decision-making and defensibility.

			Therefore, this category will not work as structured and defined. This forces the user to guess, which mitigates against consistent decision-making and defensibility.		

APPENDIX C: CCEA SCREENING TOOL TEMPLATE

Basic Information	
Name of Site	
Designation	
Province/Territory	
Date of Establishment/Securement	
Area (ha)	
Management Authority	
Governance Type	
Legal Basis/mechanism(s)	
Summary of Essential/Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity*

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OEABCM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Choose an item	
Scope of Conservation Objectives	Choose an item	
Primacy of Nature Conservation Objective(s)	Choose an item	
Governance	Choose an item	
Effective Means – 1	Choose an item	
Effective Means – 2	Choose an item	
Long Term	Choose an item	
Dedicated	Choose an item	
Timing	Choose an item	
Summary of Evaluation		

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OEABCM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS.* A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity			
	Evidence-based Rationale		
Mechanism for Protection	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Column A: Column B: Column C:		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented
	green	green	green
Evidence-based rationale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness*		
Existing subsurface resource activities (if applicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent*		
Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, minimum standard with rationale, below minimum standard but with clear evidence, below minimum standard*		

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OEABCM or n/a?	*If "other" please identify combination:*
Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)*
Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)*
IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: Outcome (change): Rationale:
Total Area to be reported to CARTS (ha)	*Only those sites, or portions of sites that meet a minimum reporting standard should be reported to CARTS*
Identify deficiencies that could be overcome in order to report to CARTS	

Appendix D: Conservation Authority Survey Form

Conservation Area (CA) Survey

Legal Basis – What is the legal basis for the CA? (Check as many as needed and cite the statute, policy and/or management plan)

☐ Legislation

☐ Policy

☐ Management Plans

Geographical Space – Is the area clearly defined with agreed and demarcated borders? (Check one)

☐ The geographical space is clearly defined with agreed and demarcated borders

☐ The geographical space is intended to be clearly defined, but may not be easily or widely recognizable

☐ The geographical space is not clearly defined

Sources:

Scope of Conservation Objectives: Are the CA objectives for the conservation of biodiversity as a whole (ecosystems, species and genetic diversity)? (Check one)

☐ The objectives are for conservation as a whole, including ecosystems, species and genetic diversity

☐ The objectives are for conservation or a subset of biodiversity or indigenous cultural values accomplished through conservation of biodiversity as a whole

☐ The objectives are for conservation or a subset of biodiversity, such as particular species or habitats, but not for biodiversity as a whole.

☐ The objectives are not for the conservation of any elements of biodiversity

Sources:

Primacy of Nature Conservation Objectives(s): Is conservation of biodiversity (ecosystems, species, and genetic diversity) explicitly stated as the primary objective? (Check one)

- ☐ Conservation of biodiversity is stated as the primary overriding objective
- ☐ Based on allowable and prohibited activities and evident intent, conservation of biodiversity is the primary overriding objective
- ☐ Based on allowable and prohibited activities and evident intent, conservation of biodiversity is an objective, and in cases of conflict among objectives, is given priority over other objectives primary overriding objective
- ☐ Conservation of biodiversity is either not an objective or, where it is an objective, is not necessarily given priority in cases of conflict among objectives

Sources:

Governance: Do all relevant governing authorities acknowledge and abide by the conservation objectives of the area? (Check one)

- ☐ All relevant governing authorities acknowledge and abide by the conservation objectives of the area
- ☐ Most key, but not all, relevant governing authorities acknowledge and abide by the conservation objectives of the area
- ☐ Few or no relevant governing authorities acknowledge and abide by the conservation objectives of the area

Sources:

Effective Means 1: Do the management mechanisms (i.e., statutes, policy, management plans) have the power to exclude, control and manage all activities within the area that are likely to have impacts on biodiversity? (Check one)

- ☐ The management mechanisms have the power to exclude, control and manage all activities within the area that are likely to have impacts on biodiversity
- ☐ The management mechanisms have the power to exclude, control and manage most activities within the area that are likely to have impacts on biodiversity
- ☐ The management mechanisms do not have the power to exclude, control and manage activities within the area that are likely to have impacts on biodiversity

Sources:

Effective Means - 2: Do the management mechanisms (i.e., statutes, policy, management plans) compel the authority to prohibit activities that are incompatible with the conservation of biodiversity? (Check one)

- ☐ The management mechanisms compel the authority to prohibit activities that are incompatible with the conservation of biodiversity
- ☐ The management mechanisms do not compel the authority to prohibit activities that are incompatible with the conservation of biodiversity, but the authority is excluding those activities
- ☐ The management mechanisms do not compel the authority to prohibit activities that are incompatible with the conservation of biodiversity, and incompatible activities are being allowed

Sources:

Long Term - Are the management mechanisms intended to be in effect in perpetuity? (Check one)

- ☐ The management mechanism is intended to be in effect in perpetuity
- ☐ The management mechanism is intended or expected to be in effect in indefinitely
- ☐ The management mechanism is not intended or expected to be in effect for the long-term

Sources:

Dedicated – How difficult is it to reverse or remove protection of the site? (Check one)

- ☐ The management mechanisms can be reversed only with great difficulty because a reversal requires….
- ☐ The management mechanisms can be reversed with moderate difficulty because a reversal requires….
- ☐ The management mechanisms can be reversed without much difficulty because a reversal requires….

Sources:

Timing - Is the management mechanism in effect year-round? (Check one)

- ☐ The management mechanism is in effect year-round.
- ☐ The management mechanism is not in effect year-round.

Sources:

Subsurface Rights - Are subsurface rights an issue? (Check one)

☐ No because….

☐ Yes because….

Sources:

Do you have any comments or suggestions?

Thank you for completing this survey!

APPENDIX E: PROTECTED AREA EVALUATIONS OF SELECTED CONSERVATION AUTHORITY PROPERTIES

An important aspect of this project involved the creation of case studies to help practitioners gain experience in the application of the CCEA protected area screening tool and use of the IUCN protected area diagnostic key. These case studies helped CAs to describe the potential role of selected properties in meeting Aichi targets and to explore opportunities to recognize the contribution of other Areas of Natural and/or Culture Value to biodiversity conservation and overall ecosystem health. As learning tools, the case studies helped participants at the Barrie workshop engage in an informed discussion about the strengths and weaknesses of these decision tools and potential opportunities for CAs to identify and to recognize properties as Protected Areas (PAs), Other Effective Area-based Conservation Measures (OECMs), or Areas of Natural and/or Cultural Value (ANCVs). Given that the CCEA screening tool is evolving, the case studies included in this Appendix likely will need to be modified by CAs as additional information is gathered and applied to finalize the categorization of areas. Accordingly, it is recommended that readers and practitioners interested in using these examples as case studies contact the appropriate Conservation Authority for any updates and/or changes in protection status and IUCN designation that has been assigned to the examples in this report.

Altona Forest

DRAFT ONLY – JUNE 2017 – CONTACT THE TORONTO AND REGION CONSERVATION AUTHORITY TO CHECK FOR CHANGES

Basic Information	
Name of Site	Altona Forest
Designation	Conservation Area
Province/Territory	Ontario
Date of Establishment/ Securement	1991
Area (ha)	53
Management Authority	Toronto and Region Conservation Authority (TRCA)
Governance Type	Government – Subnational
Legal Basis/mechanism(s)	**Legislation:** Clean Water Act Conservation Authorities Act Endangered Species Act Environmental Assessment Act Environmental Bill of Rights Fish and Wildlife Conservation Act Public Lands Act Planning Act Species At Risk Act Trespass to Property Act **Plans:** Altona Forest Environmental Management Plan (Metropolitan Toronto and Region Conservation Authority 1996) Petticoat Creek Watershed Action Plan (Toronto and Region Conservation Authority and Rouge Park 2012)
Summary of Essential/ Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity* The Altona Forest contributes to the bioregion's greenspace network and is connected to the environmentally protected Rouge-Duffins Wildlife Corridor on the north. The Forest also replenishes groundwater storage areas and reduces the potential for damaging floods downstream. The Altona Forest is located on the boundary between the Carolinian and Great Lakes – St. Lawrence forest regions. The Forest provides habitat for more than 130 species of wild flowers, 100 birds, 14 mammals, and 10 reptiles. There are 35 vegetation communities. The Murray J. Speirs Ecological Reserve is located in the southern part of the Altona Forest and is managed to protect flora and fauna. The only permitted use is for research purposes by universities and naturalists (TRCA 2011, n.d.).

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OECM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Green	The geographical space is defined by the Conservation Authority. All CA properties acquired in fee simple have a metes and bounds survey with registered boundaries on title.
Scope of Conservation Objectives	Green	The objectives are for conservation as a whole, including ecosystems, species and genetic diversity. The management plan is designed to ensure the long-term protection of the ecological integrity of the Altona Forest (TRCA n.d.).
Primacy of Nature Conservation Objective(s)	Yellow	Based on allowable and prohibited activities and evident intent, conservation of biodiversity is an objective, and in cases of conflict among objectives, is given priority over other objectives.
Governance	Green	The Conservation Authority acknowledges and abides by the conservation objectives for the area. In 1998, the Altona Forest Stewardship Committee was formed to work with the TRCA on the restoration and improvement of the forest environment to date. The Stewardship Committee and its partners have been honoured with a number of awards from the City of Pickering, Region of Durham, and TRCA for its work in the Altona Forest (TRCA 2011).
Effective Means – 1	Yellow	The management mechanisms have the power to exclude, control and manage most activities within the area that are likely to have impacts on biodiversity. Management mechanisms include the Conservation Authorities Act, the Planning Act, the Endangered Species Act and other statutes provide the power to control activities that are likely to impact natural heritage (e.g., biodiversity) and other assets. There is always potential for the municipality or other major service provider (e.g., gas and hydro) to acquire land within the property for their servicing needs, and such acquisitions could impact biodiversity. Through the TRCA and other policies and permitting requirements, impacts to biodiversity would be minimized.
Effective Means – 2	Green	The management mechanisms compel the authority to prohibit activities that are incompatible with the conservation of biodiversity. The Environmental Management Plan outlines acceptable recreational uses which include passive and non-intrusive outdoor activities that are compatible with the natural environment. Such activities include hiking, bird watching, wildlife photography, and interpretive walks. The activities do not include mountain biking, camping, the operation of motorized vehicles of any kind, or the destruction or picking or cutting of any plants including flowers and trees (TRCA n.d.).
Long Term	Green	The management mechanism is intended to be in effect in perpetuity. The term of the management plan is 1995-2004, but continues to apply in the absence of an updated property management plan.
Dedicated	Yellow	The management mechanisms can be reversed with moderate difficulty because a reversal requires an updated management plan.
Timing	Green	The management mechanism is in effect year-round.
Summary of Evaluation	Green 6 of 9 criteria Yellow 3 of 9 criteria	

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OECM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS.* A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity			
	Evidence-based Rationale		
Mechanism for Protection	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Column A: No minerals, and gravel is part of the property Column B: No minerals, and gravel is part of the property Column C: No minerals, and gravel is part of the property		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented
	green	green	green
Evidence-based rationale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness*		
Existing subsurface resource activities (if applicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent* None		
Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, minimum standard with rationale, below minimum standard but with clear evidence, below minimum standard* Best Practice		

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OEABCM or n/a?	Protected Area *If "other" please identify combination:*
Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)* 7 of 9 Green and 3 of 9 Yellow - Report to CARTS as a candidate protected area
Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)* Best Practice

IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: not reported Outcome (change): Category IV Rationale: Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category. Other objectives include: • To protect vegetation patterns or other biological features through traditional management approaches. • To protect fragments of habitats as components of landscape or seascape-scale conservation strategies. • To develop public education and appreciation of the species and/or habitats concerned. • To provide a means by which the urban residents may obtain regular contact with nature (Dudley 2008).
Total Area to be reported to CARTS (ha)	*Only those sites, or portions of sites that meet a minimum reporting standard should be reported to CARTS* 53 ha
Identify deficiencies that could be overcome in order to report to CARTS	The 'Dedication' mechanism could be strengthened.

Literature Cited:

Dudley, N. (Editor). 2008. Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN. x + 86p. WITH S. Stolton, P. Shadie, and N. Dudley. 2013. IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No. 21, IUCN, Gland, Switzerland.

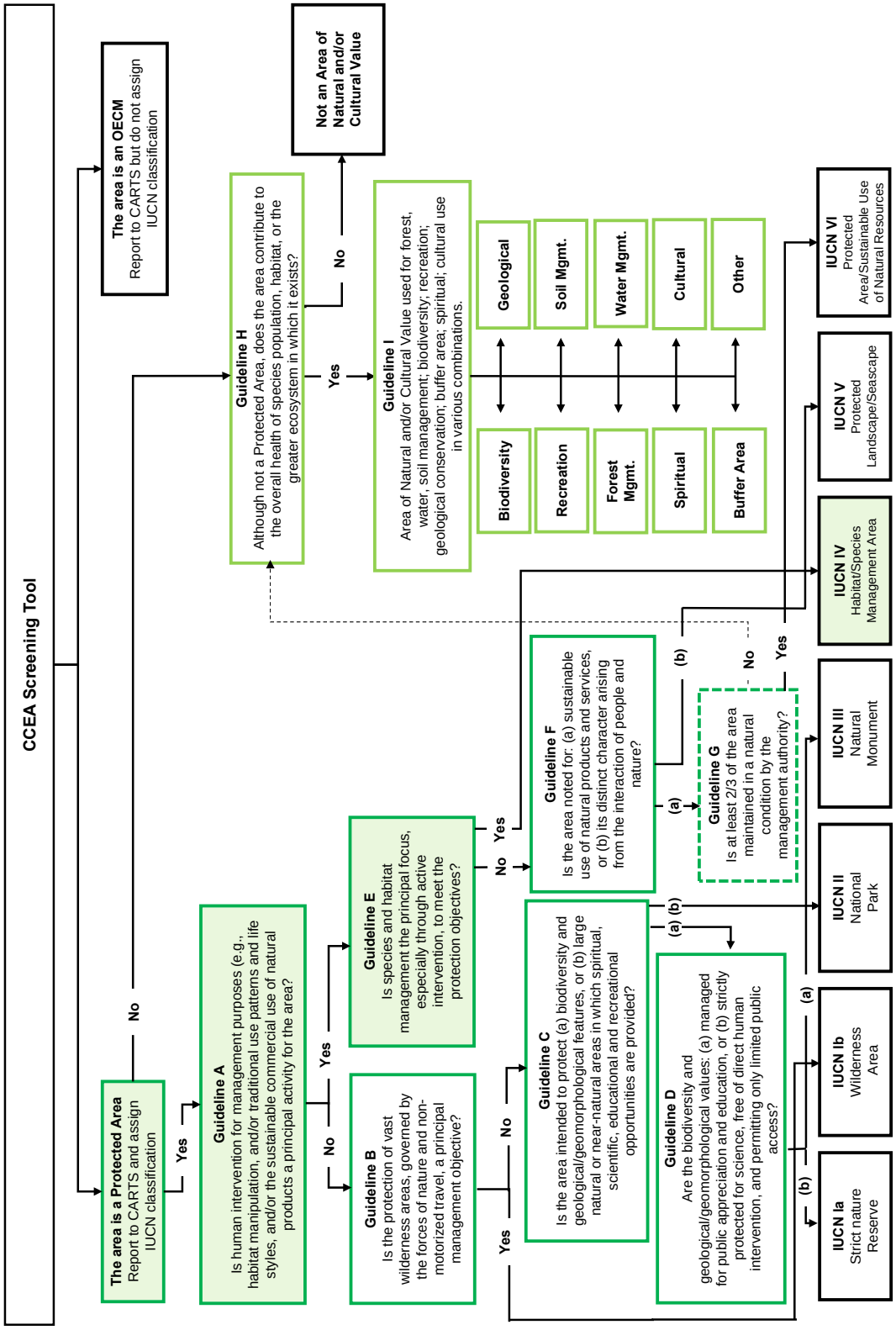
MTRCA (Metropolitan Toronto and Region Conservation Authority). 1996. Altona Forest Environmental Management Plan.

Toronto and Region Conservation Authority and Rouge Park. 2012. Petticoat Creek Watershed Action Plan.

TRCA (Toronto and Region Conservation Authority). No Date. Altona Forest. Accessed on 18 February 2016. Available online at: http://www.trca.on.ca/enjoy/locations/altona-forest.dot

TRCA (Toronto and Region Conservation Authority). 2011. Altona Forest Trail Guide and Map. Accessed on 18 February 2016. Available online at: http://www.altonaforest.org/documents/1674-Altona-trail_guide_2011-v8.pdf

IUCN Diagnostic Key for the Altona Forest



Calton Swamp Wildlife Management Area

DRAFT ONLY – JUNE 2017 – CONTACT THE CATFISH CREEK CONSERVATION AUTHORITY TO CHECK FOR CHANGES

Basic Information	
Name of Site	Calton Swamp Wildlife Management Area
Designation	Conservation Area and Wildlife Management Area
Province/Territory	Ontario
Date of Establishment/ Securement	1972-2005
Area (ha)	The 84 ha Calton Swamp Wildlife Management Area is owned by the Ministry of Natural Resources and Forestry (MNRF) (41 ha) and the Catfish Creek Conservation Authority (CCCA) (43 ha) (Carolinian Canada n.d.).
Management Authority	Catfish Creek Conservation Authority (CCCA)
Governance Type	Government – Subnational
Legal Basis/mechanism(s)	**Legislation**: Clean Water Act Conservation Authorities Act Endangered Species Act Environmental Assessment Act Environmental Bill of Rights Fish and Wildlife Conservation Act Public Lands Act Planning Act Species At Risk Act Trespass to Property Act **Plans**: Management Plan – Calton Swamp Wildlife Management Area (contact the CA for more information) (Also see MNR 2006a for management issues and options)

Summary of Essential/ Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity* The mix of wetland, deciduous forest, and coniferous plantation provides habitat for a diverse mix of plant and wildlife species. Amphibians and reptiles include leopard frogs, spring peepers, gray treefrogs, green frogs, painted turtles, and snapping turtles (MNR 2006b). Bird species include the Alder Flycatcher, Virginia Rail, Pileated Woodpecker, Wild Turkey, Ruffed Grouse, and a number of waterfowl species (MNR 2006b). Mammals include the White-tailed Deer, Raccoon, Striped Skunk, Muskrat, Red Fox, Red Squirrel, eastern Gray Squirrel, Eastern Chipmunk, Mink, Long-tailed Weasel, and Beaver (MNR 2006b). The area provides habitat for nationally and provincially rare and endangered plant species, including Slender Sedge, Puttyroot, and Virginia Creeper. There is one nationally endangered species (Whorled Pagonia), 15 rare species (e.g., Black Gum, Chestnut, Virginia Creeper, Slender Sedge and Puttyroot), and 96 species identified as being of significant representation of several floristic zones (MNR 2006b, Environment Canada 2011, Naturally Elgin 2012, Carolinian Canada n.d.). The main trail is used by hikers and bird watchers. School groups spend time learning about wetland ecosystems. The area is one of Ontario's Provincial Wildlife Management Areas created by the Ministry of Natural Resources to increase wildlife-related day-use experiences in southern Ontario. During hunting season small game and waterfowl hunting is permitted. The water levels are managed by a water control structure installed by Ducks Unlimited Canada. The Wildlife Management Area provides a variety of outdoor recreation opportunities. Since 1997, the property has been co-managed by the Elgin Stewardship Council and the Ministry of Natural Resources and Forestry (MNRF) (Lake Erie Source Protection Region Technical Team 2008, Naturally Elgin 2012).

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OECM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Green	The geographical space is defined by the Conservation Authority. All CA properties acquired in fee simple have a metes and bounds survey with registered boundaries on title.
Scope of Conservation Objectives	Green	The objectives are for conservation as a whole, including ecosystems, species, and genetic diversity. The properties are managed to conserve the wetland and forest, provide habitat for priority species, and to support seasonal use including hunting, hiking, research, environmental education, and nature appreciation (Carolinian Canada, n.d.).
Primacy of Nature Conservation Objective(s)	Green	Conservation of biodiversity is stated as the primary overriding objective.

Governance	Green	All relevant governing authorities acknowledge and abide by the same conservation objectives for the area. The site is managed under the auspices of an Operations Plan between the MNRF and CCCA. Other partners involved in on-site management activities include Duck Unlimited Canada and the Elgin Stewardship Council. The CA works closely with the MNRF to ensure that the site objectives are recognized (Carolinian Canada n.d.).
Effective Means – 1	Green	The management mechanisms have the power to exclude control and manage all activities within the area that are likely to have impacts on biodiversity. Management mechanisms include the Conservation Authorities Act, the Planning Act, the Endangered Species Act, and other statutes provide the power to control activities that are likely to impact natural heritage (e.g., biodiversity) and other assets.
Effective Means – 2	Green	The management mechanisms compel the authority to prohibit activities that are incompatible with the conservation of biodiversity. Prohibited activities include: • No motorized vehicles are permitted and all pets must be leashed securely (owners must clean up after their pets). • All users must stay on designated trails and have due regard for other visitors. • No camping, fires, or littering is permitted. • No person shall cut, remove, injure, or destroy a plant, tree, shrub, flower, or habitat. • No person shall carry out any research project except under a permit issued by the Authority. In addition, Conservation Areas Regulations, Section 29, Regulation 100 under the Conservation Authorities Act also applies (CCCA n.d.).
Long Term	Yellow	The management mechanism is intended or expected to be in effect indefinitely.
Dedicated	Green	The management mechanisms can be reversed only with great difficulty because reversal requires approval from the province of Ontario, approval through the Conservation Authorities Act and approval under the auspices of partnership agreements with Ducks Unlimited and the Nature Conservancy of Canada.
Timing	Green	The management mechanism is in effect year-round.
Summary of Evaluation	8 Green of 9 criteria 1 Yellow of 9 criteria	

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OECM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS.* A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity			
	Evidence-based Rationale		
Mechanism for Protection	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Column A: Not aware of any subsurface rights registered against the property. Column B: Not aware of any subsurface rights registered against the property. Column C: Not aware of any subsurface rights registered against the property.		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented
	green	green	green
Evidence-based rationale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness*		
Existing subsurface resource activities (if applicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent* None		
Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, minimum standard with rationale, below minimum standard but with clear evidence, below minimum standard* Best Practice		

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OECM or n/a?	Protected Area *If "other" please identify combination:*
Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)* 8 of 9 Green and 1 of 9 Yellow – Report to CARTS as a candidate protected area
Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)* Best Practice

IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: not reported Outcome (change): Category IV Rationale: Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category. Other objectives include: • To protect vegetation patterns or other biological features through traditional management approaches. • To protect fragments of habitats as components of landscape or seascape-scale conservation strategies. • To develop public education and appreciation of the species and/or habitats concerned. • To provide a means by which the urban residents may obtain regular contact with nature (Dudley 2008).
Total Area to be reported to CARTS (ha)	84 ha
Identify deficiencies that could be overcome in order to report to CARTS	The long-term commitment requires a change from 'indefinite' to 'in perpetuity'.

Literature Cited:

Carolinian Canada. No Date. Calton Swamp Wildlife Management Area/Calton Swamp Wetland Complex. Accessed on 16 February 2016. Available online at: https://caroliniancanada.ca/calton-swamp-wildlife-management-area-calton-swamp-wetland-complex

CCCA (Catfish Creek Conservation Authority). No Date. Available online at: http://www.catfishcreek.ca/conservation_rules

Dudley, N. (Editor). 2008. Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN. x + 86p. WITH S. Stolton, P. Shadie, and N. Dudley. 2013. IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No. 21, IUCN, Gland, Switzerland.

Environment Canada. 2011. Action Plan for the Small Whorled Pogonia (*Igotria medeoloides*) in Canada. Species At Risk Act Action Plan Series. Environment Canada. 10p.

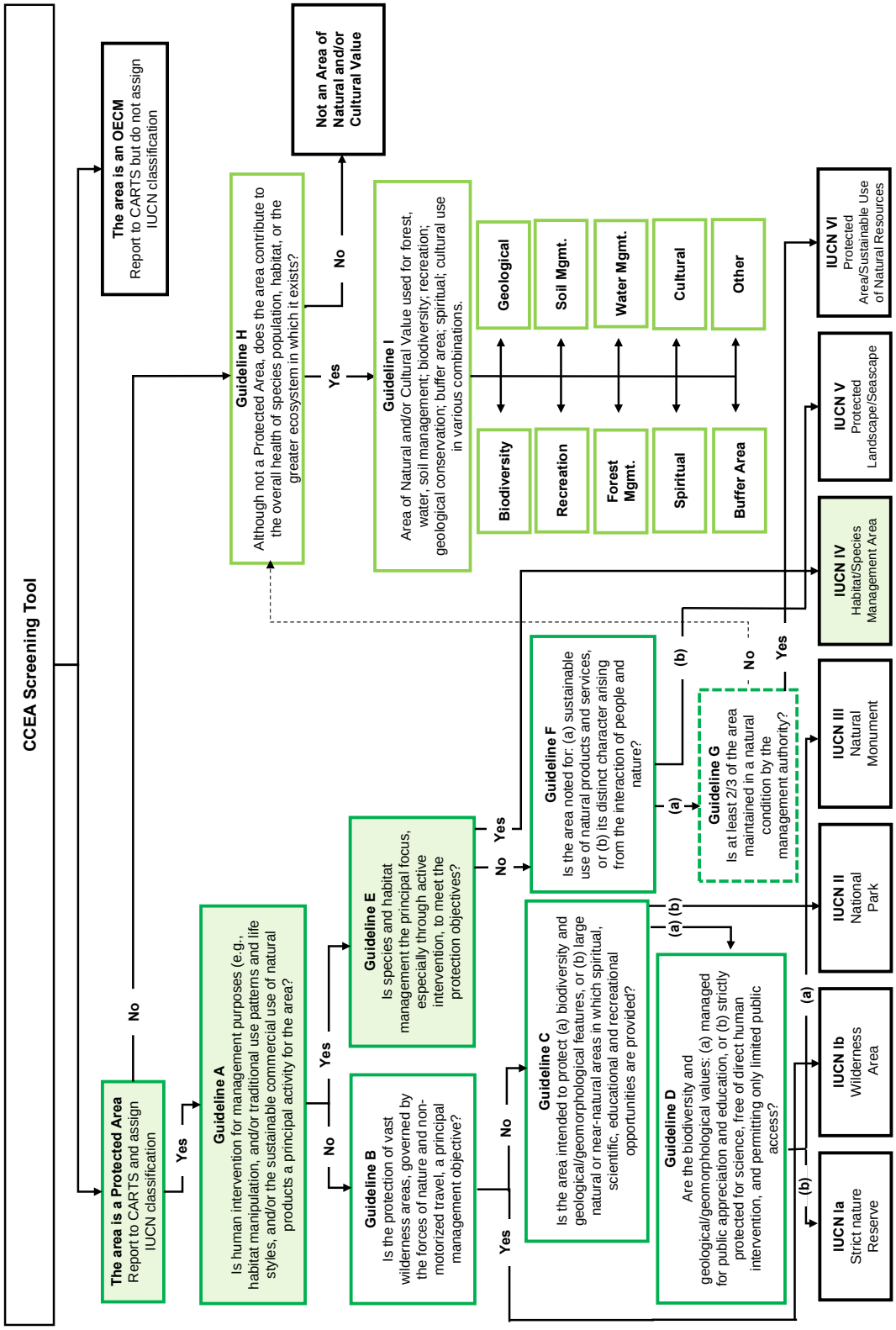
Lake Erie Source Protection Region Technical Team. 2008. Catfish Creek Watershed Characterization Report. Draft. Version 2.0. Catfish Creek Conservation Authority. 99p.

MNR. 2006a. Aylmer, Fingal and Calton Swamp Wildlife Management Issues and Options. Queen's Printer for Ontario. 27p.

MNR. 2006b. Aylmer, Fingal and Calton Swamp Wildlife Management Areas: Background Report. Queen's Printer for Ontario. 45p.

Naturally Elgin. 2012. Available online at: http://www.naturallyelgin.com/natural-areas/calton-swamp-wetland-complex/

IUCN Diagnostic Key for the Calton Swamp Wildlife Management Area



East Duffins Headwaters

DRAFT ONLY – JUNE 2017 – CONTACT THE TORONTO AND REGION CONSERVATION AUTHORITY TO CHECK FOR CHANGES

Basic Information	
Name of Site	East Duffins Headwaters
Designation	Conservation Area
Province/Territory	Ontario
Date of Establishment/ Securement	
Area (ha)	1,460
Management Authority	Toronto and Region Conservation Authority (TRCA)
Governance Type	Government – Subnational
Legal Basis/mechanism(s)	**Legislation:** Clean Water Act Conservation Authorities Act Endangered Species Act Environmental Assessment Act Environmental Bill of Rights Fish and Wildlife Conservation Act Oak Ridges Moraine Conservation Act Public Lands Act Planning Act Species At Risk Act Trespass to Property Act **Policy:** Oak Ridges Moraine Conservation Plan O. Reg 140/02 **Plans:** Greenbelt Plan (MMA 2017) Duffins Creek Headwaters Management Plan for TRCA properties (The Duffins Creek Headwaters Advisory Committee and TRCA 2003) East Duffins Management Plan Update (EDHPSC and EDHPAC 2013) A Watershed Plan for Duffins Creek and Carruthers Creek (Duffins Creek and Carruthers Creek Watershed Task Forces and Toronto and Region Conservation Authority 2003)
Summary of Essential/ Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity* The East Duffins Headwaters (EDH) CA is comprised of a group of conservation lands in the Region of Durham. All properties in the EDH are located within the Oak Ridges Moraine and make up valuable parts of the headwaters of the Duffins Creek, Lynde Creek, Pefferlaw River, and Lake Scugog Watersheds. The property intersects with major sections of both the Uxbridge Kames Environmentally Sensitive Area and the provincially designated Uxbridge Glen Major Forest Area of Natural and Scientific Interest. The area is home to several regional species of concern and Ontario species at risk (EDHPSC and EDHPAC 2013).

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OECM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Green	The geographical space is defined by the Conservation Authority. All CA properties acquired in fee simple have a metes and bounds survey with registered boundaries on title.
Scope of Conservation Objectives	Green	The objectives are for conservation as a whole, including ecosystems, species, and genetic diversity. As part of the TRCA's vision for *The Living City* (TRCA 2014a), the EDH properties are managed to achieve biodiversity protection, enhancement, and management on a provincially significant landform while providing for sustainable, healthy and enjoyable public experiences. This vision is being achieved by managing and caring for the lands and waters that value: • An environment first approach. • Protection and enhancement of integrated ecosystems, habitats, and biodiversity. • Large continuous and connected areas of core Oak Ridges Moraine lands. • Community engagement and participation that fosters trust, respect, and consensus. • Public and private land stewardship efforts, which improve the entire natural system and environmental function. • Lifelong educational opportunities and experiences about nature and culture. • Sustainable, safe, and appropriate public uses. • Scientific innovations and a commitment to work together to improve conservation. • The protection of native species and biodiversity against the threat of invasive non-native species. • A property which is safe and secure. The goal is to protect, enhance, and steward the EDH properties to achieve watershed integrity and biodiversity in an engaged community, ensuring overall sustainability and public enjoyment (EDHPSC and EDHPAC 2013).
Primacy of Nature Conservation Objective(s)	Yellow	Based on allowable and prohibited activities, and evident intent, conservation of biodiversity is an objective, and in cases of conflict among objectives, is given priority over other objectives. The objectives for the EDH are to: • Protect existing key natural heritage features and restore the natural ecosystem by ensuring the integrity and diversity of native species,

		habitats, landscapes, hydrological integrity, and ecological processes. • Ensure the connection of natural heritage features to one another and to adjacent areas. • Identify and, where appropriate, protect the cultural heritage features for their inherent value and depiction of the long-term human use and occupancy of the area. • Ensure protection of the ecological integrity and cultural values of the land through innovative planning, an increase in protected lands, management and appropriate conservation, recreation, and other land uses. • Encourage knowledge and understanding of the natural and cultural values of the land and water, their protection and management requirements, as well as their significance, sensitivities, and interrelationships. • Encourage and facilitate the ongoing public involvement towards a partnership that will foster sustainable living, and will accomplish watershed management objectives, as well as implement Management Plan recommendations. • Provide opportunities for appropriate and accessible public uses, which are consistent with all other objectives and public enjoyment (EDHPSC and EDHPAC 2013).
Governance	Green	All relevant governing authorities acknowledge and abide by the same conservation objectives for the area.
Effective Means – 1	Yellow	The management mechanisms have the power to exclude, control, and manage most activities within the area that are likely to have impacts on biodiversity. There is always potential for the municipality or other major service provider (e.g., gas and hydro) to acquire land within the property for their servicing needs, and such acquisitions could impact biodiversity. Through the TRCA and other policies and permitting requirements, impacts to biodiversity would be minimized. Management mechanisms include the Conservation Authorities Act, the Planning Act, the Endangered Species Act and other statutes that provide the power to control activities that are likely to impact natural heritage (e.g., biodiversity) and other assets.
Effective Means – 2	Green	The management mechanisms compel the authority to prohibit activities that are incompatible with the conservation of biodiversity. The EDH property is divided into nine management zones that identify where ecological features must be protected, where public use and trails will be permitted, or where restoration efforts will be focused. The zones are distinguished by their different levels of ecological protection, management, need, and acceptable levels and types of public use: • Nature Reserve Category - 1: Areas with significant or unique natural features, landforms, species, or habitats that require careful management to ensure long-term protection. Use intensity is low and public access is restricted. • Nature Reserve Category – 2: 20m area surrounding authorized corridor and boundary trails. Intended to act as transition areas to buffer public impact on Natural Reserve and Environment zones. Use intensity is low and public access is limited to trail use only. • Natural Environment Category – 1: Large core habitat areas and corridors that are natural in character but do not meet the criteria of the natural reserve zone. Category 1 Natural Environment areas

		have a trail density threshold of <120m/ha. Use intensity is none to low and public access is restricted to trail use only. • Natural Environment Category – 2: Large core habitat areas and corridors that are "natural" in character but do not meet the criteria of the natural reserve zone. Category 2 Natural Environment areas may have a trail density threshold of > 120m/ha. Use intensity is none to low intensity and public access is restricted to trail use only. • Cultural Heritage Preserve: Areas of cultural heritage significance. Intended to act as an area to protect and highlight the cultural heritage resources of the management zone. Use intensity is none to low intensity and public access is restricted. • Restoration: Locations identified as priority sites for potential forest management and habitat improvement projects to take place. Use intensity is none to low intensity, and public access is determined by the zone upon which the restoration designations is superimposed. • Lease – Residential: Areas containing a residential dwelling leased by the TRCA. Associated with normal residential activities and public access is restricted. • Lease – Agricultural: Areas containing existing agricultural leases. Moderate to high intensity uses associated with normal agricultural land uses. Public access is restricted. • Public Use: Includes large access points and parking lots. Use intensity is moderate to high (EDHPSC and EDHPAC 2013).
Long Term	Green	The management mechanism is intended to be in effect in perpetuity. Conservation Authority ownership is intended to be in perpetuity. Conservation easements are registered on title.
Dedicated	Yellow	The management mechanisms can be reversed with moderate difficulty because a reversal requires an updated management plan, and permission from the Government of Ontario (Ministry of Natural Resources and Forestry) to dispose of the property.
Timing	Green	The management mechanism is in effect year-round.
Summary of Evaluation	6 Green of 9 criteria 3 Yellow of 9 criteria	

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OECM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS.* A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity			
	Evidence-based Rationale		
Mechanism for Protection	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Column A: No minerals, and gravel is part of the property Column B: No minerals, and gravel is part of the property Column C: No minerals, and gravel is part of the property		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented

	green	green	green
Evidence-based rationale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness* No minerals in area, and any gravel deposits are part of the property.		
Existing subsurface resource activities (if applicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent* None		
Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, minimum standard with rationale, below minimum standard but with clear evidence, below minimum standard* Best Practice		

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OEABCM or n/a?	Protected Area *If "other" please identify combination:*
Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)* 6 of 9 Green and 3 of 9 Yellow - Report to CARTS as a candidate protected area
Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)* Best Practice
IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: not reported Outcome (change): Category IV Rationale: Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category. Other objectives include: • To protect vegetation patterns or other biological features through traditional management approaches. • To protect fragments of habitats as components of landscape or seascape-scale conservation strategies. • To develop public education and appreciation of the species and/or habitats concerned.

	• To provide a means by which the urban residents may obtain regular contact with nature (Dudley 2008).
Total Area to be reported to CARTS (ha)	*Only those sites, or portions of sites that meet a minimum reporting standard should be reported to CARTS* 1,460 ha
Identify deficiencies that could be overcome in order to report to CARTS	Dedication mechanism could be strengthened.

Literature Cited:

Dudley, N. (Editor). 2008. Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN. x + 86p. WITH S. Stolton, P. Shadie, and N. Dudley. 2013. IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No. 21, IUCN, Gland, Switzerland.

Duffins Creek Headwaters Advisory Committee and the Toronto and Region Conservation Authority. 2003. Duffins Creek Headwaters Management Plan for TRCA Properties.

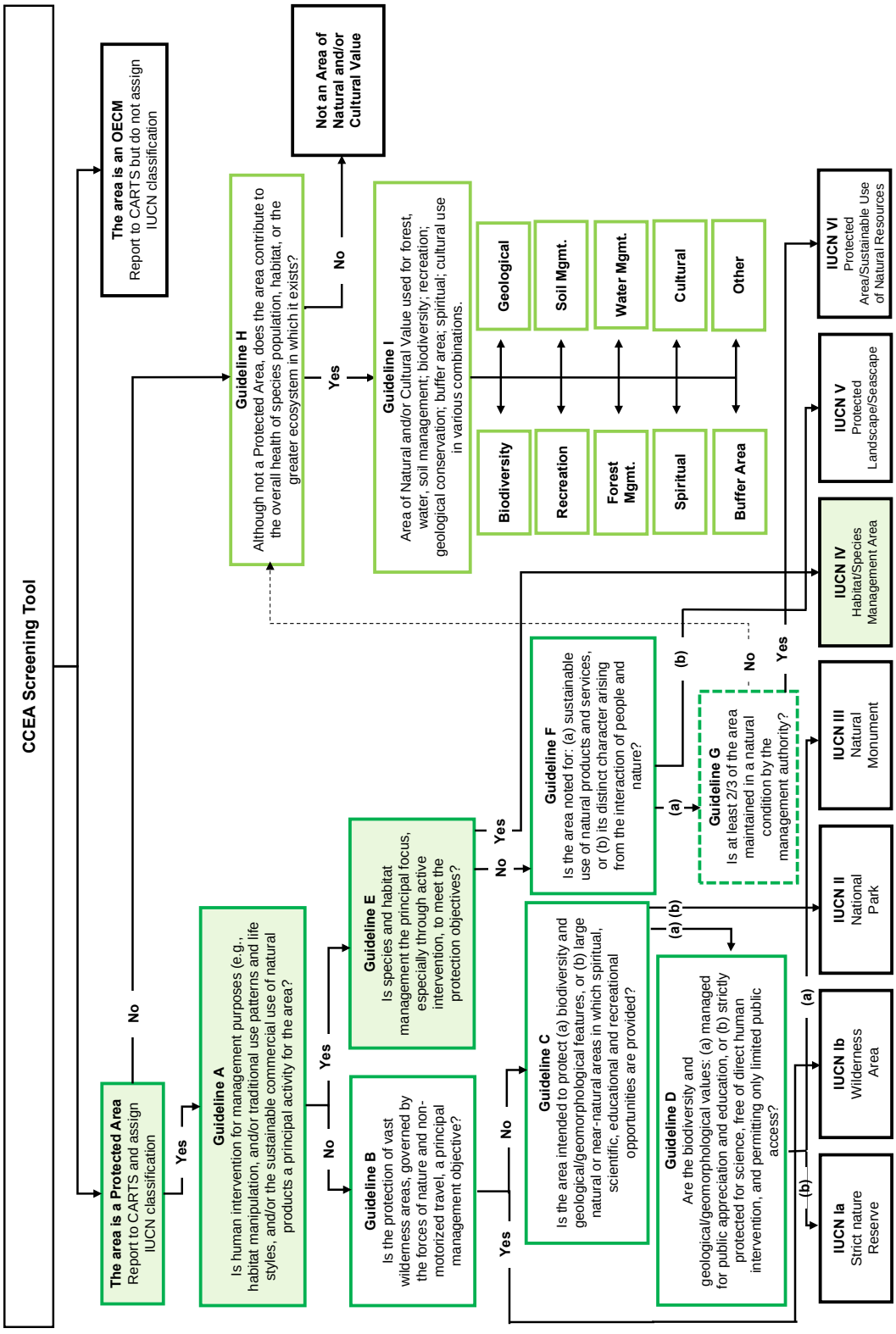
Duffins Creek and Carruthers Creek Watershed Task Forces and the Toronto and Region Conservation Authority. 2003. A Watershed Plan for Duffins Creek and Carruthers Creek.

EDHPSC (East Duffins Headwaters Project Steering Committee) and the EDHPAC (East Duffins Headwaters Public Advisory Committee). 2013. East Duffins Headwaters Management Plan Update (DRAFT). Toronto and Region Conservation Authority. Accessed on 17 February 2016. Available online at: http://www.trca.on.ca/dotAsset/156181.pdf

MMA (Ministry of Municipal Affairs). 2017. The Greenbelt Plan (2017). Ministry of Municipal Affairs, Queen's Printer for Ontario. 76p.

TRCA (Toronto and Region Conservation Authority). 2104a. The Living City: Policies for Planning and Development in the Watersheds of the Toronto and Region Conservation Authority, Toronto, Ontario. 172p + Appendices.

IUCN Diagnostic Key for the East Duffins Headwaters



Eugenia Falls Conservation Area

DRAFT ONLY – JUNE 2017 – CONTACT THE GREY SAUBLE CONSERVATION AUTHORITY TO CHECK FOR CHANGES

Basic Information	
Name of Site	Eugenia Falls
Designation	Conservation Area
Province/Territory	Ontario
Date of Establishment/ Securement	
Area (ha)	26
Management Authority	Grey Sauble Conservation Authority (GSCA)
Governance Type	Government – Subnational
Legal Basis/mechanism(s)	**Legislation:** Clean Water Act Conservation Authorities Act Endangered Species Act Environmental Assessment Act Environmental Bill of Rights Fish and Wildlife Conservation Act Public Lands Act Planning Act Species At Risk Act Trespass to Property Act **Policy:** Niagara Parks and Open Space System (MNRF 2017) **Plans:** Eugenia Falls Master Plan (contact the CA for more information)
Summary of Essential/ Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity* The tallest waterfall in the area descends from the edge of the Niagara Escarpment 30 metres to the bottom of Beaver Valley. This was discovered in 1852 during a "Fools Gold" rush. By 1905, five mills and a small private electric plant had been established. The property was later chosen for the second hydroelectric plant in Ontario. In 1915, Ontario Hydro moved the plant to the north and created Lake Eugenia, allowing more control over the water levels. The waterfall was called Eugenia following a suggestion from former soldiers of the French Army (Crimean War) working with Charles Rankin surveying the former Artemesia Township. They suggested that the waterfall be named after Princess Eugenie, wife of Napoleon III. The Conservation Area lies within a large Provincially Significant Life Science ANSI (Upper Beaver Valley). Uses include cross-country skiing, hiking, picnicking, and viewing (MNRF 2017).

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the

long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OECM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria:	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Green	The geographical space is defined by the Conservation Authority. All CA properties acquired in fee simple have a metes and bounds survey with registered boundaries on title.
Scope of Conservation Objectives	Green	The objectives for conservation or a subset of biodiversity or indigenous cultural values accomplished through conservation of biodiversity as a whole.
Primacy of Nature Conservation Objective(s)	Yellow	Based on allowable and prohibited activities and evident intent, conservation of biodiversity is the primary overriding objective
Governance	Green	All relevant governing authorities acknowledge and abide by the same conservation objectives of the area.
Effective Means – 1	Green	The management mechanisms have the power to exclude, control and manage all activities within the area that are likely to have impacts on biodiversity. Management mechanisms include the Conservation Authorities Act, Planning Act, Niagara Escarpment Management Plan, Eugenia Falls Master Plan, Endangered Species Act, and other statutes that provide the power to control activities that are likely to impact natural heritage (e.g., biodiversity) and other assets.
Effective Means – 2	Green	The management mechanisms compel the authority to prohibit activities that are incompatible with the conservation of biodiversity.
Long Term	Yellow	The management mechanism is intended or expected to be in effect indefinitely.
Dedicated	Green	The management mechanisms can be reversed only with great difficulty because reversal requires a change in CA management area policy, and approval from the Niagara Escarpment Commission and the Ministry of Natural Resources and Forestry via the Parks and Open Space System Policy.
Timing	Green	The management mechanism is in effect year-round.
Summary of Evaluation	Green 7 of 9 criteria Yellow 2 of 9 criteria	

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OECM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS.* A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity			
	Evidence-based Rationale		
Mechanism for Protection	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Column A: Niagara Escarpment Plan (MNRF 2017) Column B: Niagara Escarpment Plan (MNRF 2017) Column C: Niagara Escarpment Plan (MNRF 2017)		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented
	green	green	green
Evidence-based rationale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness*		
Existing subsurface resource activities (if applicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent* None		
Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, minimum standard with rationale, below minimum standard but with clear evidence, below minimum standard* Best Practice		

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OEABCM or n/a?	Protected Area *If "other" please identify combination:*
Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)* 7 of 9 Green and 2 of 9 Yellow – Report to CARTS as a candidate protected area
Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)* Best Practice

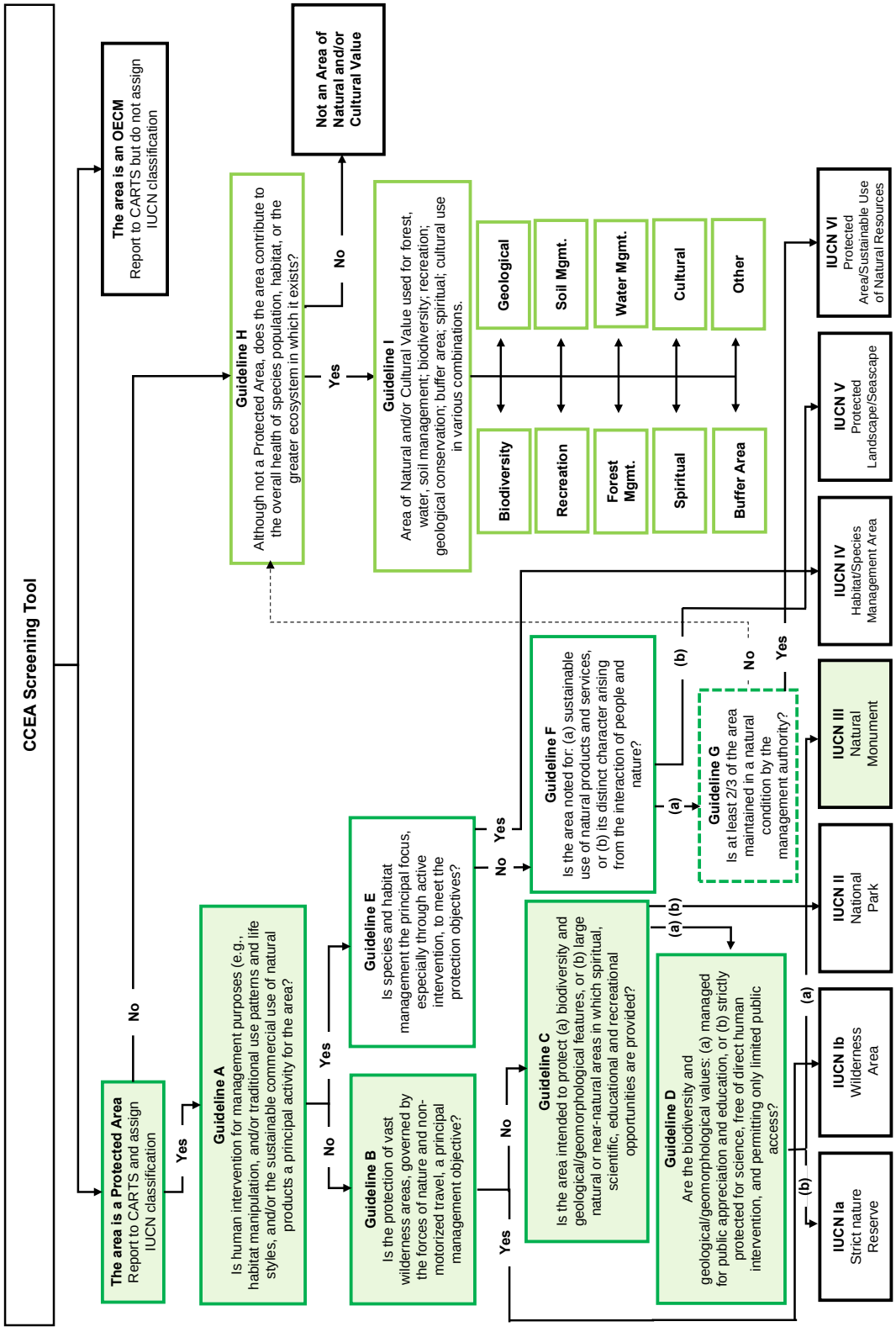
IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: not reported Outcome (change): Category III Rationale: Category III protected areas are set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value. Objectives: • To protect specific outstanding natural features and their associated biodiversity and habitats. • To provide biodiversity protection in landscapes or seascapes that have otherwise undergone major changes. • To protect specific natural sites with spiritual and/or cultural values where these also have biodiversity values. • To conserve traditional spiritual and cultural values of the site (Dudley 2008).
Total Area to be reported to CARTS (ha)	*Only those sites, or portions of sites that meet a minimum reporting standard should be reported to CARTS* 26
Identify deficiencies that could be overcome in order to report to CARTS	The CA could provide a more explicit statement about the strength of its commitment to protect biodiversity.

Literature Cited:

Dudley, N. (Editor). 2008. Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN. x + 86p. WITH S. Stolton, P. Shadie, and N. Dudley. 2013. IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No. 21, IUCN, Gland, Switzerland.

MNRF (Ministry of Natural Resources and Forestry) 2017. Niagara Escarpment Plan (2017). Queen's Printer for Ontario. 165p.

IUCN Diagnostic Key for Eugenia Falls



Feversham Gorge Conservation Area

DRAFT ONLY – JUNE 2017 – CONTACT THE GREY SAUBLE AUTHORITY TO CHECK FOR CHANGES

Basic Information	
Name of Site	Feversham Gorge Conservation Area
Designation	Conservation Area
Province/Territory	Ontario
Date of Establishment/ Securement	
Area (ha)	14
Management Authority	Grey Sauble Conservation Authority (GSCA)
Governance Type	Government – Subnational
Legal Basis/mechanism(s)	**Legislation:** Clean Water Act Conservation Authorities Act Endangered Species Act Environmental Assessment Act Environmental Bill of Rights Fish and Wildlife Conservation Act Public Lands Act Planning Act Species At Risk Act Trespass to Property Act **Plan:** Feversham Gorge Master Plan (contact the CA for more information)
Summary of Essential/ Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity* The Feversham Gorge – Madeleine Graydon Memorial Conservation Area is located just west of the Village of Feversham on Grey County Road 2. The CA encompasses 14 ha of land with geological and biological interest. The gorge begins on private property at an old mill dam in Feversham and extends downstream along the Beaver River. The vertical limestone walls, towering 24.4 meters over the river, are cloaked with conifers and ferns. The Beaver River is relatively shallow along this section of the gorge, with several pools and bubbling rapids along its course. Although somewhat hard to access, the cliffs are a botanist's paradise and are home to a number of rare ferns, mosses, and liverworts. These plants thrive in the permanent shade created by the trees and limestone cliffs. The table land above the gorge consists mixed coniferous and deciduous tree cover. A 1.5 km hiking trail is located in these forested areas. The Senior League Society of Collingwood coordinated funding for the purchase of this property. Donations were provided by numerous interested individuals with the bulk of the money being contributed by the Graydon Family in memory of Madeleine Graydon, the Labatt Family and John Labatt Ltd (GSCA 2016).

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the

long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OECM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Green	The geographical space is defined by the Conservation Authority. All CA properties acquired in fee simple have a metes and bounds survey with registered boundaries on title.
Scope of Conservation Objectives	Green	The objectives for conservation or a subset of biodiversity or indigenous cultural values accomplished through conservation of biodiversity as a whole.
Primacy of Nature Conservation Objective(s)	Yellow	Based on allowable and prohibited activities and evident intent, conservation of biodiversity is the primary overriding objective.
Governance	Green	All relevant governing authorities acknowledge and abide by the same conservation objectives of the area.
Effective Means – 1	Green	The management mechanisms have the power to exclude, control and manage all activities within the area that are likely to have impacts on biodiversity. Management mechanisms include the Conservation Authorities Act, the Planning Act, Feversham Gorge Master Plan, the Endangered Species Act, and other statutes that provide the power to control activities that are likely to impact natural heritage (e.g., biodiversity) and other assets.
Effective Means – 2	Green	The management mechanisms compel the authority to prohibit activities that are incompatible with the conservation of biodiversity.
Long Term	Yellow	The management mechanism is intended or expected to be in effect indefinitely.
Dedicated	Green	The management mechanisms can be reversed only with great difficulty because reversal requires a change in CA management policy.
Timing	Green	The management mechanism is in effect year-round.
Summary of Evaluation	Green 7 of 9 criteria Yellow 2 of 9 criteria	

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OECM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS.* A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity			
	Evidence-based Rationale		
Mechanism for Protection	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Column A: Not aware of subsurface rights registered against the property Column B: Not aware of subsurface rights registered against the property Column C: Not aware of subsurface rights registered against the property		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented
	green	green	green
Evidence-based rationale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness*		
Existing subsurface resource activities (if applicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent* None		
Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, minimum standard with rationale, below minimum standard but with clear evidence, below minimum standard* Best Practice		

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OEABCM or n/a?	Protected Area *If "other" please identify combination:*
Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)* 7 of 9 Green and 2 of 9 Yellow – Report to CARTS as a candidate protected area
Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)* Best Practice
IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: not reported Outcome (change): Category III Rationale: Category III Rationale: Category III protected areas are set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value. Objectives:

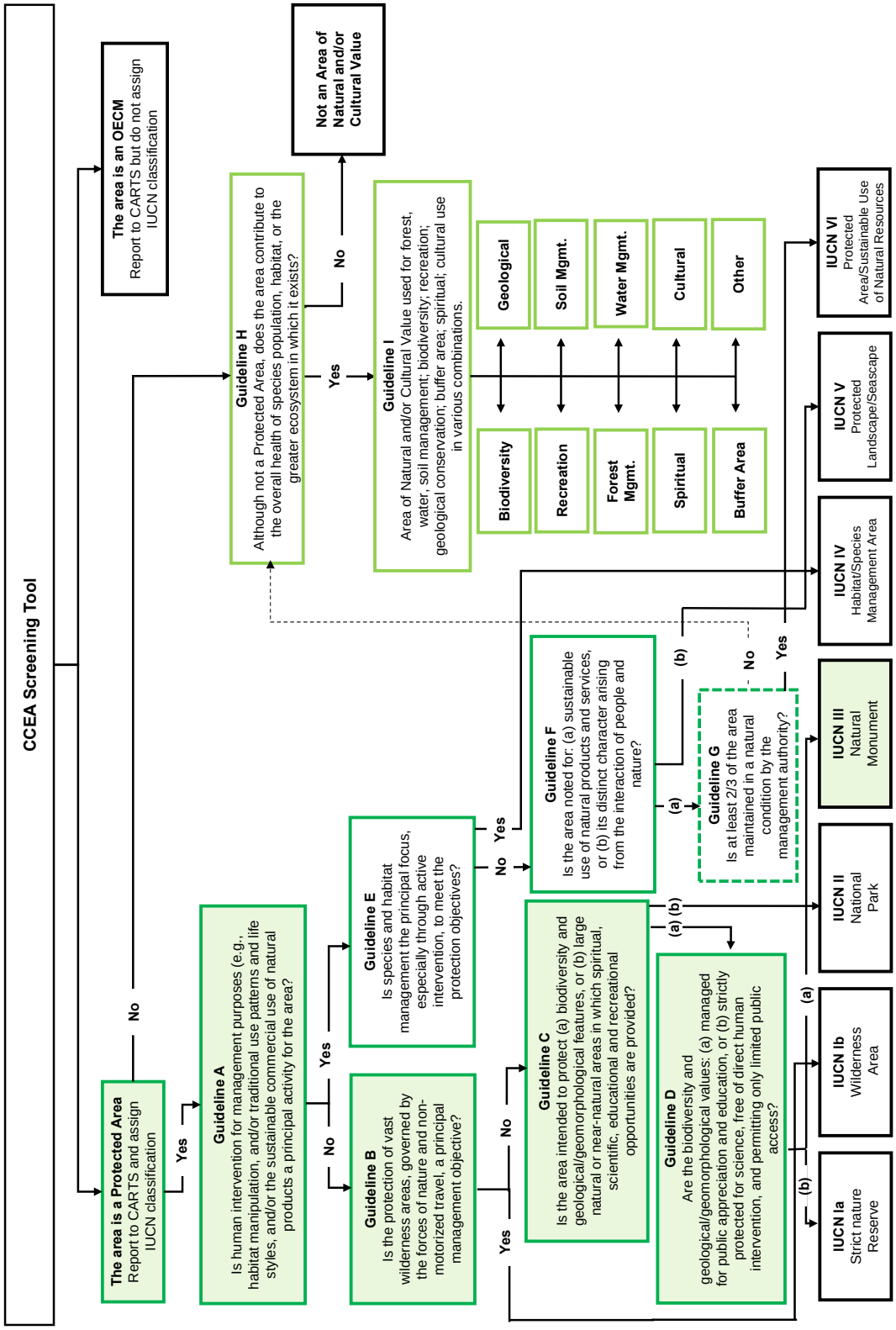
	• To protect specific outstanding natural features and their associated biodiversity and habitats. • To provide biodiversity protection in landscapes or seascapes that have otherwise undergone major changes. • To protect specific natural sites with spiritual and/or cultural values where these also have biodiversity values. • To conserve traditional spiritual and cultural values of the site (Dudley 2008).
Total Area to be reported to CARTS (ha)	*Only those sites, or portions of sites that meet a minimum reporting standard should be reported to CARTS* 14 ha
Identify deficiencies that could be overcome in order to report to CARTS	The CA could be more explicit about the strength of its commitment to protect biodiversity.

Literature Cited:

Dudley, N. (Editor). 2008. Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN. x + 86p. WITH S. Stolton, P. Shadie, and N. Dudley. 2013. IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No. 21, IUCN, Gland, Switzerland.

GSCA (Grey Sauble Conservation Authority). 2016a. Feversham Gorge Conservation Area. Available online at: http://www1.greysauble.on.ca/portfolio/feversham-gorge/

IUCN Diagnostic Key for Feversham Gorge



Gros Cap Conservation Area

DRAFT ONLY – JUNE 2017 – CONTACT THE SAULT STE. MARIE REGION CONSERVATION AUTHORITY TO CHECK FOR CHANGES

Basic Information	
Name of Site	Gros Cap
Designation	Conservation Area
Province/Territory	Ontario
Date of Establishment/ Securement	1973
Area (ha)	61.2
Management Authority	Sault Ste. Marie Region Conservation Authority (SSMRCA)
Governance Type	Government – Subnational
Legal Basis/mechanism(s)	**Legislation:** Clean Water Act Conservation Authorities Act Endangered Species Act Environmental Assessment Act Environmental Bill of Rights Fish and Wildlife Conservation Act Public Lands Act Planning Act Species At Risk Act Trespass to Property Act **Policy:** Conservation Authorities Act: O. Reg. 176/06 – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Clean Water Act, 2006: O. Reg. 134/1990 Conservation Areas – Sault Ste. Marie Region Conservation Authority **Plans:** Forest Management Plan for the Sault Ste. Marie Region Conservation Authority Properties (Atwell and Gagnon 2007)
Summary of Essential/ Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity* Gros Cap was selected for protection as a CA because of its rare plants, geology, and potential archaeological significance (Attwell and Gagnon 2007). Rock faces and bluffs highlight the rugged, natural characteristics of Gros Cap. Steep cliffs rise from the water to a height of 60-90 metres overlooking Lake Superior and the shipping lanes. The geology of Gros Cap is unusual because the property is situated on a batholith, a large deep-seated body of intrusive igneous rock consisting of coarse-grained granite rock. This was created when the magma (hot liquid rock) many km below the surface forced its way upward. Gros Cap provides habitat for a variety of vegetation types including mixed forest, cedar swamp, hardwood, and rare plants species such as Lime Saxifrage, Tickseed, and Small-flowered Collinsia (Attwell and Gagnon 2007, SSMRCA 2015). These habitats support a variety of plants and animals including Beaver, Porcupine, Moose, White-tailed Deer, squirrels, hares, Eastern Chipmunk, and many species of birds.

	The 40 km Saulteaux Section of the Voyageur Trail begins in the Gros Cap Conservation Area and runs through to the Hiawatha Highlands Conservation Area (Attwell and Gagnon 2007, SSMRCA 2015). Gros Cap protects a unique and representative suite of aquatic and terrestrial ecosystems, including wetlands, beaches, beach ridges, bedrock and glacial escarpments with a variety of species characteristic of the Great Lakes-St. Lawrence Forest Region (Attwell and Gagnon 2007). In the eastern portion, forest site conditions range from pockets of organic soils, containing Eastern White Cedar, to deep glacial tills supporting Sugar Maple, oak, and birch. The western portion is characterized by valleys and bedrock outcrops with scattered Red and White Pine, Eastern White Cedar, oak, poplar, and Serviceberry. The Voyageur Trail transects this part of the Conservation Area (Attwell and Gagnon 2007).

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OEABCM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Green	The geographical space is defined by the Conservation Authority. All CA properties acquired in fee simple have a metes and bounds survey with registered boundaries on title.
Scope of Conservation Objectives	Green	The objectives are for conservation as a whole, including ecosystems, species, and genetic diversity (SSMCA 2016). The CAs shoreline and source water protection program is accomplished though the management and maintenance of Conservation Areas and forest properties (Attwell and Gagnon 2007).
Primacy of Nature Conservation Objective(s)	Green	Based on allowable and prohibited activities and evident intent, conservation of biodiversity is the primary overriding objective (SSMRCA 2016).
Governance	Green	All relevant governing authorities acknowledge and abide by the same conservation objectives (SSMRCA 2016).
Effective Means – 1	Yellow	The management mechanisms have the power to exclude control and manage most activities within the area that are likely to have impacts on biodiversity (SSMRCA 2016).
Effective Means – 2	Yellow	The management mechanisms do not compel the authority to prohibit activities that are incompatible with the conservation of biodiversity, but the authority is excluding those activities (SSMRCA 2016).
Long Term	Green	The CA is protected in perpetuity (SSMRCA 2016).

Dedicated	Green	The management mechanisms can be reversed only with great difficulty because approval is required by the SSMRCA Board and Ministry of Natural Resources and Forestry. Protections will only be removed with the sale of the property which could take up to one year for SSMRCA Board approval, then presentation to and approval by Minister of Ontario Ministry of Natural Resources and Forestry, which could take up to two years or more (SSMRCA 2016).
Timing	Green	The management mechanism is in effect year-round (SSMRCA 2016).
Summary of Evaluation	Green 7 of 9 criteria Yellow 2 of 9 criteria	

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OECM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS.* A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity			
	Evidence-based Rationale		
Mechanism for Protection	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Column A: Not Withdrawn Column B: Not Withdrawn Column C: Not Withdrawn		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented
	red	red	yellow
Evidence-based rationale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness* Land Title Deed does not include subsurface rights (SSMRCA 2016).		
Existing subsurface resource activities (if applicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent* None		
Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, minimum standard with rationale, below minimum standard but with clear evidence, below minimum standard* Below Minimum Standard, but with Clear Evidence		

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OEABCM or n/a?	not applicable *If "other" please identify combination:* It is not a Protected Area
Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)* 7 of 9 Green 2 of 9 Yellow
Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)* Below Minimum Standard, but with Clear Evidence
IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: not reported Outcome (change): not reported Rationale:
Total Area to be reported to CARTS (ha)	*Only those sites, or portions of sites that meet a minimum reporting standard should be reported to CARTS* None
Identify deficiencies that could be overcome in order to report to CARTS	Strengthen effective means and secure subsurface rights.

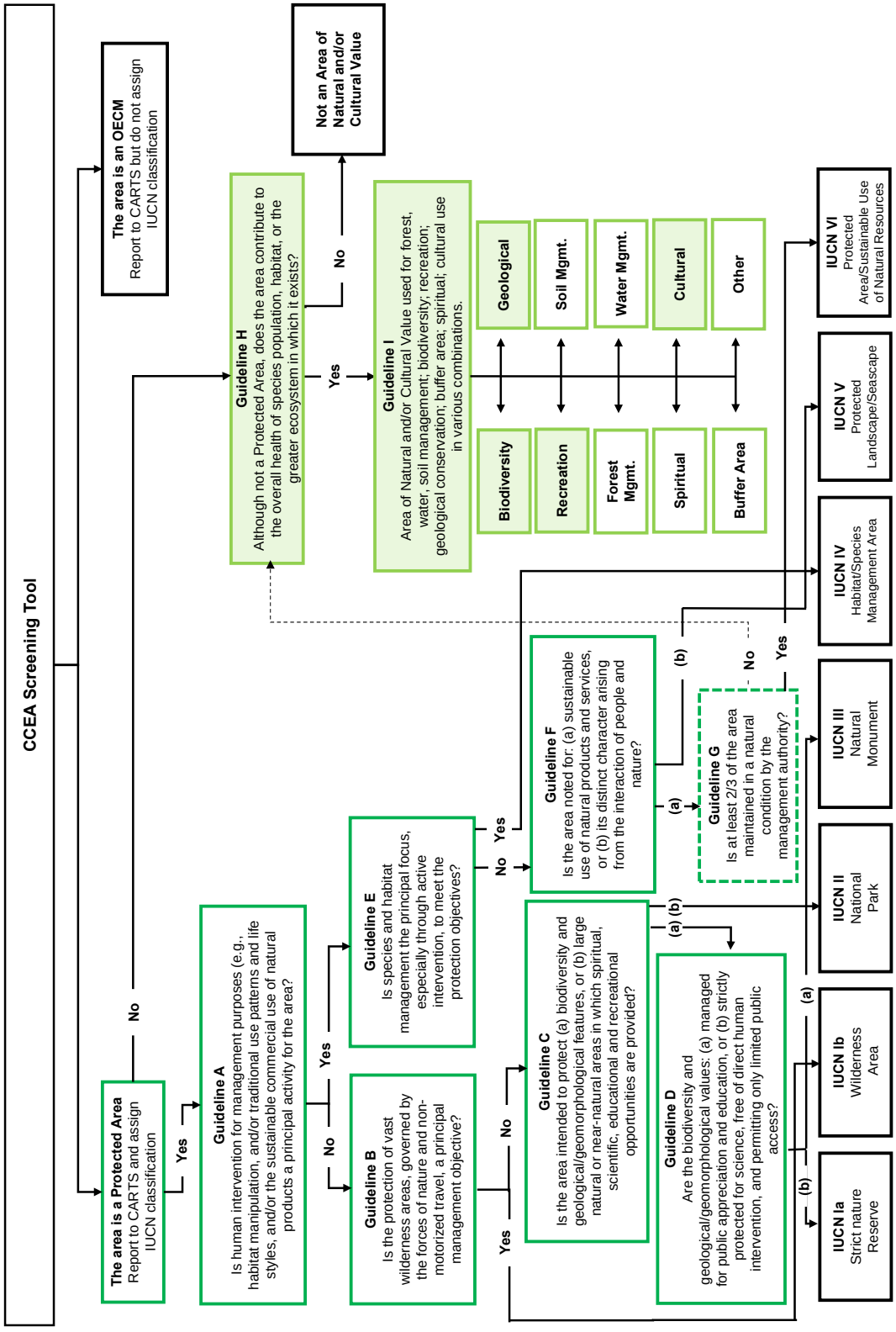
Literature Cited:

Attwell, B. and P. Gagnon. 2007. Forest Management Plan for the Sault Ste. Marie Region Conservation Authority Properties. Regen Forestry. 162p.

SSMRCA (Sault Ste. Marie Region Conservation Authority). 2015. Gros Cap Conservation Area. Accessed on 18 February 2016. Available online at: http://ssmrca.ca/recreation/gros-cap-conservation-area

SSMRCA (Sault Ste. Marie Region Conservation Authority). 2016. Conservation Authority Lands Survey: Gros Cap Conservation Area. (Unpublished).

IUCN Diagnostic Key for Gros Cap



Inglis Falls Conservation Area

DRAFT ONLY – JUNE 2017 – CONTACT THE GREY SAUBLE CONSERVATION AUTHORITY TO CHECK FOR CHANGES

Basic Information	
Name of Site	Inglis Falls
Designation	Conservation Area
Province/Territory	Ontario
Date of Establishment/ Securement	1960
Area (ha)	211
Management Authority	Grey Sauble Conservation Authority (GSCA)
Governance Type	Government – Subnational
Legal Basis/mechanism(s)	**Legislation:** Clean Water Act Conservation Authorities Act Endangered Species Act Environmental Assessment Act Environmental Bill of Rights Fish and Wildlife Conservation Act Public Lands Act Planning Act Species At Risk Act Trespass to Property Act **Policy:** Niagara Parks and Open Space System **Plans:** Inglis Falls Master Plan (contact the CA for more information)
Summary of Essential/ Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity* Encompassed by the 211 ha Inglis Falls CA, Inglis Falls is an 18 metre high cascade, created by the Sydenham River meeting the edge of the Niagara Escarpment. The erosive power of the water has carved a deep gorge at the base of the falls. On a clear day you can see down the valley into the City of Owen Sound and out to the Owen Sound harbour. Activities include a viewing platform for those unable to see over the stone wall, 7.42 km of trails of various difficulty, access to the Bruce Trail, more than 20 species of ferns, bird watching opportunities, a series of geological potholes, historical remains of a grist mill, washrooms, picnic facilities, and a visitor information centre. In 1845, Peter Inglis purchased a small existing grist mill built two years previously by a Mr. Boyd, and 121 ha of deeded Crown land. In 1862, Inglis replaced the old gristmill with a new four-storey mill that produced flour, bran and shorts (feed for animals). In 1932, the property was obtained by the City of Owen Sound for water rights. The mill was idle for two years until purchased by Emil Henkel. He ran the mill until 1945 when it was destroyed by fire. In 1960, the former North Grey Region Conservation Authority (now the Grey Sauble Conservation Authority) acquired what is presently the Inglis Falls Conservation Area. Today all that remains of that earlier industrial scene are the family home, a stone building, the silent millstones and the enduring beauty of Inglis Falls.

	The Sydenham River flows over the Niagara Esacrpment at Inglis Falls. Several geologic sites are located on the property. Primary activities include fishing, picnicking, hiking, and cross-country skiing. Inglis Falls is a nodal park in the Niagara Escarpment protected area system (MNRF 2017). Nodal parks are managed for: • Orientation – To inform visitors where they are in relation to other parks, open spaces, trails, natural features, and points if interest. • Education – To stimulate an understanding of the Niagara Escarpment and its natural and cultural heritage resources. • Interpretation – To familiarize visitors with the features of a park or open system. • Recreation – Identify and provide information on how to participate in nearby Escarpment recreational activities (MNRF 2017).

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OECM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Green	The geographical space is defined by the Conservation Authority. All CA properties acquired in fee simple have a metes and bounds survey with registered boundaries on title.
Scope of Conservation Objectives	Green	The objectives for conservation or a subset of biodiversity or indigenous cultural values accomplished through conservation of biodiversity as a whole.
Primacy of Nature Conservation Objective(s)	Yellow	Based on allowable and prohibited activities and evident intent, conservation of biodiversity is the primary overriding objective.
Governance	Green	All relevant governing authorities acknowledge and abide by the same conservation objectives of the area.
Effective Means – 1	Green	The management mechanisms have the power to exclude, control and manage all activities within the area that are likely to have impacts on biodiversity. Management mechanisms include the Conservation Authorities Act, the Planning Act, Niagara Escarpment Management Plan, Inglis Falls Master Plan, the Endangered Species Act and other statutes provide the power to control activities that are likely to impact natural heritage (e.g., biodiversity) and other assets.
Effective Means – 2	Green	The management mechanisms compel the authority to prohibit activities that are incompatible with the conservation of biodiversity.
Long Term	Yellow	The management mechanism is intended or expected to be in effect indefinitely.

Dedicated	Green	The management mechanisms can be reversed only with great difficulty because reversal requires a change in CA management area policy and approval from the Niagara Escarpment Commission and the Ministry of Natural Resources and Forestry via the Parks and Open Space System Policy.
Timing	Green	The management mechanism is in effect year-round.
Summary of Evaluation	Green 7 of 9 criteria Yellow 2 of 9 criteria	

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OECM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS.* A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity			
	Evidence-based Rationale		
Mechanism for Protection	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Column A: Niagara Escarpment Plan (MNRF 2017) Column B: Niagara Escarpment Plan (MNRF 2017) Column C: Niagara Escarpment Plan (MNRF 2017)		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented
	green	green	green
Evidence-based rationale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness*		
Existing subsurface resource activities (if applicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent* None		
Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, minimum standard with rationale, below minimum standard but with clear evidence, below minimum standard* Best Practice		

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OEABCM or n/a?	Protected Area *If "other" please identify combination:*

Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)* 7 of 9 Green and 2 of 9 Yellow – Report to CARTS as a candidate protected area
Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)* Best Practice
IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: not reported Outcome (change): Category III Rationale: Category III protected areas are set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value. Objectives: • To protect specific outstanding natural features and their associated biodiversity and habitats. • To provide biodiversity protection in landscapes or seascapes that have otherwise undergone major changes. • To protect specific natural sites with spiritual and/or cultural values where these also have biodiversity values. • To conserve traditional spiritual and cultural values of the site (Dudley 2008).
Total Area to be reported to CARTS (ha)	*Only those sites, or portions of sites that meet a minimum reporting standard should be reported to CARTS* 211 ha
Identify deficiencies that could be overcome in order to report to CARTS	The CA could provide more detail about the strength of its commitment to protect biodiversity.

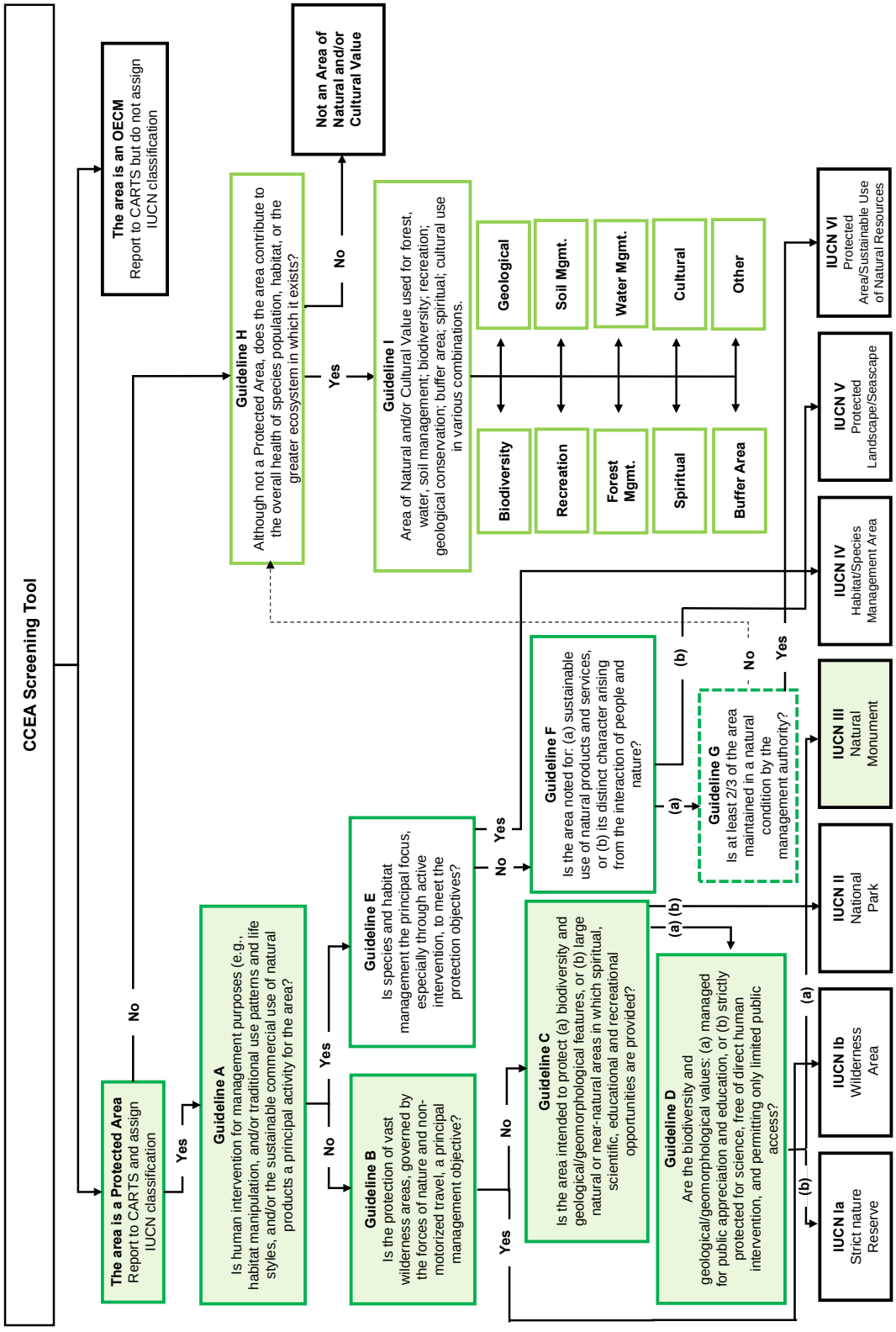
Literature Cited:

Dudley, N. (Editor). 2008. Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN. x + 86p. WITH S. Stolton, P. Shadie, and N. Dudley. 2013. IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No. 21, IUCN, Gland, Switzerland.

GSCA (Grey Sauble Conservation Authority). 2016b. Inglis Falls Conservation Area. Available online at: http://www1.greysauble.on.ca/portfolio/inglis-falls-conservation-area/

MNRF (Ministry of Natural Resources and Forestry). 2017. Niagara Escarpment Plan (2017). Queen's Printer for Ontario. 165p.

IUCN Diagnostic Key for Inglis Falls



Little Cataraqui Creek Conservation Area

DRAFT ONLY – JUNE 2017 – CONTACT THE CATARAQUI REGION CONSERVATION AUTHORITY TO CHECK FOR CHANGES

Basic Information	
Name of Site	Little Cataraqui Creek Conservation Area (LCCCA)
Designation	Conservation Area
Province/Territory	Ontario
Date of Establishment/ Securement	1966 (229 ha) and 1967 (164 ha)
Area (ha)	393
Management Authority	Cataraqui Region Conservation Authority (CRCA)
Governance Type	Government – Subnational
Legal Basis/mechanism(s)	**Legislation:** Clean Water Act Conservation Authorities Act Endangered Species Act Environmental Assessment Act Environmental Bill of Rights Fish and Wildlife Conservation Act Public Lands Act Planning Act Species At Risk Act Trespass to Property Act **Policy:** Municipal Zoning Provincial Policy Statement Managed Forest Program Conservation Lands Tax Incentive Program - Most of the LCCCA (353 ha) is designated as Community Conservation Lands (CCL) under the Conservation Lands Tax Incentive Program (CLTIP). The CCL category is restricted to non-profit charitable conservation organizations and conservation authorities. Eligibility criteria for the new category are outlined in Ontario Regulation 388/04 under the Assessment Act. **Plans:** Little Cataraqui Creek Conservation Area Master Plan (CRCA 2012).
Summary of Essential/ Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity* The Little Cataraqui Creek Conservation Area contains diverse habitats that interact with one another to support a diverse array of flora and fauna, including regionally or provincially threatened or endangered species. Aquatic habitats include the main reservoir as an open water habitat, the wetland (with submergent and emergent vegetation), the flowing creek system with its tributaries, and the isolated pools and ponds that exist throughout the property. Terrestrial habitats include woodlands (natural and plantations), meadows, and recreation areas. The property encompasses many unique features that are potentially sensitive to further development. Based on the current use of the property, however, the ecological state of the property is considered healthy and stable (CRCA 2012).

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OECM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Green	The area is clearly defined by the Conservation Authority and described in management plans and policies.
Scope of Conservation Objectives	Green	The objectives are for conservation as a whole, including ecosystems, species, and genetic diversity. The Authority has broad conservation objectives for all of its properties. The intent is to preserve, protect, enhance, or restore as deemed necessary. The Little Cataraqui Creek property contains the administration/operations buildings, education/outdoor centre and recreational trails/facilities. The protection of natural heritage and the maintenance of ecological integrity is a key responsibility of the CA in the context of an ongoing management regime that includes nature protection, recreation and education. The primary goals for LCCCA under the master plan are as follows: • Protecting and enhancing the natural heritage features associated with LCCCA. • Rationalize developed areas and trails for year-round operational access, and provide passive recreation opportunities that also support learning experiences. • Facility and infrastructure upgrades should be conservative in nature, while maintaining an aesthetic consistent with the CRCA. • Pursue a co-operative strategy with partners and stakeholders for moving forward with shared objectives. • Provide opportunities for collaborations with stakeholders, members of the public, and private groups to conduct programs on the property. • Enhance the clarity and consistency of messaging for visitors regarding regulations, permitted activities, and interpretive information. • Maintain regular monitoring of site facilities/infrastructure to ensure visitor safety and regulation compliance CRCA 2012).
Primacy of Nature Conservation Objective(s)	Yellow	Based on allowable and prohibited activities and evident intent, conservation of biodiversity is the primary overriding objective. Protection of natural heritage is one of the primary objectives: • To protect and enhance the functions of the site's natural heritage features through monitoring and restoration projects. • To promote stewardship of the environment through education programs and opportunities for passive recreational experiences. • To enhance property security related to visitor activities and safety.

		• To minimize the impacts and degradation caused by property use (CRCA 2012).
Governance	Green	As the governing authority, the Conservation Authority recognizes and abides by the site objectives. The CA works closely with partners to ensure that the site objectives are recognized. The Authority does have a natural gas pipeline and hydro corridors, which have easements on the property. They work within their environmental plans; however, these areas are maintained in a cleared state by those respective interests (CRCA 2012).
Effective Means – 1	Green	The management mechanisms have the power to exclude, control, and manage all activities within the area that are likely to have impacts on biodiversity. The master plan provides operational guidance (CRCA 2012).
Effective Means – 2	Yellow	The management mechanisms do not compel the Authority to prohibit activities that are incompatible with the conservation of biodiversity, but the authority is excluding those activities. The Authority is overseen by a Board which is comprised of municipal elected officials. The management mechanisms encourage the prohibition of activities, and the Board has supported these objectives. However, decisions are ultimately up to the Board and they are not forced to prohibit activities. It is possible to argue that any activity on the property would be incompatible with conserving biodiversity and therefore recreational trails are an incompatible activity that is being allowed. However, the Authority has and continues to monitor and react to issues that affect biodiversity. Property management, including prohibited activities, are described in the master plan and CRCA policies in a manner that preserves natural features (CRCA 2012).
Long Term	Yellow	The management mechanism is intended or expected to be in effect indefinitely. The Authority reviews its master plans for its properties and makes updates as required. Therefore, while the general direction/intent of the Authority should remain for perpetuity, the management mechanism(s) may change or evolve over time.
Dedicated	Red	The management mechanisms can be reversed without much difficulty because reversal requires approval of the Authority Board.
Timing	Green	The designation is year-round.
Summary of Evaluation	Green 5 of 9 criteria Yellow 3 of 9 criteria Red 1 of 9 criteria	

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OECM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS*. A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity			
	Evidence-based Rationale		
Mechanism for Protection	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Column A: Withdrawn Column B: Withdrawn Column C: Withdrawn		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented
	green	green	green
Evidence-based rationale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness*		
Existing subsurface resource activities (if applicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent* None		
Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, minimum standard with rationale, below minimum standard but with clear evidence, below minimum standard* Best Practice		

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

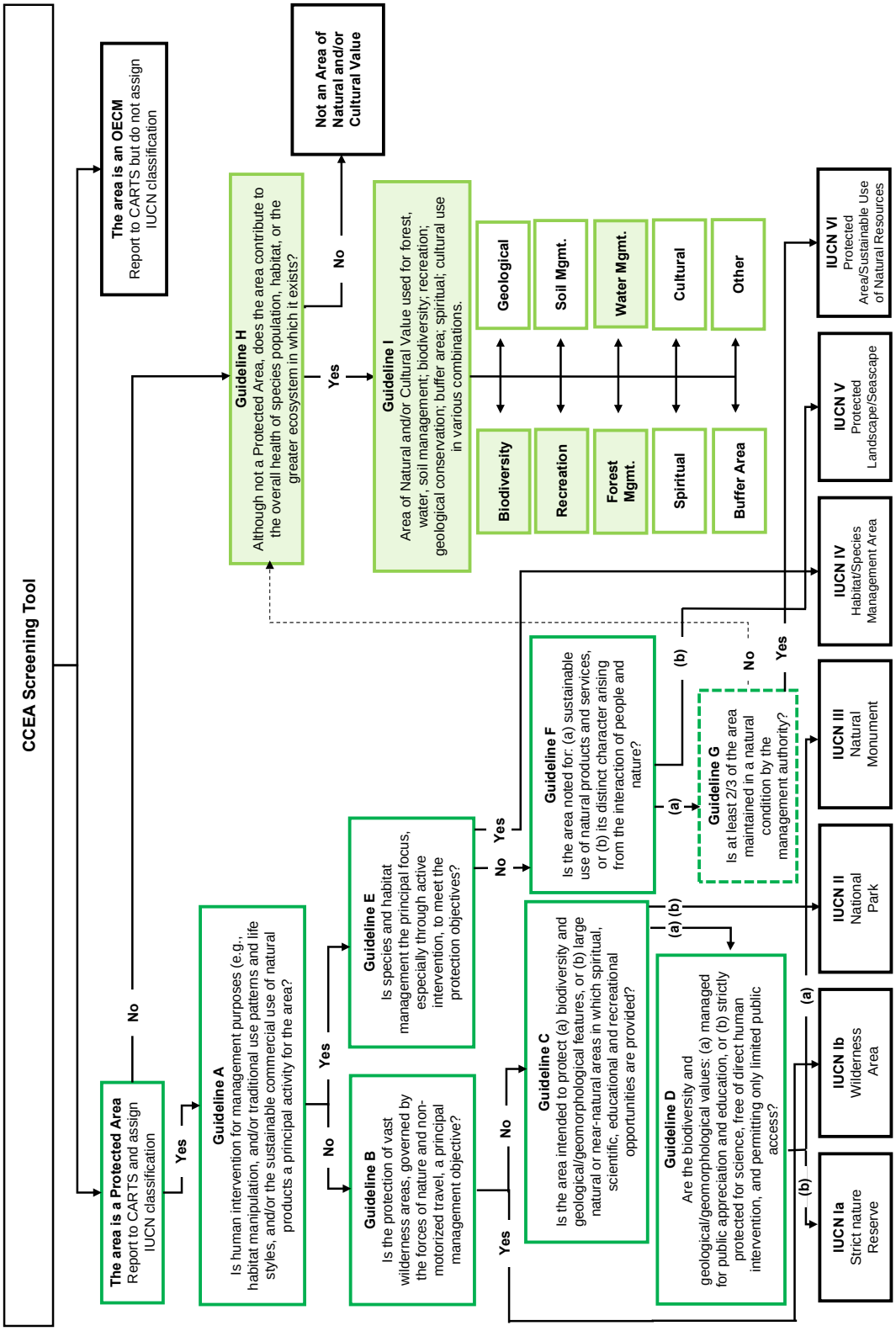
PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OEABCM or n/a?	not applicable *If "other" please identify combination:*
Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)* 5 of 9 Green, 3 of 9 yellow, and 1 of 9 Red – Do Not Report to CARTS
Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)* Best Practice
IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: not reported Outcome (change):
Total Area to be reported to CARTS (ha)	*Only those sites, or portions of sites that meet a minimum reporting standard should be reported to CARTS* Not applicable

Identify deficiencies that could be overcome in order to report to CARTS	A primary requirement for protected area status is the strength of the management mechanism with respect to status reversal.

Literature Cited:

CRCA (Cataraqui Creek Conservation Authority). 2012. Little Cataraqui Creek Conservation Area Master Plan, 2012. Cataraqui Creek Conservation Authority.

IUCN Diagnostic Key for the Little Cataraqui Creek Conservation Area



Minesing Wetland

DRAFT ONLY – JUNE 2017 – CONTACT THE NOTTAWASAGA VALLEY CONSERVATION AUTHORITY TO CHECK FOR CHANGES

Basic Information	
Name of Site	Minesing Wetland
Designation	Conservation Area
Province/Territory	Ontario
Date of Establishment/ Securement	First properties acquired in 1970
Area (ha)	3,900 owned by Nottawasaga Valley Conservation Authority and 2,100 owned by the Ministry of Natural Resources and Forestry (MNRF), the Nature Conservancy (NCC), and private landowners.
Management Authority	Nottawasaga Valley Conservation Authority (NVCA)
Governance Type	Government – Subnational
Legal Basis/mechanism(s)	**Legislation:** The Minesing Wetlands is protected from development and site alteration by provincial and federal legislation: Clean Water Act Conservation Authorities Act Endangered Species Act Environmental Assessment Act Environmental Bill of Rights Fish and Wildlife Conservation Act Public Lands Act Planning Act Species At Risk Act Trespass to Property Act **Policy:** Natural heritage designations and policies, including: Area of Natural and Scientific Interest (ANSI-Life Science), Provincially Significant Wetland (PSW), Simcoe County Greenland designation (County of Simcoe Official Plan - "the purpose of the Greenland designation is to ensure that the scale, form and location of development is such that the features and functions of the natural heritage system are sustained for future generations" (County of Simcoe 2007)). **Plans:** Minesing Wetlands Property Management Plan, Georgian Bay – Huronia Subregion/Ontario Region, 2014-2018 (Fergson 2011).
Summary of Essential/ Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity* The wetland complex encompasses a diverse assemblage of plants and animals. The area supports important ecological functions and globally significant biodiversity including 36 federally listed species at risk, 29 provincially listed species at risk, seven globally rare species, and 42 provincially rare species. The rivers are important migratory routes for fish species. Mixed and coniferous swamp communities and fens along the southern and eastern boundaries provide habitats similar to boreal forests much further north while the Silver Maple/Hackberry and Bur Oak swamps at the north end share similar characteristics with communities found further south in the eastern United States. A constantly shifting mosaic of meadow marsh, shallow marsh and thicket/treed swamp communities provide a variety of habitats throughout the

	remainder of the wetland complex (Bowles et al. 2007, Ferguson 2011). Minesing supports the southern-most occurrence of patterned peatlands in Canada.

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OECM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Green	The geographical space is defined by the Conservation Authority. All CA properties acquired in fee simple have a metes and bounds survey with registered boundaries on title.
Scope of Conservation Objectives	Green	The objectives are for conservation as a whole, including ecosystems, species and genetic diversity. The NVCA has the responsibility to regulate activities in natural and hazardous areas in order to: 1. Prevent the loss of life and property due to flooding and erosion. 2. Conserve and enhance natural resources.
Primacy of Nature Conservation Objective(s)	Green	Conservation of biodiversity is the primary overriding objective. The management, including protection, of biodiversity is a primary objective for a number of ecosystems in the Minesing Wetland. Conservation goals are: 1. Monitor and maintain, enhance or restore the condition of the property's various habitats. 2. Control the establishment and spread of problematic invasive species such as Common Reed and Dog-strangling Vine within the wetlands. 3. Work closely with key partners on conservation and outreach initiatives. 4. Educate the community on the importance of the area and encourage compatible use of the wetlands. 5. Monitor significant species and maintain, enhance, or restore their populations (Ferguson 2011).
Governance	Green	All relevant governing authorities acknowledge and abide by the same conservation objectives for the area. The CA works closely with the MNRF, the NCC, and the Friends of Minesing Wetlands (FOMW) to ensure that the site objectives are recognized.
Effective Means – 1	Green	The management mechanisms have the power to exclude, control, and manage all activities within the area that are likely to have impacts on biodiversity. Management mechanisms include the Conservation Authorities Act, the Planning Act, the Endangered Species Act, and other statutes that provide the power to control activities that are likely to impact natural heritage (e.g., biodiversity) and other assets.

Effective Means – 2	Green	The management mechanisms compel the authority to prohibit activities that are incompatible with the conservation of biodiversity. Prohibited activities include commercial baitfish harvesting, commercial timber harvesting, outpost camps, food harvesting and gathering (e.g., wild rice), maple sugar operations, peat extraction, renewable energy, subsurface resource exploration and development, surface and groundwater extraction, fish stocking, wildlife population management, ATV use, camping, fires, and horseback riding. Permitted activities include commercial tourism, fire suppression, nature appreciation, wildlife viewing, and recreation. Partially permitted activities include agriculture, livestock grazing, licenced trapping, herbicide use, insect and disease control, invasive species control, prescribed fire, scientific research, some collecting for scientific research, dog walking, fishing, sport hunting, mountain biking, motor boats, hiking, x-country skiing, snowmobiling, and trail development (Ferguson 2011).
Long Term	Green	The wetlands are protected in perpetuity.
Dedicated	Green	The management mechanisms can be reversed only with great difficulty because reversal requires approval from the Nature Conservancy Canada, Ducks Unlimited, the province of Ontario, and municipalities.
Timing	Green	The management mechanism is in effect year-round.
Summary of Evaluation	Green 9 for 9 criteria	

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OECM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS.* A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity			
	Evidence-based Rationale		
Mechanism for Protection	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Column A: Withdrawn Column B: Withdrawn Column C: Withdrawn		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented
	green	green	green
Evidence-based rationale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness* Subsurface resource exploration and development is prohibited in the Minesing wetland (Ferguson 2011).		
Existing subsurface resource activities (if applicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent* None		

Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, minimum standard with rationale, below minimum standard but with clear evidence, below minimum standard* Best Practice

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OECM or n/a?	Protected Area *If "other" please identify combination:*
Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)* 9 of 9 Green – Report to CARTS
Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)* Best Practice
IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: not reported Outcome (change): Category IV Rationale: Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category. Other objectives include: • To protect vegetation patterns or other biological features through traditional management approaches. • To protect fragments of habitats as components of landscape or seascape-scale conservation strategies. • To develop public education and appreciation of the species and/or habitats concerned. • To provide a means by which the urban residents may obtain regular contact with nature (Dudley 2008).
Total Area to be reported to CARTS (ha)	*Only those sites, or portions of sites that meet a minimum reporting standard should be reported to CARTS* 3,900
Identify deficiencies that could be overcome in order to report to CARTS	

Literature Cited:

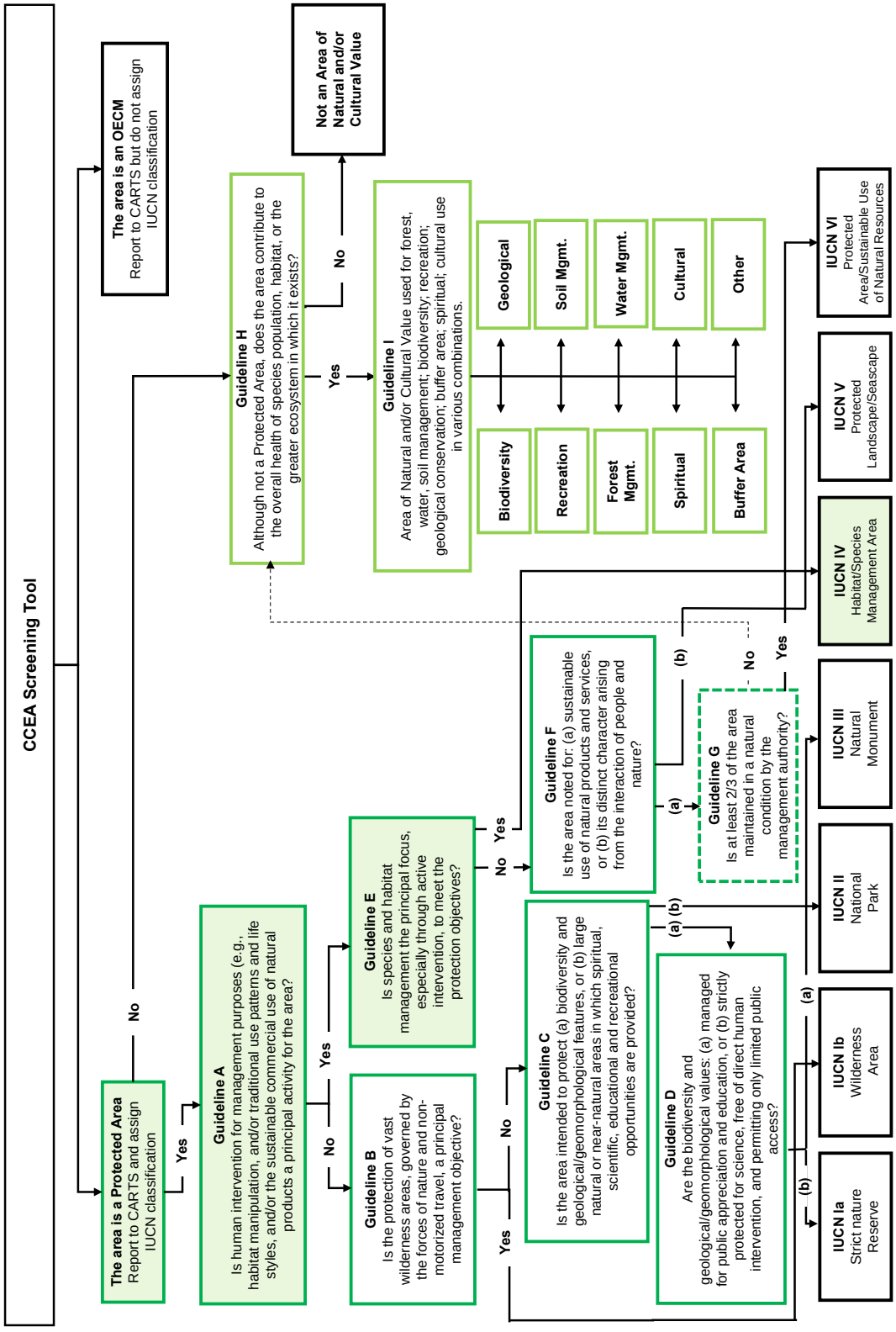
Bowels, R.J., J. Laverty, and D. Featherstone. 2007. Minesing Wetlands Biological Inventory. Nottawasaga Valley Conservation Authority. 124p. Accessed on 16 February 2016. Available online at: http://www.nvca.on.ca/Shared%20Documents/Minesing%20Wetlands%20Biological%20Inventory.pdf

County of Simcoe. 2007. (Consolidated). The County of Simcoe Official Plan. 123p. Accessed on 16 February 2016. Available online at: http://www.simcoe.ca/Planning/Documents/SCOP.pdf

Dudley, N. (Editor). 2008. Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN. x + 86p. WITH S. Stolton, P. Shadie, and N. Dudley. 2013. IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No. 21, IUCN, Gland, Switzerland.

Ferguson, K. 2011. Minesing Wetlands Property Management Plan, Georgian Bay-Huronia Subregion/Ontario Region, 2014-2018. Template Version 2, June 2011. Nature Conservancy of Canada. 20p. Accessed on 16 February 2016. Available online at: https://minesingwetlandsfriends.files.wordpress.com/2015/01/minesing-wetlands-2014-pmp-abbreviated-version-for-sharing.pdf

IUCN Diagnostic Key for the Minesing Wetlands



Nashville Conservation Reserve

DRAFT ONLY – JUNE 2017 – CONTACT THE TORONTO AND REGION CONSERVATION AUTHORITY TO CHECK FOR CHANGES

Basic Information	
Name of Site	Nashville Conservation Reserve
Designation	Conservation Area
Province/Territory	Ontario
Date of Establishment/ Securement	1960s
Area (ha)	820
Management Authority	Toronto and Region Conservation Authority (TRCA)
Governance Type	Government – Subnational
Legal Basis/mechanism(s)	**Legislation:** Clean Water Act Conservation Authorities Act Endangered Species Act Environmental Assessment Act Environmental Bill of Rights Fish and Wildlife Conservation Act Oak Ridges Moraine Conservation Act Public Lands Act Planning Act Species At Risk Act Trespass to Property Act **Policy:** Oak Ridges Moraine Conservation Plan O. Reg 140/02 **Plans:** Nashville Resource Management Tract Management Plan (TRCA 2015) Humber River Watershed Plan: Pathways to a Healthy Humber (TRCA 2014b) Humber River Watershed Plan Implementation Guide (TRCA 2008)
Summary of Essential/ Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity* A Resource Management Tract or RMT is a TRCA owned non-gated recreation area designed for year round, passive, public use. There is no charge for using these areas (some may have voluntary registration and/or donations), and there is rarely a defined service provided for the user. These areas provide the public with quality open space for nature-based recreation. Usually, RMT's include a mix of open space, nature trails, and passive recreational uses. The Nashville Resource Management Tract (NRMT) has been defined as an RMT since 1960's (TRCA 2006, in TRCA 2015). The NCR is a diverse site containing many habitat types such as upland forests, bottomland forests, meadows, former agricultural fields, wetlands and small tributaries that feed into the upper Humber River. The property supports a variety of wildlife, provides significant White-tailed Deer wintering yards, and is an important migratory corridor. Because of its large size, and current and future ecological value, the NCR is an integral part of TRCA's natural heritage system (TRCA 2015). The historical clearing of forests for agriculture within the NRMT has significantly affected the quality of habitat and species richness. The result of this is a forest habitat

	that is fragmented and considered "fair" patch quality under TRCA's Terrestrial Natural Heritage Strategy (TRCA 2007). Nevertheless, the site still provides a diverse range of habitats and species. For example, the area supports 299 recorded species of native vascular plants, 114 of which are of regional concern. There are 96 species of breeding fauna, including 33 of regional concern (TRCA 2012, in TRCA 2015). Species richness and diversity in aquatic ecosystems has been maintained at consistent levels. There are 18-20 species inhabiting the streams and rivers. Some of the surveyed species have been identified as sensitive to habitat degradation. The only non-native species is Rainbow Trout (stocked and/or naturalized). This strongly suggests that aquatic conditions are stable and healthy. The Redside Dace, a provincially endangered species under the Endangered Species Act, is present within the larger stream system that flows through the NRMT. A recovery habitat for Reside Dace flows through some of the tributaries on the eastern side of the NRMT property. This species and its habitat are regulated by the Ontario Ministry of Natural Resources and Forestry. Any works (including stream and riparian restoration) within the regulated area (meander belt plus 30m on each side) may require a permit under the Endangered Species Act (TRCA 2015).

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OECM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Green	The geographical space is defined by the Conservation Authority. All CA properties acquired in fee simple have a metes and bounds survey with registered boundaries on title.
Scope of Conservation Objectives	Green	The objectives are for conservation as a whole, including ecosystems, species and genetic diversity. The TRCA's vision statement for the NRMT captures the historical, ecological, and agricultural values that are synonymous with the region: "A vital and dynamic part of the connected greenspace in the upper Humber River Watershed, the NRMT boasts extensive, high quality habitat that supports a diverse suite of species. It is valued by community members and visitors alike for its unique cultural heritage resources, spectacular trails, and agricultural features" (TRCA 2015). The goal of the TRCA in managing its conservation lands is to "ensure the environmental stewardship of authority lands and to continue to bring into ownership additional conservation and hazard lands essential for achieving a healthy regional environment and sustainable communities" (TRCA 2001). Goal (Terrestrial Resources): To protect, restore, and enhance the natural ecosystems and to ensure the health and diversity of native species, habitats, landscapes, and ecological functions. Objectives include: • Restore and naturalize disturbed areas in the NRMT.

		• Maximize linkages and connectivity of the natural heritage features to one another and adjacent lands. • Establish and manage forests within the NRMT. • Protect the health of native species. Goal (Aquatic Resources): To protect and enhance the form and function of the Humber River aquatic system. Objectives include: • Protect, restore, and enhance the health and diversity of native aquatic habitats, communities, and species. • Protect and restore surface water quality, with respect to toxic contaminants and other pollutants (such as sediment, nutrients, and road salt). • Provide for sustainable fishing opportunities and the safe consumption of fish. • Protect groundwater recharge and discharge. • Prevent groundwater contamination. • Maintain natural hydrologic connection to the floodplain and in doing so eliminate or minimize risks to human life and property. • Maintain and improve NRMT's contribution to the water balance of the Humber River. Goal (Cultural Heritage Resources): To celebrate the diverse cultural heritage of the Humber River and NRMT by protecting, conserving, and interpreting archaeological and historic resources. Objectives include: • Protect and conserve all known and unknown archaeological sites and cultural landscapes, including all properties/structures listed in the Vaughan Heritage Inventory. • Promote the cultural heritage features of the NRMT including the Kleinburg Nashville Heritage Conservation Resource District. • Integrate the NRMT trail system with the Kleinburg Nashville Heritage Conservation District. Goal (Nature-Based Public Use): To encourage healthy living and provide opportunities for appropriate and accessible nature-based recreation by providing safe, enjoyable, and sustainable trail experiences. Objectives include: • Focus public access and use on passive, outdoor recreation with development limited to appropriate areas. • Provide access to diverse landscapes, places, wildlife habitats, programs, and experiences. • Plan and manage outdoor nature-based recreation facilities in a manner that integrates ecological health with social benefits • Use principles of ecological integrity (having regard for all of a systems components, functions, and linkages), in planning trails throughout the NRMT. • Develop and enhance the trail system within the NRMT to provide connections to other trails along the Humber River. Goal (Conservation Education): To promote knowledge and understanding of the natural and cultural values of the land and water, their protection and management requirements, as well as their significance, sensitivities, and interrelationships within the NRMT and with surrounding areas. Objectives include:

		• Offer passive learning opportunities about the natural environment, cultural and heritage resources, and sound conservation land management practices. • Foster outdoor educational learning. Goal (Stewardship and Outreach): To inspire community stewardship through genuine engagement and consultation, provide innovative educational experiences, and encourage partnerships that will achieve watershed and management plan objectives. Objectives include: • Encourage community participation in property management and land use planning. • Promote partnerships among environmental, cultural heritage, agriculture, recreation and education organizations, private industry and public agencies in property management and programming. • Encourage action-oriented initiatives to protect, conserve and regenerate the NRMT. • Improve community connections to the watershed through recognition, preservation, and celebration of heritage features and resources. • Raise funds for environmental regeneration, protection, education, and awareness initiatives in the NRMT. • Encourage people to choose lifestyles that are sustainable and ecologically-sound through demonstrations and passive education opportunities at the NRMT. Goal (Conservation Lands Use and Management): To integrate the NRMT as part of a sustainable community by planning for future development and achieving balance between demand for public use and need for natural heritage protection. Goal (Conservation Lands Use and Management): To protect and enhance the integrity and economic viability of agricultural areas by valuing the community, for-profit and educational aspects of agriculture. Objectives include: • Protect and enhance the integrity, economic viability of, and provide for appropriate public access to agricultural areas within the NRMT. • Promote the benefits public ownership, public stewardship and the responsible use of surrounding lands which connect to and influence the natural system of the NRMT. • Reduce and eliminate inappropriate land uses such as dumping, unapproved trail creation, and encroachments. • Offset downstream ecological damage. • Maintain property standards on NRMT property. Goal (Implementation, Monitoring, and Review of the Management Plan): To implement a progressive land management model at the NRMT that will foster a strong sense of community involvement and provide a diverse and well-connected natural system. Objectives include: • Track the success of land management strategies and actions, and adapt management strategies in response. • Provide for ongoing public involvement in the management process (TRCA 2015).

Primacy of Nature Conservation Objective(s)	Green	Based on allowable and prohibited activities and evident intent, conservation of biodiversity is the primary overriding objective. The purpose of this ownership is to protect and manage valley and stream corridors, flood plains, the Lake Ontario shorelands, wildlife, vegetation, and environmentally significant areas. Where compatible, access and facilities for public use are permitted and encouraged (TRCA 1995).
Governance	Green	All relevant governing authorities acknowledge and abide by the same conservation objectives for the area.
Effective Means – 1	Yellow	The management mechanisms have the power to exclude control and manage most activities within the area that are likely to have impacts on biodiversity. Management mechanisms include the Conservation Authorities Act, the Planning Act, the Endangered Species Act, and other statutes that provide the power to control activities that are likely to impact natural heritage (e.g., biodiversity) and other assets. For example, the Redside Dace, a provincially endangered species under the Endangered Species Act, is present within the larger stream system that flows through the NRMT. A recovery habitat for Reside Dace flows through some of the tributaries on the eastern side of the NRMT property. This species and its habitat are regulated by the Ontario Ministry of Natural Resources and Forestry. Any works (including stream and riparian restoration) within the regulated area (meander belt plus 30m on each side) may require a permit under the Endangered Species Act (TRCA 2015). There is always potential for the municipality or other major service provider (e.g., gas and hydro) to acquire land within the property for their servicing needs, and such impacts could impact biodiversity. Through TRCA, other policies, and permitting requirements, impacts to biodiversity would be minimized.
Effective Means – 2	Green	The management mechanisms compel the authority to prohibit activities that are incompatible with the conservation of biodiversity. The NRMT is divided into seven management zones that identify where ecological features must be protected, where public use and trails will be permitted, or where restoration efforts will be focused. The zones are distinguished by their different levels of ecological protection, management need, and acceptable levels and types of public use: • Nature Reserve Zone (278 ha): Protect areas with the highest number or most sensitive of species, communities or habitats. It is desirable to minimize public access to these zones to provide a sanctuary for flora and fauna. Major trail systems, such as inter-regional trails, are permitted to cross nature reserve zones where it is deemed appropriate by TRCA staff. Resource management projects encouraged in this zone include those designed to protect, enhance, restore, and connect natural features, landforms, species or habitats. This includes forest management, fish habitat improvement, naturalization and invasive species management activities. All trails should be monitored to ensure that invasive species are not spread throughout the area. • Natural Environment Zone (455 ha): Areas that are ecologically healthy but may require some restoration. These areas have significant natural and/or cultural heritage value, but are not as sensitive as areas classified as Nature Reserves. Permitted activities on public trails include walking, hiking, cycling, horse riding, leashed dog walking, and cross-country skiing. Natural Environment zones are

		suitable for environmental management projects designed to protect, enhance, restore, and connect natural features, landforms, species or habitats. All trails should be monitored for invasive species. • Cultural Heritage Preserve (ha to be determined): Cultural Heritage Preserves are designated on the basis of known Aboriginal and early European settlements existing below or above grade. Boundaries of these zones are determined by developing a non-descript buffer around known features. Depending on site conditions, areas of historical significance will not be identified on public mapping due to privacy concerns. The TRCA requires that an archaeological investigation be undertaken prior to any development or undertaking that will significantly disturb or alter the soil and result in negative impacts to cultural heritage resources. Any significant archaeological finds that cannot be mitigated (e.g., foundations and wells) may be left in-situ and a new Heritage Preserve Zone would be established to ensure proper documentation, conservation and interpretation. • Restoration (55 ha): Restoration zones in the NRMT have been identified under the auspices of a Habitat Implementation Plan (TRCA 2004) or the TRCA Managed Forest Plan (TRCA 1998). These areas are scheduled for regular forestry maintenance projects or for habitat improvement. Resource management activities encouraged in this zone include environmental management projects designed to protect, enhance, restore, and connect natural features, landforms, species or habitats. By undertaking successful restoration activities, these areas will naturally mature and be reclassified as Natural Environment or Nature Reserve Zones. • Lease Management Zone (Buildings) (29 ha): These are buildings and lands subject to residential or commercial lease agreements. Access to these areas is restricted to TRCA staff, building tenants and their guests/clients. • Lease Management Zone (Agriculture) (54.5 ha): An area with existing agricultural activities or with the potential for agricultural uses or gardens. There is potential to add additional agricultural areas as part of restoration work. Individual farm tenants currently hold ongoing lease agreements with the TRCA. • Public Use Zone (ha to be determined): These areas are designated for high levels of public use and include large access points, parking lots, and dog off-leash areas. Currently, there are no formal public entryways into the property with the exception of two trailheads. Resource management activities encouraged in this zone include environmental management projects designed to protect, enhance, restore and connect natural features, landforms, species or habitats wherever possible, while still allowing for appropriate public access (TRCA 2015).
Long Term	Green	The management mechanism is intended to be in effect in perpetuity because CA ownership is intended to be in perpetuity.
Dedicated	Yellow	The management mechanisms can be reversed with moderate difficulty. A reversal requires an updated management plan.
Timing	Green	The management mechanism is in effect year-round.

Summary of Evaluation	Green 7 of 9 criteria Yellow 2 of 9 criteria

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OECM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS.* A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity			
	Evidence-based Rationale		
Mechanism for Protection	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Column A: No minerals, and gravel is part of the property Column B: No minerals, and gravel is part of the property Column C: No minerals, and gravel is part of the property		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented
	green	green	green
Evidence-based rationale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness* No minerals in the area and any gravel deposits are part of the property.		
Existing subsurface resource activities (if applicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent* None		
Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, minimum standard with rationale, below minimum standard but with clear evidence, below minimum standard* Best Practice		

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OEABCM or n/a?	Protected Area *If "other" please identify combination:*
Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)* 7 of 9 Green and 2 of 9 Yellow - Report to CARTS as a candidate target protected area

Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)* Best Practice
IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: not reported Outcome (change): Category V Rationale: A Category V protected area is an area where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural, and scenic value, and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values. The primary objective is to protect and sustain important landscapes/seascapes and the associated nature conservation and other values created by interactions with humans through traditional management practices. Other objectives include: • To maintain a balanced interaction of nature and culture through the protection of landscape and/or seascape and associated traditional management approaches, societies, cultures and spiritual values. • To contribute to broad-scale conservation by maintaining species associated with cultural landscapes and/or by providing conservation opportunities in heavily used landscapes. • To provide opportunities for enjoyment, well-being and socio-economic activity through recreation and tourism. • To provide natural products and environmental services. • To provide a framework to underpin active involvement by the community in the management of valued landscapes and seascapes and the natural and cultural heritage that they contain. • To encourage the conservation of agrobiodiversity and aquatic biodiversity. • To act as models of sustainability so that lessons can be learnt for wider application (Dudley 2008).
Total Area to be reported to CARTS (ha)	*Only those sites, or portions of sites that meet a minimum reporting standard should be reported to CARTS* 820 ha
Identify deficiencies that could be overcome in order to report to CARTS	The management mechanism and the 'dedication' mechanism could be strengthened.

Literature Cited:

Dudley, N. (Editor). 2008. Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN. x + 86p. WITH S. Stolton, P. Shadie, and N. Dudley. 2013. IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No. 21, IUCN, Gland, Switzerland.

TRCA (Toronto and Region Conservation Authority). 1995. The Strategy for Public Use of Conservation Authority Lands. Toronto and Region Conservation Authority, Toronto, Ontario.

TRCA (Toronto and Region Conservation Authority). 1998. Managed Forest Plan. Toronto and Region Conservation Authority, Toronto, Ontario.

TRCA (Toronto and Region Conservation Authority). 2001. Toronto and Region Conservation Authority Business Plan. Toronto and Region Conservation Authority, Toronto, Ontario.

TRCA (Toronto and Region Conservation Authority). 2004. Humber Habitat Implementation Plan. Toronto and Region Conservation Authority). 2004, Toronto, Ontario.

TRCA (Toronto and Region Conservation Authority). 2006. Operational Procedures for managing Hazard Trees. Toronto and Region Conservation Authority, Toronto, Ontario.

TRCA (Toronto and Region Conservation Authority). 2007. Terrestrial Natural heritage System Strategy. Toronto and Region Conservation Authority, Toronto, Ontario. 57p.

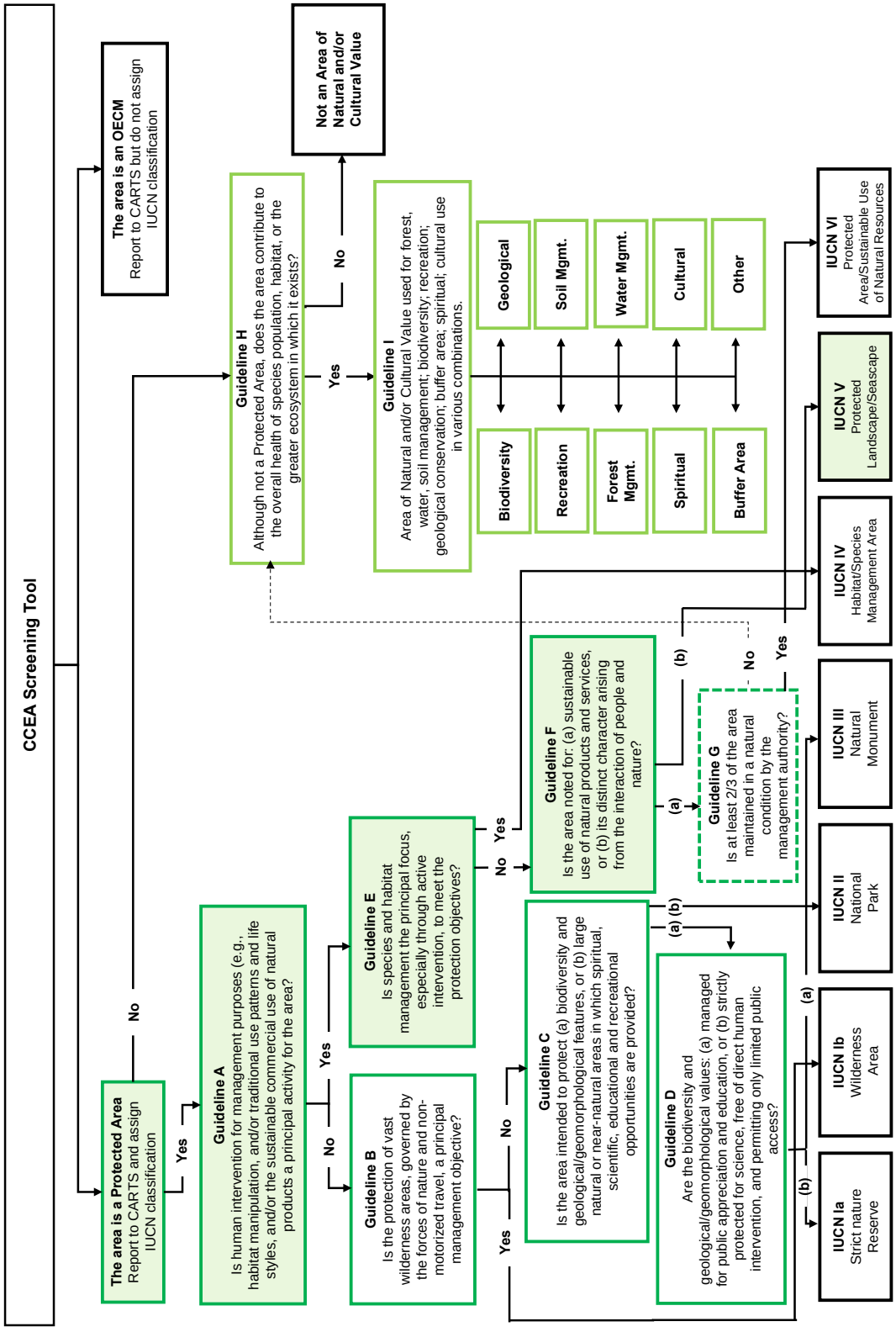
TRCA (Toronto and Region Conservation Authority). 2008. Humber River Watershed Plan Implementation Guide. Toronto and Region Conservation Authority, Toronto, Ontario.

TRCA (Toronto and Region Conservation Authority). 2012. Nashville Resource Management Tract Background Report. Toronto and Region Conservation Authority, Toronto, Ontario.

TRCA (Toronto and Region Conservation Authority). 2014b. Humber River Watershed Plan: Pathways to a Healthy Humber. Toronto and Region Conservation Authority, Toronto, Ontario.

TRCA (Toronto and Region Conservation Authority). 2015. Nashville Resource Management Tract (Nashville Conservation Reserve) Management Plan. Final Draft, May 2015. Toronto and Region Conservation Authority. 63p. Accessed on 17 February 2016. Available online at: http://www.trca.on.ca/dotAsset/210623.pdf

IUCN Diagnostic Key for the Nashville Conservation Reserve



Parrott's Bay Conservation Area

DRAFT ONLY – JUNE 2017 – CONTACT THE CATARAQUI REGION CONSERVATION AUTHORITY TO CHECK FOR CHANGES

Basic Information	
Name of Site	Parrott's Bay Conservation Area
Designation	Conservation Area
Province/Territory	Ontario
Date of Establishment/ Securement	1980s - 2006 (note that the property was designated for public recreation in 1969 by Ernestown [now Loyalist] Township Council to preclude development).
Area (ha)	117
Management Authority	Cataraqui Region Conservation Authority (CRCA)
Governance Type	Government – Subnational
Legal Basis/mechanism(s)	**Legislation:** Clean Water Act Conservation Authorities Act Endangered Species Act Environmental Assessment Act Environmental Bill of Rights Fish and Wildlife Conservation Act Public Lands Act Planning Act Species At Risk Act Trespass to Property Act **Policy:** Provincial Policy Statement (MMA 2014) Managed Forest Program Conservation Lands Tax Incentive Program **Plans:** Parrott's Bay Master Plan (Hynes 2009)
Summary of Essential/ Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity* The CA encompasses coastal marsh, and deciduous and mixed forest surrounding Parrott's Bay along the Lake Ontario shoreline. The shoreline wetland of the Bay is a Provincially Significant Wetland and a candidate ANSI. The CA encompasses the habitat of plant and animal species that are locally and provincially significant. Significant species include Pied-billed Grebe, Marsh Wren, Least Bittern, Caspian Tern, Northern Harrier, King Rail, and the Stinkpot Turtle. Parrott's Bay is an area of outstanding natural beauty, and provides a place for quiet, rest, and contemplation in a natural setting. It provides connecting habitat through which species move between the Lake Ontario shoreline and inland wetlands, woodlands, and alvars. It contains culturally significant features and history that enrich the community and link to the area's heritage (Hynes 2009).

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the

long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OECM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Green	The area is clearly defined by the Conservation Authority and described in management plans and policies.
Scope of Conservation Objectives	Green	The objectives are for conservation as a whole, including ecosystems, species, and genetic diversity. The Parrott's Bay Conservation Area is managed by the CRCA to meet the following primary goals: • To protect the (cultural and ecological) site's regional/provincial significance and diversity. • To establish the PBCA's role as a link in a larger network of protected, natural spaces. • To encourage and educate area residents to responsibly use and value this community asset (Hynes 2009).
Primacy of Nature Conservation Objective(s)	Yellow	Based on allowable and prohibited activities and evident intent, conservation of biodiversity is the primary overriding objective. Protection of this coastal marsh is the main reason Parrott's Bay Conservation Area was established by the CRCA. Key management initiatives include: • Minimize change to preserve the natural state of the property. • Sensitive and core habitat areas should be designated/preserved against intrusion. • Place barriers that deter wheeled vehicles from accessing the property. • Place safeguards against the destruction or removal of natural features and habitat. • Reduce the number of access points, especially along Taylor-Kidd Blvd. • Designate the Highway 33 parking lot as the PBCA main entrance to create a central property access and focal point (Hynes 2009).
Governance	Green	As the governing authority, the Conservation Authority recognizes and abides by the site objectives. The CRCA operates conservation areas as part of its mandate under the Conservation Authorities Act, and more directly through CRCA policy in *Cataraqui to 2020* (CRCA 2001) that describes the strategic goals of the Authority (Hynes 2009).
Effective Means – 1	Green	The management mechanisms have the power to exclude, control, and manage all activities within the area that are likely to have impacts on biodiversity. The Conservation Authorities Act, the Planning Act, the Endangered Species Act and other statutes provide the power to control activities that are likely to impact natural heritage (e.g., biodiversity) and other assets. The master plan provides operational guidance (Hynes 2009).
Effective Means – 2	Yellow	The management mechanisms do not compel the authority to prohibit activities that are incompatible with the conservation of biodiversity, but the authority is excluding those activities. The Authority is overseen by a Board which is comprised of municipal elected officials. The management mechanisms would encourage the prohibition of activities, and the Board has supported these objectives. However, decisions are ultimately

		up to the Board and they are not forced to prohibit activities. It is possible to argue that any activity on the property would be incompatible with conserving biodiversity and therefore recreational trails are an incompatible activity that is being allowed. The Authority has and continues to monitor and react to issues that affect biodiversity. Property management, including prohibited activities, are described in the master plan and CRCA policies in a manner that preserves natural features.
Long Term	Yellow	The management mechanism is intended or expected to be in effect indefinitely. The Authority reviews its master plans for its properties and makes updates as required. Therefore, while the general direction/intent of the Authority should remain for perpetuity, the management mechanism(s) may change or evolve over time.
Dedicated	Red	The management mechanisms can be reversed without much difficulty because reversal requires approval of the Authority Board.
Timing	Green	The designation is year-round.
Summary of Evaluation	Green 5 for 9 criteria Yellow 3 for 9 criteria Red 1 for 9 criteria	

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OECM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS*. A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity	
	Evidence-based Rationale
Mechanism for Protection	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Excerpt from the *Mining Act* Column A: **Southern Ontario:** (2) In Southern Ontario, for lands where there is a surface rights owner and the mining rights are held by the Crown, the mining rights shall be deemed to be withdrawn from prospecting, staking, sale and lease as of the day this subsection comes into force. 2009, c. 21, s. 15 (1). **Exception** (3) Despite subsection (2), any mining claims, mining leases or licences of occupation for mining rights existing on the day this section comes into force shall not be affected by the deemed withdrawal under that subsection and shall remain open for prospecting, sale or lease. 2009, c. 21, s. 15 (1) (Mining Act). Column B: **Southern Ontario:** (2) In Southern Ontario, for lands where there is a surface rights owner and the mining rights are held by the Crown, the mining rights shall be deemed to be withdrawn from prospecting, staking, sale and lease as of the day this subsection comes into force. 2009, c. 21, s. 15 (1). **Exception** (3) Despite subsection (2), any mining claims, mining leases or licences of occupation for mining rights existing on the day this section comes into force shall not be affected by the deemed withdrawal under that subsection and shall remain open for prospecting, sale or lease. 2009, c. 21, s. 15 (1) (Mining Act).

	Column C: **Southern Ontario:** (2) In Southern Ontario, for lands where there is a surface rights owner and the mining rights are held by the Crown, the mining rights shall be deemed to be withdrawn from prospecting, staking, sale and lease as of the day this subsection comes into force. 2009, c. 21, s. 15 (1). **Exception** (3) Despite subsection (2), any mining claims, mining leases or licences of occupation for mining rights existing on the day this section comes into force shall not be affected by the deemed withdrawal under that subsection and shall remain open for prospecting, sale or lease. 2009, c. 21, s. 15 (1) (Mining Act).		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented
	green	green	green
Evidence-based rationale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness*		
Existing subsurface resource activities (if applicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent*		
Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, minimum standard with rationale, below minimum standard but with clear evidence, below minimum standard* Best Practice		

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OEABCM or n/a?	not applicable *If "other" please identify combination:* Not a protected area
Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)* 5 of 9 Green, 3 of 9 Yellow, and 1 of 9 Red – Do not Report to CARTS
Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)* Best Practice
IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: not reported Outcome (change): not reported Rationale:

Total Area to be reported to CARTS (ha)	*Only those sites, or portions of sites that meet a minimum reporting standard should be reported to CARTS* Not applicable
Identify deficiencies that could be overcome in order to report to CARTS	A primary requirement for protected area status is the strength of the management mechanism with respect to status reversal.

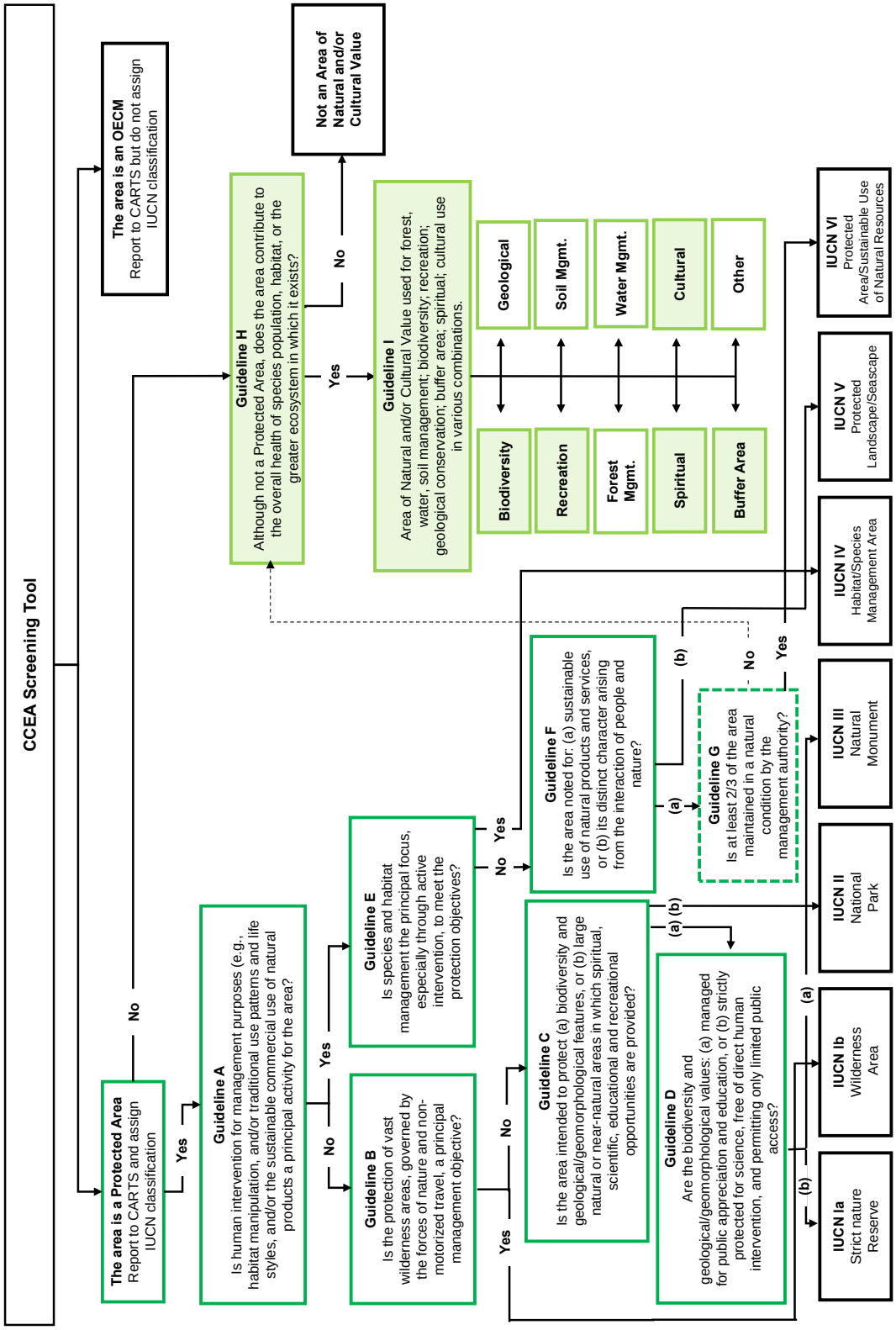
Literature Cited:

CRCA (Cataraqui Region Conservation Authority). 2001. Cataraqui to 2020. Cataraqui Region Conservation Authority.

CRCA (Cataraqui Region Conservation Authority). 2010. Conservation Lands Guidelines: Our Role, Principles and Priorities. Cataraqui Region Conservation Authority.

Hynes, J.D. 2009. Parrott's Bay Conservation Area Master Plan. Cataraqui Region Conservation Authority. 83p. Accessed on 17 February 2016. Available online at: http://crca.ca/wp-content/uploads/PDFs/PBCA_draft_masterplan_april2009.pdf .Accessed

IUCN Diagnostic Key for Parrott's Bay Conservation Area



Springwater Forest

DRAFT ONLY – JUNE 2017 – CONTACT THE CATFISH CREEK CONSERVATION AUTHORITY TO CHECK FOR CHANGES

Basic Information	
Name of Site	Springwater Forest
Designation	Conservation Area
Province/Territory	Ontario
Date of Establishment/ Securement	
Area (ha)	150
Management Authority	Catfish Creek Conservation Authority (CCCA)
Governance Type	Government – Subnational
Legal Basis/mechanism(s)	**Legislation:** Clean Water Act Conservation Authorities Act Endangered Species Act Environmental Assessment Act Environmental Bill of Rights Fish and Wildlife Conservation Act Public Lands Act Planning Act Species At Risk Act Trespass to Property Act **Policy:** Conservation Land Tax Incentive Program Area Natural and Scientific Interest (ANSI) Policy **Plans:** CA Operations Plan
Summary of Essential/ Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity* This 150 ha site encompasses a variety of habitats including a 5.5 ha pond and Carolinian forest. There are three trails. The 8 km long Springwater Forest trail traverses the mature Carolinian forest inhabited by species such as the Hooded Warbler, Tufted Titmouse, and the Pileated Woodpecker. The Millpond Trail extends through the campground, skirts a freshwater marsh, and takes hikers over an earthen dam and past a variety of Carolinian plant and animal communities. The 1.5 km Arboretum Trail takes hikers past rare Carolinian species such as American Sweet Chestnut, Paw Paw, White Mulberry, Blue Ash, Heart Nut, Sassafras, and Tulip Tree. Throughout the year, the CCCA sponsors a variety of educational activities, including programs about land and water management. The Jaffa Environmental Education Center and the CCCA work together to provide students with a maple syrup education program every March. The Springwater Forest is an Area of Natural and Scientifics Interest (ANSI) and an Area of Provincial Significance inhabited by 11 rare plant species. Three species of provincial significance grow here: Tulip Tree, Eastern Flowering Dogwood, and Yellow Mandarin (Naturally Elgin 2012).

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OECM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Green	All CA properties acquired in fee simple have a metes and bounds survey with registered boundaries on title.
Scope of Conservation Objectives	Green	The objectives are for conservation as a whole, including ecosystems, species, and genetic diversity. The properties are managed to conserve the wetland and forest, provide habitat for priority species and to support seasonal use including hunting, hiking, research, environmental education, and nature appreciation (Carolinian Canada n.d.).
Primacy of Nature Conservation Objective(s)	Green	Conservation of biodiversity is stated as the primary overriding objective. The area is managed as an ANSI.
Governance	Green	The Conservation Authority acknowledges and abides by the same conservation objectives for the area.
Effective Means – 1	Green	The management mechanisms have the power to exclude control and manage all activities within the area that are likely to have impacts on biodiversity. Management mechanisms include the Conservation Authorities Act, the Planning Act, the Endangered Species Act, and other statutes that provide the power to control activities that are likely to impact natural heritage (e.g., biodiversity) and other assets.
Effective Means – 2	Green	The management mechanisms compel the authority to prohibit activities that are incompatible with the conservation of biodiversity. Prohibited activities include: • No motorized vehicles are permitted and all pets must be leashed securely (owners must clean up after their pets). • All users must stay on designated trails and have due regard for other visitors. No camping, fires, littering, or hunting is permitted. • No person shall cut, remove, injure, or destroy a plant, tree, shrub, flower, or habitat. • No person shall carry out any research project except under a permit issued by the Authority. In addition, Conservation Areas Regulations, Section 29, Regulation 100 under the Conservation Authorities Act also applies (CCCA n.d.).
Long Term	Green	The management mechanism is intended to be in effect in perpetuity.
Dedicated	Green	The management mechanisms can be reversed only with great difficulty because reversal requires approval from the province of Ontario and under the auspices of the Conservation Authorities Act.
Timing	Green	The management mechanism is in effect year-round.

Summary of Evaluation	9 Green of 9 criteria

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OECM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS*. A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity			
	Evidence-based Rationale		
Mechanism for Protection	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Column A: Not aware of any subsurface rights registered against the property. Column B: Not aware of any subsurface rights registered against the property. Column C: Not aware of any subsurface rights registered against the property.		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented
	green	green	green
Evidence-based rationale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness*		
Existing subsurface resource activities (if applicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent* None		
Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, minimum standard with rationale, below minimum standard but with clear evidence, below minimum standard* Best Practice		

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OEABCM or n/a?	Protected Area *If "other" please identify combination:*
Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)* 9 of 9 Green – Report to CARTS

Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)* Best Practice
IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: not reported Outcome (change): Category IV Rationale: Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category. Other objectives include: • To protect vegetation patterns or other biological features through traditional management approaches. • To protect fragments of habitats as components of landscape or seascape-scale conservation strategies. • To develop public education and appreciation of the species and/or habitats concerned. • To provide a means by which the urban residents may obtain regular contact with nature (Dudley 2008).
Total Area to be reported to CARTS (ha)	150 ha
Identify deficiencies that could be overcome in order to report to CARTS	

Literature Cited:

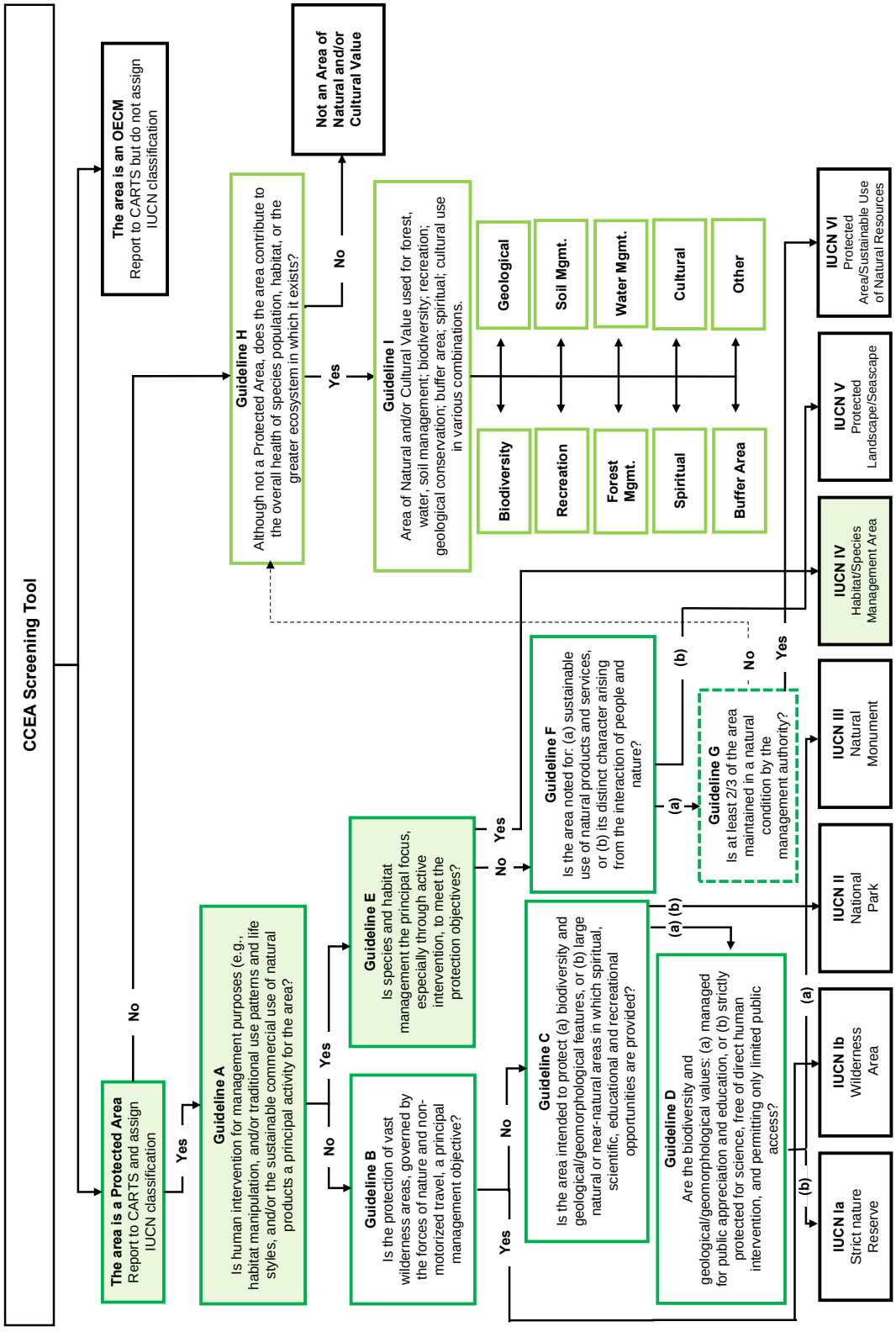
Carolinian Canada. No Date. Calton Swamp Wildlife Management Area/Calton Swamp Wetland Complex. Accessed on 16 February 2016. Available online at: https://caroliniancanada.ca/calton-swamp-wildlife-management-area-calton-swamp-wetland-complex

CCCA (Catfish Creek Conservation Authority). Accessed on 16 February 2016. Available online at: http://www.catfishcreek.ca/conservation_rules

Dudley, N. (Editor). 2008. Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN. x + 86p. WITH S. Stolton, P. Shadie, and N. Dudley. 2013. IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No. 21, IUCN, Gland, Switzerland.

Naturally Elgin. 2012. Springwater Forest. Accessed on 16 February 2016. Available online at: http://www.naturallyelgin.com/natural-areas/springwater-forest/

IUCN Diagnostic Key for Springwater Forest



Stone Road Alvar Conservation Area

DRAFT ONLY – JUNE 2017 – CONTACT THE ESSEX REGION CONSERVATION AUTHORITY TO CHECK FOR CHANGES

Basic Information	
Name of Site	Stone Road Alvar Conservation Area
Designation	Conservation Area
Province/Territory	Ontario
Date of Establishment/ Securement	1987-1989
Area (ha)	36.4
Management Authority	Essex Region Conservation Authority (ERCA)
Governance Type	Government – Subnational
Legal Basis/mechanism(s)	**Legislation:** Clean Water Act Conservation Authorities Act Endangered Species Act Environmental Assessment Act Environmental Bill of Rights Fish and Wildlife Conservation Act Public Lands Act Planning Act Species At Risk Act Trespass to Property Act **Policy:** Conservation Areas Land Management Framework (contact the CA for more Information)
Summary of Essential/ Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity* Alvar ecosystems occur on flat glaciated limestone bedrock where soils are thin or absent and distinct associations of plants have adapted to seasonal drought and flooding (Johnson 2005). The Stone Road Alvar is located on Pelee Island where access is by boat only. The alvar is an area of thin topsoil over limestone bedrock, a unique ecosystem and one of the region's most biologically diverse. It encompasses habitat that supports 55 native alvar plants. Stone Road Alvar is prime habitat for the endangered Blue Racer snake. As well, five rare butterflies occur quite commonly at Stone Road: Giant Swallowtail, Tawny Emperor, Acadian Hairstreak, Hackberry Butterfly, and Sachem Skipper. Carolinian bird species such as the Yellow-breasted Chat and the Blue-gray Gnatcatcher use the property's dense thickets. Chinquapin Oaks are scattered throughout the alvar habitat and can often be well over 100 years old. The open savannahs provide habitat for the provincially rare Hop Tree and Blue Ash. Of special note is the local abundance of Downy Wood Mint, a plant confined to Pelee Island in Canada (ERCA n.d.). The site is managed in collaboration with the neighbouring Nature Conservancy of Canada and Nature Canada (R. Wyma, personal communication).

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OECM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Green	The area is clearly defined by the Conservation Authority and described in management plans and policies.
Scope of Conservation Objectives	Green	The objectives are for conservation as a whole, including ecosystems, species, and genetic diversity.
Primacy of Nature Conservation Objective(s)	Yellow	Based on allowable and prohibited activities and evident intent, conservation of biodiversity is the primary overriding objectives. Management efforts include periodic prescribed burns to prevent the natural succession of shrubs from closing in on the savannah communities (ERCA n.d.).
Governance	Green	As the governing authority, the Conservation Authority recognizes and abides by the site objectives.
Effective Means – 1	Yellow	A management planning framework is applied to all Conservation Areas in the Region.
Effective Means – 2	Green	The management mechanisms compel the authority to prohibit activities that are incompatible with the conservation of biodiversity.
Long Term	Green	The management mechanism is intended or expected to be in effect indefinitely.
Dedicated	Yellow	The management mechanisms can be reversed with moderate difficulty because reversal requires a resolution from the CA Board of Directors. Such a reversal would be contrary to the CA's strategic direction and difficult to achieve.
Timing	Green	The designation is year-round.
Summary of Evaluation	Green 6 for 9 criteria Yellow 3 of 9 criteria	

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OECM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS.* A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity			
	Evidence-based Rationale		
Mechanism for Protection	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Column A: Withdrawn Column B: Withdrawn Column C:Withdrawn		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented
	green	green	green
Evidence-based rationale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness*		
Existing subsurface resource activities (if applicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent*		
Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, minimum standard with rationale, below minimum standard but with clear evidence, below minimum standard* Best Practice		

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OEABCM or n/a?	Protected Area *If "other" please identify combination:*
Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)* 6 0f 9 Green and 3 of 9 Yellow - Report to CARTS as a candidate target protected area
Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)* Best Practice
IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: not reported Outcome (change): Category III Rationale: Category III protected areas are set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value. Objectives:

	• To protect specific outstanding natural features and their associated biodiversity and habitats. • To provide biodiversity protection in landscapes or seascapes that have otherwise undergone major changes. • To protect specific natural sites with spiritual and/or cultural values where these also have biodiversity values. To conserve traditional spiritual and cultural values of the site (Dudley 2008).
Total Area to be reported to CARTS (ha)	*Only those sites, or portions of sites that meet a minimum reporting standard should be reported to CARTS* 36.4 ha
Identify deficiencies that could be overcome in order to report to CARTS	Difficulty for reversal could be strengthened.

Literature Cited:

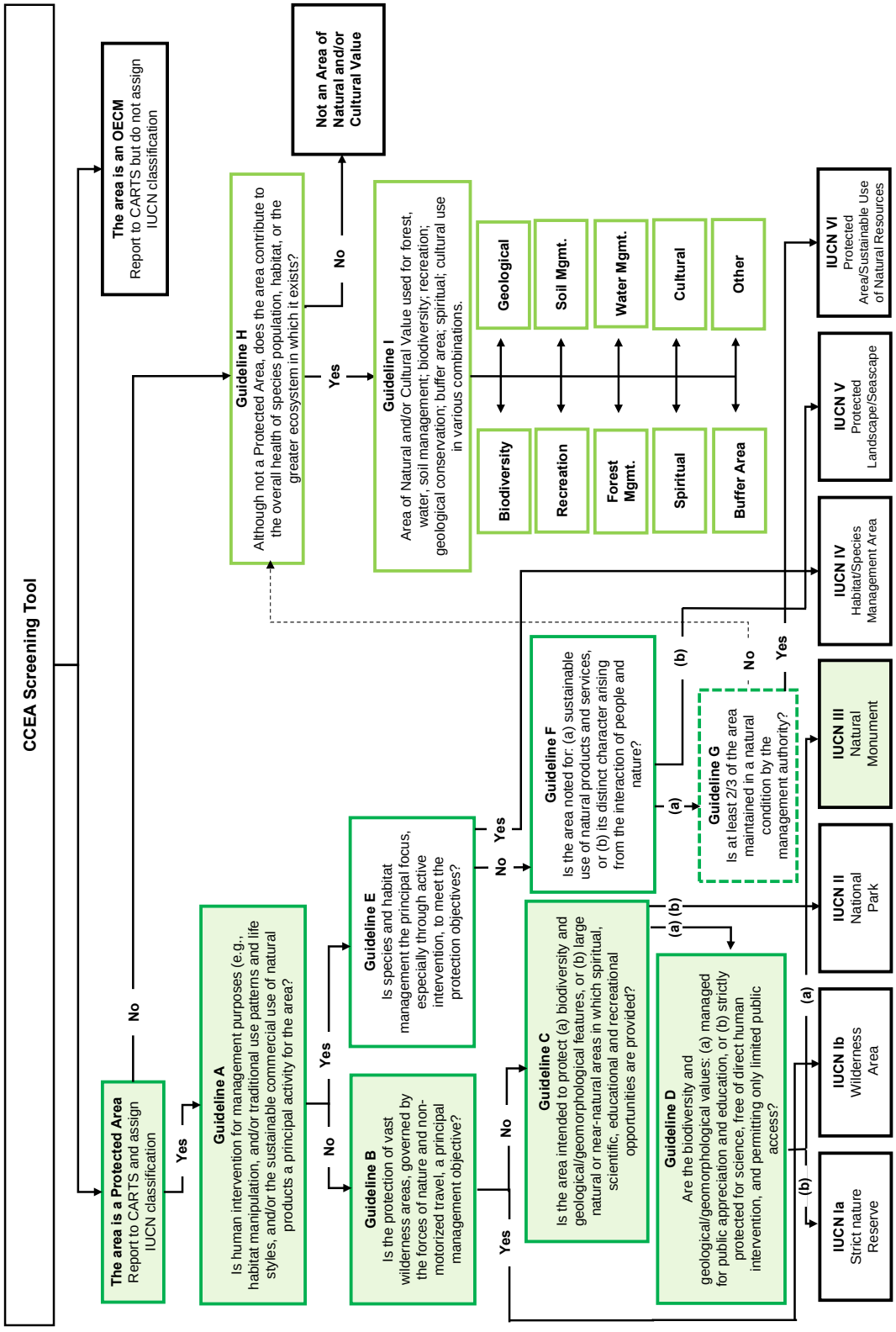
Dudley, N. (Editor). 2008. Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN. x + 86p. WITH S. Stolton, P. Shadie, and N. Dudley. 2013. IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No. 21, IUCN, Gland, Switzerland.

ERCA (Essex Region Conservation Authority). No Date. Stone Road Alvar. Accessed on 17 February 2016. Available online at: http://erca.org/conservation-areas-events/conservation-areas/stone-road-alvar/

Johnson, L. 2005. Carolinian Canada Signature Sites: A Guide to 38 Special Natural Areas in Ontario's Deep South and Heritage Plaques Celebrating Community Conservation. Carolinian Canada Coalition, London, Ontario. 79p.

Wyma, R. personal communication.

IUCN Diagnostic Key for Stone Road Alvar



Warsaw Caves Conservation Area

DRAFT ONLY – JUNE 2017 – CONTACT THE OTANABEE REGION CONSERVATION AUTHORITY TO CHECK FOR CHANGES

Basic Information	
Name of Site	Warsaw Caves Conservation Area
Designation	Conservation Area
Province/Territory	Ontario
Date of Establishment/ Securement	1962
Area (ha)	245.8 ha
Management Authority	Otonabee Region Conservation Authority (ORCA)
Governance Type	Government – Subnational
Legal Basis/mechanism(s)	**Legislation:** Clean Water Act Conservation Authorities Act Endangered Species Act Environmental Assessment Act Environmental Bill of Rights Fish and Wildlife Conservation Act Public Lands Act Planning Act Species At Risk Act Trespass to Property Act **Policy:** Planning Act – Provincial Policy Statement (MMA 2014) Assessment Act – O. Reg 282/98 affords tax relief for lands containing ANSIs through the Conservation Land Tax Incentive Program (CLTIP) ORCA's Land Management Policy ORCA's Watershed Planning and Regulation Policy (ORCA 2012) **Plans:** A management plan for Warsaw Caves Conservation Area will be completed in the future
Summary of Essential/ Relevant Natural, social and cultural values	*Maximum 3-4 sentences intended to provide overall site context and connection to conservation of biodiversity* The Warsaw Caves Conservation Area encompasses a unique suite of geological and biological assets recognized as a significant ecosystem with assets that merit protection. There is an Area of Natural and Scientific Interest (ANSI-LS - provincially significant representative ecological features-life science) and ORCA owns more than 50% of it, an Earth Science site (ES-provincially significant representative ecological features an area recognized as having geological features that has not been officially designated as a provincial earth science ANSI), an IBP (International Biological Programme) site (136.4 ha) (IBP-a site inventoried in the late 1960's and early 1970s as part of the International Biological Program), and a Provincially Significant Wetland (16 ha) (PSW-Wetland Complex) (Brunton 1990, MNR 2007).

Part A Instructions:

Use the Decision Screening tool for Aichi Target 11 protected areas and Other Effective Area Based Conservation Measures (OECMs) with the table in Part A to assess the effectiveness of the mechanism for the long-term conservation of biodiversity criteria for reporting to CARTS. A copy of the protected areas and OECM Screening Tool is attached.

PART A: Conservation Effectiveness		
Criteria	Potential Effectiveness (Green, Yellow, Red)	Evidence-based Rationale
Geographical Space	Green	The area is clearly defined by the Conservation Authority and described in management plans and policies. In addition, about 50% of the property is demarcated by boundary roads and a watercourse, 25% is marked with fences and hedgerows, and the remaining 25% is either unmarked or in an indeterminate state because it is not readily accessible.
Scope of Conservation Objectives	Yellow	The objectives are for conservation or a subset of biodiversity, such as particular species or habitats, but not for biodiversity as a whole. ORCAs guiding principles are safe watershed, healthy watershed, protected watershed, and sustainable watershed. ORCA works with all levels of government to enhance watershed health by coordinating and implementing a variety of programs and services designed to: • Facilitate watershed planning. • Enhance water quality. • Maintain reliable water supply. • Reduce flood damages. • Protect natural areas and biodiversity. • Provide environmental education. • Provide environmentally responsible outdoor recreational opportunities.
Primacy of Nature Conservation Objective(s)	Red	Conservation of biodiversity is either not an objective or, where it is an objective, is not readily given priorities in cases of conflict among objectives. This CA is recreation-oriented. Recreation-oriented activities have a relatively small footprint on the property and much of the rest of the property offers only limited accessibility and is thereby in some measure insulated from impacts. Where site improvements are made for recreational purposes, consideration is given to minimalizing or avoiding environmental impacts.
Governance	Green	As the governing authority, the Conservation Authority recognizes and abides by the site objectives. The CA works closely with partners to ensure that the site objectives are recognized.
Effective Means – 1	Yellow	The management mechanisms have the power to exclude, control and manage most activities within the area that are likely to have impacts on biodiversity. The Conservation Authorities Act, the Planning Act, the Endangered Species Act, and other statutes that provide the power to control activities that are likely to impact natural heritage (e.g., biodiversity) and other assets. The Watershed Planning Regulations Policy Manual (ORCA 2012) provides operational guidance.

Effective Means – 2	Yellow	The management mechanisms do not compel the authority to prohibit activities that are incompatible with the conservation of biodiversity, but the authority is excluding those activities. While there is no specific focus on biodiversity, ORCA's broad approach is to try to minimize impacts on the property.
Long Term	Yellow	The management mechanism is intended or expected to be in effect in-definitely.
Dedicated	Green	The management mechanisms can be reversed only with great difficulty because reversal requires action by the Province and some fundamental changes to land use and planning policies. ORCA owns the Warsaw Caves Conservation Area and is committed to its long-term protection and management.
Timing	Green	The designation is year-round.
Summary of Evalua-tion	Green 4 of 9 criteria Yellow 4 of 9 criteria Red 1 of 9 criteria	

Part B Instructions:

All PAs and OECMs must be evaluated against the Subsurface Tool to identify the effectiveness of the mechanism for managing subsurface resources within the PA or OECM. *Only those sites or portions of sites that meet or exceed the minimum standard should be reported to CARTS*. A copy of the Subsurface Resources Screening Tool is attached.

PART B: Effectiveness of Protection from Subsurface Resource Activity			
	Evidence-based Rationale		
Mechanism for Protec-tion	*Location on subsurface table under Mechanism for Protection (columns A, B, and C)* Column A: No Resources Column B: No Resources Column C: No Resources		
Effectiveness	Granting Rights Prevented	Exercise of Rights Prevented	Impacts Prevented
	green	green	green
Evidence-based ra-tionale	*For those sites identified as minimum standard with rationale (i.e., may or may not meet minimum standard), please summarize rationale/evidence of prevention of impacts and long-term effectiveness* There are no known mineral resources of interest in the subsurface. Historical quarrying of limestone along the river bank is long abandoned and there is no reasonable prospect that it will resume.		
Existing subsurface re-source activities (if ap-plicable)	*Summarize existing commitments, if any that are honoured, and approximate area/extent* None		
Outcome	*Identify recommended interpretation of outcome: Best practice, minimum standard, mini-mum standard with rationale, below minimum standard but with clear evidence, below minimum standard* Best Practice		

Part C Instructions:

Include outcomes from Parts A and B, as well as the IUCN Management Category assignment to the reporting outcomes summary below.

PART C: CARTS Database Reporting Outcomes – Summary	
Is it a protected area or OEABCM or n/a?	not applicable *If "other" please identify combination:*
Part A Outcome: Conservation Effectiveness	*All Green = report to CARTS* *Any Yellow = sufficient evidence must be shown that deficiency is addressed or overcome for each yellow criteria to report to CARTS* *Any Red = do not report to CARTS (deficiencies not addressed)* Green 4 of 9, Yellow 4 of 9 criteria, and Red 1 of 9 - Do not report to CARTS
Part B Outcome: Effectiveness for protection from Subsurface Resource Activity?	*Identify if site meets: Best practice, minimum standard, below minimum standard (note: PAs or those areas within PAs that do not meet minimum standard should not be reported to CARTS)* Best Practice
IUCN PA Management Category and Rationale Summary *(for sites to be reported as protected areas only)*	*Use the Canadian Guidelines (or International Guidelines) to determine the most applicable protected areas management category to be used in reporting to CARTS. Include a 1 – 2 sentence summary of rationale/criteria supporting the assigned category based on Canadian or International Guidelines* Currently reported: not reported Outcome (change): not reported Rationale:
Total Area to be reported to CARTS (ha)	Only those sites, or portions of sites that meet a minimum reporting standard should be reported to CARTS
Identify deficiencies that could be overcome in order to report to CARTS	Objectives and management mechanisms would require strengthening for the area to be designated as an IUCN protected area.

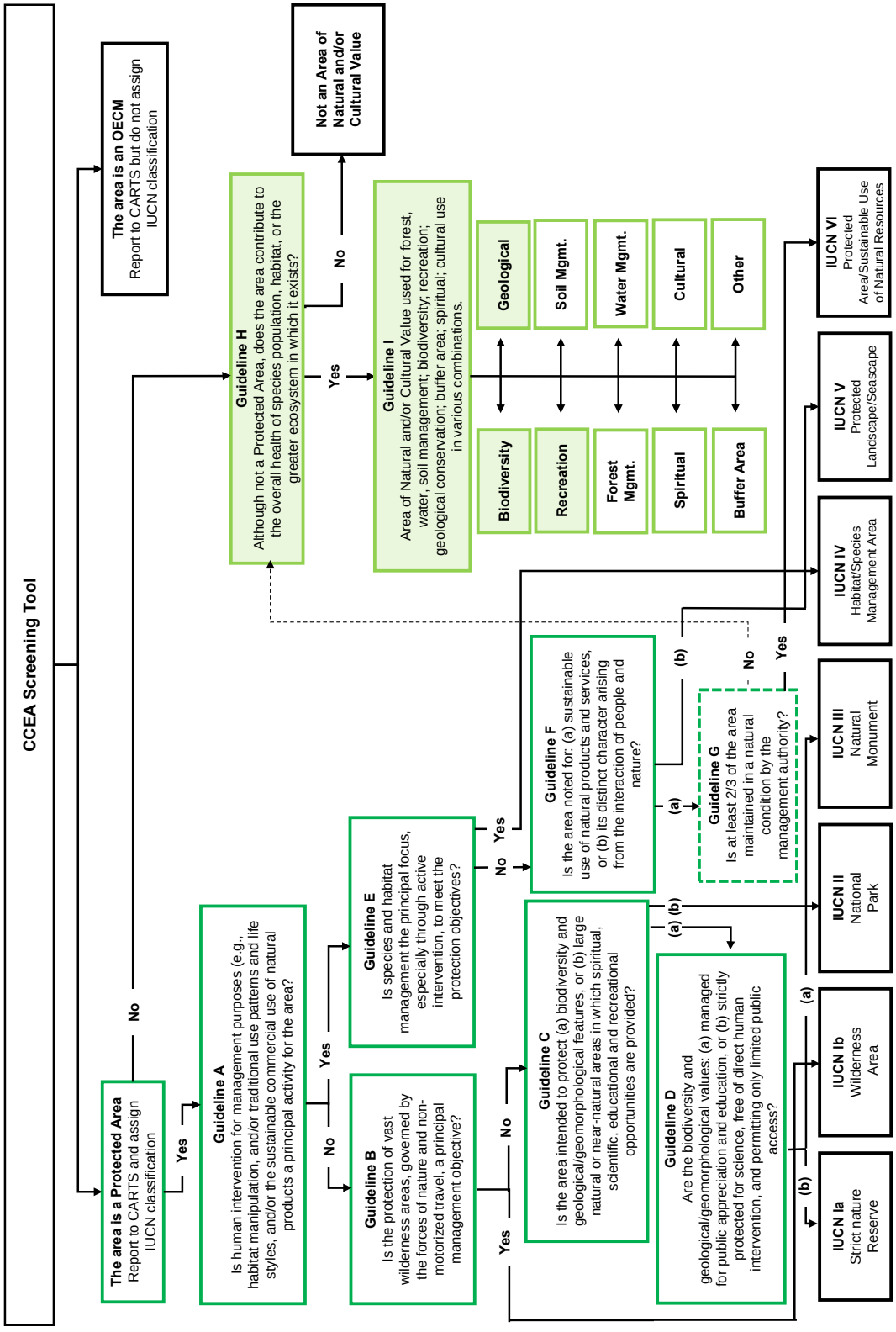
Literature Cited:

Brunton, D.F. 1990. A Biological Inventory of the Warsaw Caves Area of Natural and Scientific Interest, Peterborough County, Ontario. Parks and Recreational Areas Section, Ontario Ministry of Natural Resources Open File Ecological Report 9002, Central Region, Aurora, Ontario. 77p.

MNR (Ministry of Natural Resources). 2007. Natural Areas Report: Warsaw Caves Conservation Area. Ministry of Natural Resources. Available online at: http://www.warsawcaves.com/MNR%20ANSIs.pdf

ORCA (Otonabee Region Conservation Authority). 2012. Watershed Planning and Regulation Policy Manual (Approved May 17, 2012). Available online at: http://www.otonabee.com/wp-content/uploads/2014/04/ORCA-Watershed-Planning-Regulation-Policy-Manual-April-2014-DFO-Strikethroughs.pdf

IUCN Diagnostic Key for the Warsaw Caves



APPENDIX F: FACILITATOR'S SUMMARY – A WORKSHOP TO DISCUSS THE POTENTIAL CONTRIBUTION OF LANDS AND WATERS MANAGED BY THE ONTARIO CONSERVATION AUTHORITIES AND PARTNERS TO CANADA'S COMMITMENT TO THE AICHI BIODIVERSITY TARGET

Suggested Citation: Morand, A., and R. Ogilvie. 2017. Facilitator's Summary: A Workshop to Discuss the Potential Contribution of Lands and Waters Managed by the Ontario Conservation Authorities and Partners to Canada's Commitment to the Aichi Biodiversity Targets. Summary Report from a Workshop held on March 28, 2017 in Barrie, Ontario Designed and Facilitated by Ogilvie, Ogilvie & Company and the Ontario Centre for Climate Impacts and Adaptation Resources (OCCIAR), with Support from the Canadian Wildlife Service – Environment and Climate Change Canada.

Facilitator's Summary

A workshop to discuss the potential contribution of lands and waters managed by the Ontario Conservation Authorities and partners to Canada's commitment to the Aichi Biodiversity Targets

March 28, 2017

Holiday Inn Barrie Hotel and Conference Centre
20 Fairview Road, Barrie, ON

Under the auspices of the Canadian Wildlife Service – Environment and Climate Change Canada

Designed and Facilitated by Ogilvie, Ogilvie & Company in association with the Ontario Centre for Climate Impacts and Adaptation Resources (OCCIAR)

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About this Report

The maintenance and enhancement of biodiversity is essential for long-term ecological sustainability and Protected Areas (PAs) are universally accepted as a critical means to conserve biodiversity. In 2010, the Convention on Biological Diversity (CBD) updated its Strategic Plan for Biodiversity (2011-2020), which is organized under five strategic goals and 20 headline targets ("the Aichi Biodiversity Targets"). The best known and perhaps most difficult commitment is defined in Target 11:

- "By 2020, at least 17 percent of terrestrial and in-land water, and 10 percent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes".

This report summarizes the results of a workshop held on March 27, 2017 at the Holiday Inn in Barrie, Ontario, to discuss the potential contribution of lands and waters managed by the Ontario Conservation Authorities (CAs) and partners to Canada's commitment to the Aichi Biodiversity Targets. Collectively, CA holdings are comprised of about 6,400 parcels that encompass more than 150,000 hectares, most of which is compositionally and/or functionally important for biodiversity conservation. It is not known how many conserved or protected areas in these parcels would qualify as Aichi Target 11 properties, or how these areas contribute to the other 19 Aichi Targets. Thus, workshop participants explored a proposed approach for cataloguing and assessing the conservation value of CA lands and waters, and to discuss the potential contribution of these properties to Canada's commitment to the Aichi Biodiversity Targets. Specifically, the Canadian Wildlife Service (Ontario Region) asked that participants:

- Discuss CA comfort level with the methodology and results of Phase I of the project and identify options for improvement;
- Discuss the update provided for Phase II of the project; and
- Explore interest by CAs and partners in participating in future initiatives.

Prior to the workshop, participants were sent a digital copy of the Report, "Fully Accounting for Canada's Conservation Lands", which proposes a methodology for cataloguing and assessing the conservation value of lands held in full or partial title by CAs in regard to the protection or conservation of biodiversity, as well as the Workshop Handbook (i.e. the "Coles Notes" version of the larger report which provides a shorter version of the report and highlights the major findings, conclusions and recommendations).

Acknowledgements

Sincere thanks to all those who participated in the workshop and provided their valuable input and feedback on the report and methodology. Participants included representatives from 15 of the 36 Conservation Authorities in Ontario, Conservation Ontario, Ontario Nature, Ontario Biodiversity Council, the Ontario Ministry of Natural Resources and Forestry, the Environmental Commissioner's Office, the Nature Conservancy of Canada, as well as Environment and Climate Change Canada.

Workshop Participants

• Andrea Kettle	Head, Protected Areas and Stewardship, Canadian Wildlife Service, ECCC
• Alyson Symon	Watershed Planner, Mississippi Valley Conservation Authority
• Brian McDougall	General Manager, St. Clair Region Conservation Authority
• Brian R. Kemp	General Manager- Conservation Lands, Lake Simcoe Region Conservation Authority
• Byron Wesson	Director Lands, Education & Stewardship, Nottawasaga Valley Conservation Authority
• Caroline Schultz	Executive Director, Ontario Nature
• Cathy Quinlan	Terrestrial Biologist, Upper Thames River Conservation Authority
• Chris Hachey	Lands Management Coordinator, Grey Sauble Conservation
• Christian Asselin	Agent des aires protégées, Environnement et changement Climatique Canada
• Deanna Cheriton	Supervisor, Greenspace Conservation, Toronto and Region Conservation Authority
• Don Pearson	General Manager, Lower Thames Valley Conservation Authority
• Graham Bryan	Manager, Protected Areas, Canadian Wildlife Service, ECCC

- Hajnal Broz — Stewardship Liaison, Conservation Sudbury
- Heather Lynn — Ecologist - Conservation Lands, Credit Valley Conservation
- Jamie Davidson — Conservation Areas Planner, Central Lake Ontario Conservation Authority
- Jessie James — Manager, Conservation Lands Program, Otonabee Conservation
- Jim Mackenzie — NHIC Coordinator, Ontario Natural Heritage Information Centre
- Jocelyn Sherwood — National Conservation Plan Officer, Canadian Wildlife Service, ECCC
- Karen Hartley — Senior Protected Areas Ecologist, Protected Areas Section, MNRF
- Kim Barrett — Associate Director, Science and Partnerships, Conservation Halton
- Kim Gavine — General Manager, Conservation Ontario
- Kim Taylor — Ecologist, MNRF
- Kyra Howes — Manager of Lands & Operations, Nottawasaga Valley Conservation Authority
- Laura Bjorgan — Senior Conservation Ecologist, MNRF
- Noah Gaetz — Ecologist, Toronto and Region Conservation Authority
- Rebekah Church — Senior Policy Advisor, Office of the Environmental Commissioner of Ontario
- Richard Wyma — General Manager/Secretary-Treasurer, Essex Region Conservation Authority
- Rick Wilson — Information Management Coordinator, Conservation Ontario
- Rob Davis — Manager, Protected Areas Section, MNRF
- Steve Hounsell — Chair, Ontario Biodiversity Council
- Troy Storms — Supervisor Field Operations, North Bay-Mattawa Conservation Authority
- Wendy Cridland — Director of Conservation, Ontario Region, Nature Conservancy of Canada

Project Team

- Al Douglas — Director OCCIAR
- Annette Morand — Community Adaptation Coordinator, OCCIAR
- Paul Gray — Lead Author, Independent Consultant
- Robb Ogilvie — Facilitator, Ogilvie, Ogilvie & Company

Welcome and Introductory Remarks

Graham Bryan, Manager, Protected Areas

Canadian Wildlife Service, Environment and Climate Change Canada

Graham Bryan welcomed the group and provided a brief overview of the Fully Accounting for Canada's Conservation Lands (FACCL) initiative. He explained that a few years back, the different regions of the Canadian Wildlife Service (CWS) were tasked by Environment and Climate Change Canada (ECCC) to fully account for Canada's conservation lands in an effort to identify areas that could potentially contribute to Canada's 17% terrestrial Aichi Target commitment. Historically, only a few designations such as National Parks, Provincial Parks, and Territorial Lands were counted as formal protected areas and organized according to the International Union for Conservation Nature (IUCN) classification system. Given the diversity of protected area types in Canada, CWS was asked to identify other lands and waters that could be counted as part of the protected area estate.

Other types of potential protected areas in Ontario include land trust lands and private lands managed by the Nature Conservancy, Ontario Nature and other organizations. In addition, Ontario is unique in that it has Conservation Authority (CA) lands. CWS worked with Conservation Ontario and the Conservation Authorities to develop a database, catalogue CA properties, and enter the data into the database. However, they could not say how much of that land was protected, conserved by other means, or did not have any conservation value. This was the reason for this project – to develop a way to catalogue CA lands and determine if they qualify for classification under IUCN, if they fall under the new category of Other Effective Area-Based Conservation Measures (OEABCMs), etc.

The project team came up with a classification system based on the Canadian Council on Ecological Areas (CCEA), the IUCN, and other papers to try and get down to the question of what type of protection classification a parcel of land has. This process has taken a bit of time because it is very complicated, questions about management, the type of lands, etc. The project team developed an initial report under Phase I of the project and are now working on Phase II, which will involve classifying even more CA lands.

Graham explained that the purpose of the workshop is to share the results and methodology from Phase I of the project and to seek input and validation. For example, when we say a land is protected or conserved, the land manager/owner has to make that statement (i.e. it is up to the individual CA to agree or disagree); thus, we are seeking validation of results. We also hope that the workshop will spark an internal conversation amongst the CAs on how they feel about being counted towards the Aichi Target. Another initiative going on is Pathway 2020 which will chart out a pathway to achieve 17% by 2020. Results of this workshop will inform the Pathway 2020 work.

Beyond this, regionally CWS activities in this area are winding down. There will still be a database which will provide, at the very least, a snapshot in time of the lands held by CAs; however they will try and update the database over time, which might prove challenging based on the sheer scope of the lands and the resources needed to do it.

Introduction to the Study

Al Douglas, Director

Ontario Centre for Climate Impacts and Adaptation Resources (OCCIAR)

Al Douglas provided the group with a brief overview of the work that went into the study and the multi-disciplinary team who conducted the work. He explained that over the past 16 years, the Ontario Centre for Climate Impacts and Adaptation Resources (OCCIAR) has been focused on climate change impacts and adaptation, and there is a great connection between the impacts of climate change and the protection of biodiversity and protected areas. The work that OCCIAR does recognizes that facets of biodiversity and protected areas can change significantly in the context of

climate change over the next 30 years.

A few years ago OCCIAR connected with Graham Bryan, Paul Gray, Tom Beechey and Chris Lemieux to map out a process for examining the system of protected areas in Ontario, and the CAs and others played a big role in that. The team conducted research into the state of the classification of these areas and how those records could be reconciled to be thinking about how they can contribute to broader domestic and international targets.

Al acknowledged the project team and explained that Paul Gray was the lead that drove this process along and deserves full recognition for a lot of the content in the report; Tom Beechey contributed significantly to the report writing; Chris Lemieux helped construct some of the screening tools; and Jocelyn Sherwood and Graham Bryan helped develop tables, maps, etc. Al closed by reminding the participants that we are seeking their advice; we want them to be honest with us on what they think of the report and the work that went into the results.

Overview of the Workshop

Robb Ogilvie, Facilitator
Ogilvie, Ogilvie & Company

Robb provided an overview of how the workshop will go. He first identified the different sections of the workshop binder and highlighted the Cole's Notes, a 25 page document that attempts to distill the essence of Paul's report to a shorter version (note: nothing was paraphrased from the report, it is all taken word for word from the larger document). A digital copy of the Cole's Notes was sent to all the participants in advance of the workshop, and even if the participants did not get a chance to review the document, Paul will be taking them through the methodology and results in his presentation. Robb encouraged participants to ask questions as they think of them, and not to wait until the end of the presentation. As the guru on screening and assessment of protected areas, Paul will be answering all of the questions.

Robb explained that Annette will be live-time keyboarding and projecting the sessions on a separate screen. He encouraged the participants to check the screen often and to let us know if we captured anything incorrectly. All comments quoted in the summary report will be anonymous.

The purpose of the workshop is to explore the CA comfort level with the methodology and results of Phase I, to outline and provide an update on Phase II, and to explore the interest by CAs and partners in participating in future initiatives. So we want the discussion, reaction and how you feel about it.

Robb then went through the agenda. The morning is all Paul, who will speak to the methodology and the survey results because we need to make sure you have a good comfort level with it. The afternoon is about next steps and future directions. Paul and his team made a number of suggestions about next steps so we want to know what you think. We will wrap up with a trial close (i.e. Robb will ask people "what are the major things you heard today"). This will be recorded on the screen so that the summary is accurate and reflects what was said.

Robb asked the group's permission to use a set of Canadian Discussion Ground Rules: DECENT. The group agreed. One of the problems with our Canadian persona is that we are often reluctant to express our true opinions in a workshop setting; thus, Robb encouraged people to provide us with their candid opinions which we will accept without prejudice.

Robb introduced Peter Courchesne, the project photographer, who took photos at the workshop that will be included in the summary. Participants were told to let Peter know if they would prefer that their photographs not be used in the summary report.

Robb then introduced the two paper assistants: the "I didn't get a chance to say…" form and the facilitator's feedback form.

Part I: A Summary of the Results from Phase I

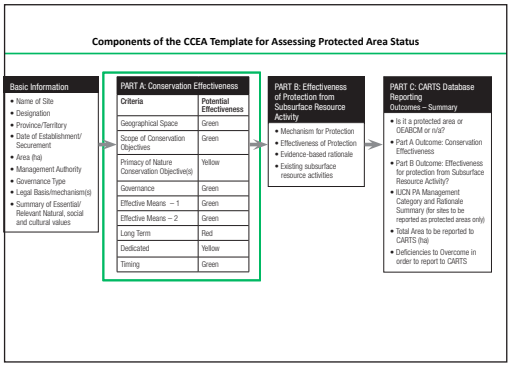
Paul Gray, Lead Author, Independent Consultant

The purpose of this session was to make sure the participants understood the methodology so they would be able to critique it and understand its implications for them should they get involved. As the lead author, Paul Gray presented the Report's methodology and answered all the questions raised in an open and transparent manner. His open style encouraged people to ask questions and offer their opinions about the rather complex steps involved in determining the potential of a parcel of land/water to be classified as a protected area. Paul took the participants through a series of 15 slides that covered the four major components of the report:

- An exploration of the definition of protection and related measures;
- An evaluation of the CAs database and its capacity for assessing protection status and the International Union for the Conservation of Nature (IUCN) protection categories;
- Development of a screening technique to evaluate protection status; and
- A test of the screening technique on a sample of CA properties.

Summary of Paul's Presentation

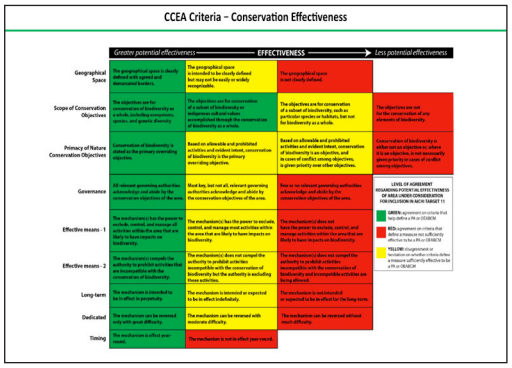
- This project looked at the CA lands database and tried to determine how we could make it work going forward.
- A number of suggestions came forward during the project and we included them in the report. What you see as recommendations are not formal recommendations, but ideas that emerged. It is our hope that we can talk about them as we move through the presentation today.
- The CA assets are very significant, many of these are significant biologically.
- Thanks to the CAs who participated in the study and helped develop the tool/process.
- The idea was to look at the current round of protected area definitions and how they might apply to CA properties. We did not address OEABCMs in great detail, but we do factor them into the screening tool.
- Many of the issues we are talking about are being addressed by the Pathway 2020 group (there is a working group that has a mandate to look at the definitions).
- We address partially protected areas, which also have natural value . Partially protected areas tend to scare practitioners (in jurisdictions around the world) because of the risk of abuse in decision-making processes. For example, even though they might not qualify as formal protected areas, there is risk that some interests could lobby to include them in the tally to increase the percentage area protected. On the other hand, there are many values within conservation areas that are managed by CAs and by other agencies and organizations responsible for management of values on the intervening landscapes (e.g., private lands and Crown land) that do contribute to the maintenance of biodiversity, are given some form of protection and justify some kind of recognition.



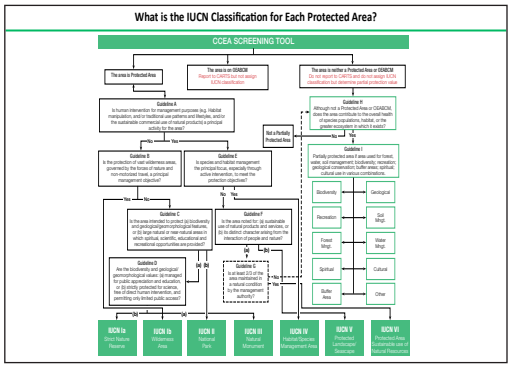
- One of our principal responsibilities involved an assessment of the database. We were impressed by the fact that it documents the spatial extent and description of conservation properties. Given that it predated the CCEA screening process, we took it apart and looked at it in terms of its utility going forward.
- We evaluated the database with the CCEA screening tool and the IUCN protected areas classification system in mind.
- In Part A, the CCEA screening tool asks the respondent to include basic information (name, designation, etc.) and to evaluate protection status using nine criteria apply a suite of criteria. Part B allows the user to talk about protection mechanisms, subsurface resource activities, etc. The final summary/decision making sheet – whether or not it is protected, etc. – helps the user decide if the area can be submitted to CARTS

for recognition.

- We completed the evaluation by assessing available management plans and survey forms completed by CA staff. Based on those results, we developed a rationale statement as to whether it is protected and where it might fit with IUCN. The evaluation sheets are included in the appendices of the report.
- We do not really address OEABCMs in this report, but expect OEABCMs will have a role in the future.
- The CCEA screening tool is an evolving process and we expect that the template we used will change. However, we feel the tool is robust and close to its final format, and do not expect that we will need to go back and change the assessments on the basis of new criteria etc.

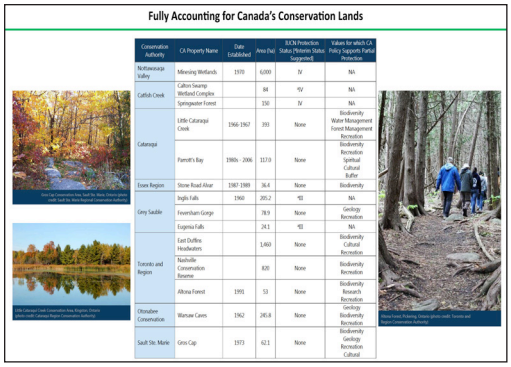


- Comparing the CA database (left side of screen) and CCEA Criteria (right side of screen) – we wanted to know if the language and logic in the original database would help practitioners assess protection status going forward.
- In our work, we found a few variables on both sides where the language was similar. We also found many differences such as "Conservation Objective". We do not suggest taking those out of the database (it is up to the individual CA what they want to keep). We did recommend that if CAs want to update the database and use it, the CCEA screening criteria should be integrated into the database.
- As mentioned earlier, the CAs completed a survey that also provided an opportunity for comments. While only a few comments were included, they were very informative.
- We plan to use the survey (or some variation of it) for Phase II of the project. There is little published information for many of the Phase II properties. Therefore, the surveys will provide an important source of information to inform assessment of protection status.
- Back to Phase I, we looked at the surveys, literature, management plans, strategic plans, operating plans and worked through the work sheets and came to a point where we decided if it was a protected area. If it was not a protected area, we tried to determine whether it had qualities (e.g., maintenance of ecosystem function) that would suggest these areas be designated as partially protected areas.
- The second tool, the IUCN classification system, was developed on the basis of work completed by Dudley (2008) and MNRF staff in 2009, with the goal of rendering a complex suite of categories into a user-friendly decision-making flow chart defined by selected key words to help practitioners complete the assessment. We also reserved space for OEABCMs, which can be added at some future date in response to work completed by the CCEA. This may be feasible in Phase II of the project. Partially protected areas were also included through the use of a list of tentative value categories found in the CA literature.
- The partially protected areas list is tentative and if the CAs think there is merit in using this classification, it may be worth convening some focused meetings or workshops.
- Recognition of the partially protected areas helped us illustrate that the CA properties are hugely diverse and rich, and to lose acknowledgement of the values in these areas would be a shame.
- Here is a summary of the areas that we looked at. It gives you an idea of how they were ranked.. The ones we thought qualified as protected areas qualifies as IUCN category III (monuments) and IV (habitat). The remaining sites were partially protected areas, with a rich diversity of values (e.g. recreation, cultural, spiritual, etc.).



- Paul briefly summarized some of the key recommendations that will be discussed later in the day.
- Overall, the report recommendations are more like observations/ ideas that we thought the various agencies might want to think about going forward. At the very least. They provide fodder for starting discussions.
- Re"interpret workshop and research results that define Pas, OECMs, and distinguish the differences between them" – CCEA is engaged in this work and we can expect to be able to use that guidance going forward.

- Re "implement key biodiversity analyses" - Implementing biodiversity areas analyses refers to knowing what is there, what those values are, and how to account for those going forward.
- Re "integrate measures of ecological integrity" - Research is ongoing. CWS is working with NCC on an evaluation programs (GIS) support tool.
- Re "Develop a communications package" - In terms of communications, there is a lot of information out there. Thus, there is an opportunity to bring key groups together to develop a communication plan/package focused on the conservation areas and the work that has been done.



- Re "identify and communicate about available databases" - The CA database provides a significant amount of information, which could be enhanced with the addition of various information tools. For example, the Ontario Natural Heritage Information Centre (NHIC) has been developing tools to integrate multiple types of information products into area assessments such as photographs, field notes, and maps. .
- Re :Inter-agency coordination" - Inter-agency coordination (i.e. Federal-Provincial Steering Committee) is a good idea for obvious reasons, and we have a sense that this is something that may be addressed by the Pathway 2020 project.
- Re "Training" - Training is needed on what protected areas are, how they are defined, maintenance of these areas, etc.
- Re "Per review Process" - In terms of a peer review process, if you are going to use a screening tool with an interim protected area designation, it requires a process to support due diligence.
- Re "Review of Conservation Authorities Act" - As a result of the review of the Conservation Authorities Act, perhaps the protection mandate might be stronger.
- The report has more specific recommendations that are identified with particular organizations.

Summary of Comments/Questions from the Participants

Comment: Some of the criteria, particularly the Effective Means ones, the information you use to document them will not be found in the database; they are usually found in acts, policies and management plans because these are the things that say what you are/are not allowed to do in a natural heritage area. That is what tells you whether or not it is effectively protected. That will not be in the database, you will need to get this from other places. This is something that the CA staff will have to help you find.

Question: From those properties that land under "partially protected area", was there any cursory examination of what would bump those properties up into a "protected area"? If so, what type of investment would be needed to bump those priorities up to help meet our targets?

Paul responded that the CCEA screening tool provides that. Some of the partially protected areas would be scored as a potential (and would receive a yellow ranking) if certain things were done to meet some of the missing criteria. So the answer is yes and no because there are some areas that are probably never going to qualify as a formal protected area and yet their ecological goods and services are still contributing to the overall maintenance and in some cases enhancement of biodiversity on the landscape.

Comment: Forest reserves have values that would make them of interested to Provincial parks, but they have mining claims on them. So at the bottom of the form, there is a spot that asks what would need to happen for it to qualify? In this case, it is waiting for a mining claim to expire. If the claim expires and they did not destroy the values which would make it of interest to be a park, then it can be examined

again if the values are still there they might look at it to be a park. The form is set up for you to say these are the things we need to look for, and address those things.

Paul mentioned that this invokes the need for a peer-driven process involving different levels of government so that if we have something in yellow and it is recommended to advance, there needs to be a decision-making body that accepts that and keeps an eye on that in terms of timing of that advance and the designation moving forward. Somehow relates to CARTS and how to maintain that in the database.

Question: Years ago, unless you have sub-surface rights you could never really elevate to another standard. Your definition of protected area talks about long-term conservation and none of the CAs have sub-surface rights. So can we ever really achieve that protected area status if we cannot guarantee that long-term management?

Paul responded that he cannot answer that question, but it is a good one. There is a diversity of opinion from the CAs about their perception of sub-surface rights, which is complex, so CCEA has a whole screening tool to look at sub-surface rights which varies by jurisdiction across the country.

- The discussion point on sub-surface rights was placed on the "Bike Rack" (see Appendix 1).

Question: I noticed that none of the CA properties you analyzed fell into the OEABCM category, is that because that definition is still being determined?

Paul responded that based on the information that we had at the time, and the definition of OEABCM, we did not come across anything that fit within that category. The IUCN and CBD simply recognize that across the world there are protected areas that are managed under governance regimes that have not traditionally been embraced or acknowledged and this is an attempt to engage, in a decision process, how to elevate private lands, indigenous lands, etc.

Question: Many CA lands are managed for different objectives (e.g. biodiversity, recreation, education, etc.). To what degree can those lands be included as protected lands?

Paul responded that is why some of those CA properties fall into the partially protected designation, because the primary objective is recreation, not biodiversity. This goes back to that definition of OEABCM, as some of these areas might qualify under OEABCMs.

Question: Is there an opportunity to carve off parts of these lands that are partially protected to identify them as protected?

Paul responded that we did raise the issue of zoning in the report. In Ontario, when we are working on some of the protected areas which are zoned, you can get to a protected area status and an IUCN classification on the basis of zones. Is there some way the CAs can create a zoning system and manage those special values in those small to large zones. Which takes us to a question of reviewing the Conservation Authorities Act, but maybe there are policies under the auspices of this new evolving Conservation Authorities Act that gives CAs a stronger mandate to manage protected areas explicitly recognized, and a zoning system is an important part of that tool.

Question: In regards to the protection areas for biodiversity, are you also embracing ecosystem services? If it does, those partially protected areas ought to be qualified as a protected area.

Comment: We have to recognize that a lot of properties were purchased with provincial funding in the past and may have had management plans and since that time there has been an array of different programs and sometimes the management plans are reflective of what those funding program or priorities were (e.g. sometimes there are donation of properties to the CAs, sometimes there is municipal funding, etc.). If the intent is to try and increase that target, how do we get from here to the next one? The reality is that the CAs have not had funding to keep management plans updated and to do those assessments. Even to do this exercise, that's an added cost to those folks who are doing the assessments. This is challenging. This should be a message to the Pathway 2020 folks about resources going forward. It is nice to be able to say that we want to include these properties, but there is work to those folks on the ground who are doing those assessments.

Comment: The development of decision tools for OEABCMs has really leap-frogged. The term first appeared in 2010 but there was no formal definition. The CCEA took the lead and worked on it in 2013, developing a draft definition. Two years later the IUCN started a task force and, based largely on the work of CCEA, developed it further. Now the CCEA is working on it, but it has not quite landed yet.

Question: What is the timeline for the decision tools for OEABCMs? We are in 2017 already and we need to reach these goals by 2020; thus, we need a definition of OEABCMs soon.

Graham commented that he is quite stunned at how fast the Pathway 2020 work is moving and expects that results will be available by December. Also, the CCEA guidebook is due in late spring, 2017.

- The discussion point on OEABCMs was placed on the "Bike Rack" (see Appendix 1).

Part II: Exploring the CCEA Criteria and the Pros and Cons of Employing a 'Partially Protected Area' Classification

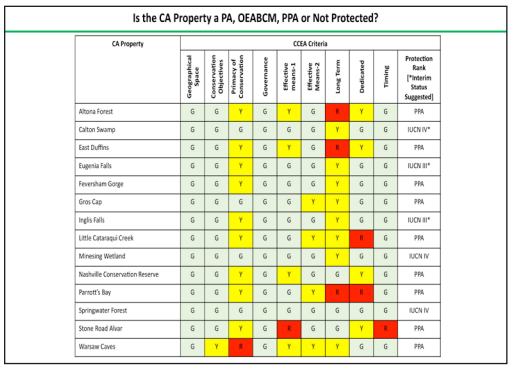
Paul Gray, Lead Author, Independent Consultant

In Part II, Paul took the participants through a series of 9 slides that focused on the findings of the 14 sites used to test the methodology. The idea was to look at results from the CA process and, starting off with the summary table (Slide 1, Session 2) developed by Graham, showed the ranking that occurred as a result of the surveys sent to the CAs. This slide illustrated a variation in responses by the CAs, which helped to illustrate the differences in perception and/or understanding of the criteria used to assess protection status.

Summary of Presentation

- Key areas of divergence included: the primacy of conservation as a statement in the management planning process; Effective Means-1 (i.e. talk about the policy aspect of the mandate as the agency has an authority to work with); Effective Means-2 (i.e. management planning side through administration or development of strategic/management plans to do certain things under the authority of the legislation/commitment); Long-term; and dedication.

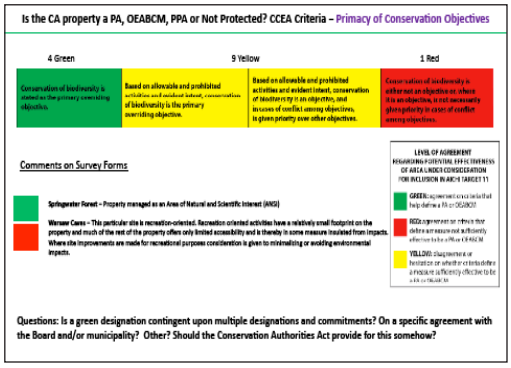
- We are interested in looking at the primacy of conservation objectives, Effective Mean-1, Effective Means-2, long term and dedicated. Many CAs are tied to municipalities, so our sense is that CAs do not control their agenda; they are managed by other bodies or influenced by them (this was an issue for the "long term" criterion). There is no statement in the CA Act or high level policies that gives practitioners a mandate to care for assets in some form of "protection" context. That is why they score yellow/red (i.e. lack of support for long term in these areas).



- The idea is to engage CAs and others on ways forward and if it is possible to resolve some of these issues, even if the CA Act does not include a protection mandate, is there something we can do to help mitigate some of the variability in these criteria?

- On the 'primacy of conservation objectives', there are a number of yellows, suggesting some level of uncertainty and recognition that other activities are occurring on CA properties. And yet even in the absence of a statement about the 'primacy of conservation objectives', there is recognizable protection being applied by the authority. For example, the Warsaw Caves is a recreation-oriented site with a red ranking for this criterion and yet but by virtue of ongoing management strategies, there is not much of a footprint. The questions become: is there some designation that can be based on multiple indicators of importance and commitments to manage those areas of importance? Can it be done in the context with a particular agreement with the municipality? Is there value in going back to the board and presenting these types of issues and talking about these types of issues to see if they would be willing to look at it from the perspective of primacy and long-term protection?

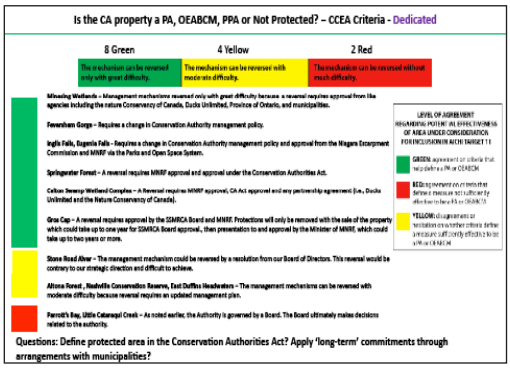
- Some CAs are comfortable with the current documents and partnerships that guide their mandate and protected area designation. However, the CAs are different in many ways including availability of management plans, partnerships, and resources, which contributes to a variety of responses. It generates questions like: For the CAs that scored yellow, did they mean to use that language? Are there opportunities to look back and change that language? These are the types of questions that popped up. CAs that are interested in revising protected area rankings may want to revisit their interpretation of definitions and guiding language.



- Effective Means-1, this is a high level policy statement in a piece of legislation or policy statement, or an owner committing in some context to protect their properties in an explicit statement. A few of the CAs were comfortable in saying that they feel that they have a mechanism in place that allows them to exclude and do other things. So that is encouraging. There were some CAs that scored yellow (meaning that the mechanisms has the power to exclude, etc.) and manage most activities. Again the question for CAs is if

there is some type of discussion that could be had with the board or municipalities and other government agencies in terms of the legislation that is available to provide for the protection?

- Some of these areas have 5 or 6 pieces of legislation on top of them – which is significant. In some cases, in order for the CAs to make a significant change, the board has to agree to it, the Ontario Ministry of Natural Resources and Forestry (MNRF) has to agree, it has to go to the minister, etc.
- Effective Means-2 is based on whether the agency has access to management plans and operations that facilitate implementation of policy. And there were no reds and 10 greens. The intent is that the practitioners take direction from the policy and demonstrate how that policy will be delivered (through a statement of intent) through strategic plans, management plans, etc. And whether or not the agency feels confident/ comfortable with the plans that guide the work.
- Long-term was fairly variable with many yellows and reds. Again, it comes back to the mandate, authority and legislation that does not exist, and the fact that there are so many other actors involved at the municipal level and board level, in addition to more senior levels of government. So the question is are there opportunities to somehow come to a decision to care for this as a protected area or OEABCM in the long term and make that statement? Is it possible to make that statement given the dynamic management that goes on and the uncertainty that exists in the management planning process? Some respondents said that they take explicit and literal direction from a time limited (e.g., 2005-2015) management planning process. So the question is: is there anything that can be done with existing resources and relationships to somehow mitigate the impact of the "long term" question?
- The responses to last criterion on dedication (i.e., the difficulty involved in reversing a decision or a commitment) were variable (8 green, 4 yellow and 2 red). For the greens, in many cases it involved a number of agencies who are engaged in the management of the area (e.g., for Minesing Wetlands, it is a very complex, sophisticated process and there is fair confidence in the players who are at the table and the values that they bring to the table). Some CAs work with management structures and strong protection statements that require interpretation. For example, for the Stone Road Alvar, while a management mechanism could be reversed by a resolution of the board of directors, such a reversal would be contrary to its strategic direction and therefore difficult to achieve.
- For Parrott's Bay, there is a strong understanding of the limitations of mandate. It seems like the boards have a really important say in what goes on and how it is managed going forward.
- In terms of some of the private properties, run by NCC, Ontario Nature, etc., if we look at the criteria and the mandate and how they have committed to that, a lot of those areas are more strictly managed as protected areas than some government properties – it is really impressive. Those areas have not been categorized as protected. I would hate to see these high quality protected areas run by NCC, Ontario Nature, and others fall into an OEABCM category as opposed to a protected area category. If there is any opportunity to broaden out the governance concept of these areas, so if it can expanded out beyond traditional governance to indigenous governance, to private land owners like NCC, which would help us in identifying and getting us down path to Aichi Targets. That's not a question for here, but it is one that pops up.



- In terms of partially protected areas, there may be information in the grey literature but there is not much out there in the published literature. It is starting to show up in the ecological goods and services literature, and there may be information contained CA files that may prove useful. So if there is interest in pursuing the partially protected area designation, it may be worth figuring out how to get research people involved and exploring opportunities through a workshop.

Summary of Comments/Questions from the Participants

Question: Even though CAs cannot guarantee that a property will be protected from infrastructure, if there is 5 or 6 layers of legislation that starts to add up. How absolute does this need to be? I.e. in order to move those yellows into greens?

Question: In terms of managing properties that are adjacent to other properties and the standards of management differ. How do we elevate by collaboratively developing an overarching management plan that enables the CA to meet the criteria to shift from red to green?

Comment: Stone Road Alvar, because there is a CA there, they are already doing those things collaboratively. But when looking at this tool, the mechanisms are there, but it goes back to the power. So we could argue that this satisfies the green because the mechanisms is there. But the bigger discussion is, even if there is a collaborative mechanism in place, we still need to have the capacity (power) to manage these things. So is this question speaking to the mechanism or the power to do something about it?

Paul responded that we should have gone back to the CAs with yellow/ranks and asked them to verify if that's what they meant/want. For the Stone Road Alvar example, we illustrate this one today because it also speaks to a lack of resources. Without those resources going forward, I expect it will take a lot of work to move these from red to yellow.

Comment: There is potential for sharing capacities that actually reduces the burden of any one entity. We should be looking at that for a number of properties where we have CAs and other land conservation organizations with properties that are side by side, given the general lack of resources.

Comment: Stone Road Alvar should not be red. Essex Region Conservation Authority would probably like to change this.

Comment: From the Grey Sauble perspective, there could be a desktop review of these properties. However, from our standpoint we have Crown Land beside CA land. A desktop review of these properties would likely place high. On the CA side, we regulate the types of activities that are going to happen in terms of recreation so we can pinpoint those activities that could change the environment, but we had those activities that are going to work in harmony with the environment. On the Crown land side, when you go into that property you will find that the free use policy has changed it with extensive ATV damage going through significant areas from the lack of enforcement and policy. So when you look at those examples you have to consider what is being looked at from a desktop and what is being looked at on the ground. CAs are quite active with those permitted uses and key policies on the ground (e.g. for the Warsaw Caves case, it is high intensive recreation, they thoughtfully proposed what type of recreation will be good for the area and it protects the attributes).

Paul responded that the report is purposely still in draft form to allow the CAs to make any changes to the CCEA screening tool results that they want.

Comment: A lot of natural heritage areas, the legislation around them does not say it has to be around for perpetuity, but it is written in a way that you can tell it is not supposed to stop either. The planning cycles are iterative without end. It will say that the plan is to be renewed every 5 years and it is never supposed to stop. I would consider these to be ongoing, forever, even though it might not say it is for perpetuity.

Comment: For land trusts to be eligible for the federal Ecological Gifts Program, a few years ago we changed the criteria which now requires that land trust, NCC, Ontario Nature, and others have to mention in their letters of patent that they are managing lands for conservation in perpetuity. If the Conservation Authority Act is under review, is there an opportunity to change the wording to include the word 'perpetuity' and add on to our list of criteria?

A participant responded that a lot of acts for natural heritage areas do not include the word "perpetuity" but there are things in the planning processes that are ongoing/iterative. So there is no end.

Question: Was there guidance in terms of what qualifies as long term for the CAs? There might be a lot of subjectivity.

Paul responded that yes, we provided definitions on each category and people were encouraged to call us and discuss. Questions were taken from the CCEA criteria, so it depends on how those criteria were interpreted by each individual.

Question: Was there any effort to go back to see if the results of the study were consistent from the original CA database?

Paul responded that no, we did not do this. However, we will go back and look at the whole report given the comments we receive today. We can also send a note to all CAs and ask questions and look into items that they may want to change.

Question: It really comes down to the staff person and their familiarity with the CA Act and how their board functions and legal implications, because some of the ones that are green reference special requirements from MNRF and the CA Act, where that same statement would apply to the bottom one as well, but the staff person who wrote that up did not express those same sentiments. There needs to be a standard that is generally agreed that the CA Act provides this level of protection just by virtue of being owned by a CA.

Paul responded that this was a process that we put together using CCEA criteria and we asked them to look at those criteria. We present this here as information to help discussions because some of our recommendations suggest there might be opportunities for common language going forward. So that's a good point. The question is, what is that process? Does it involve this particular exercise? Is it something that CAs could do on their own?

Comment: All the criteria so far are about protection of the site. I wonder if there should be another criteria: that the area being brought forward had been selected or determined based on scientifically valid criteria for either biodiversity, geological diversity or cultural diversity. And those criteria would come from whatever the appropriate jurisdiction is.

Paul responded that we talk about common language in the recommendations. There is a need for common language out there. And if we get to that point of common language between the CAs the scores/ranks on the sheet would change significantly.

Comment: It would be useful for a number of these criteria to have a subset of 'Yes' and 'No' questions. For example, is there a master plan for this property? Is there a regular cycle of updates to the master plan? Do you have a land divestment strategy? That would put everyone in a common playing field to start with.

Comment: When we were filling out this survey, a lot of times I was thinking we do not have this area armored up enough, and it felt like it was held to an unrealistic standard in some cases. So to invite a standard that breaks down some of those walls but still provides protection, is something that needs to be considered. A lot of times when we were going through the criteria and trying to answer the question, I felt like if there was any kind of intrusion on the property to do with people (which CAs deal with a lot) these criteria were rigid, so there is lots of room to engage people within the environment and still protect it. Some of them may have pushed us out of that category because it was not considered at the time. It does not have to be recreation, it could be nature appreciation as well.

Part III: Next Steps and Other Suggestions

Al Douglas, Director, Ontario Centre for Climate Impacts and Adaptation Resources, OCCIAR

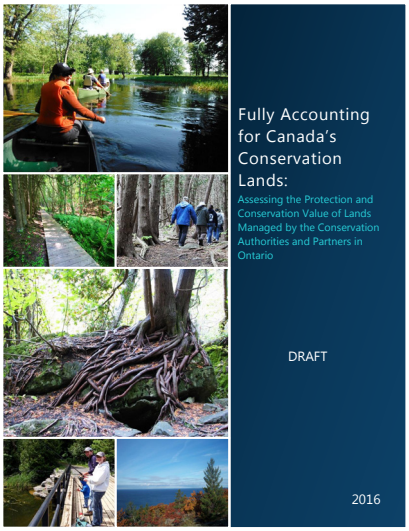
Al Douglas, as one of the co-authors of the report, presented the slides highlighting the project team's suggestions for next steps. Al reminded participants that these suggestions are not "givens" or "cast in concrete"; they are suggestions from the project team. Robb Ogilvie then facilitated the discussion for each item.

Finish the 2016 Report

- Next step: Canvass participants about their comfort level with the 2016 report, finish it, and distribute it.

Outcome: Approved with minor edits/revisions.

Paul mentioned that when the report was drafted, a copy was sent out to the CAs. We received a few comments which are reflected in the report, but we did not want to move to a final report just yet; that is why it is still stamped as a draft. We will go back with a letter to all participating CAs to see if they are comfortable with it. We will also craft a few paragraphs that acknowledges the Pathway 2020 process at the end of the report to tie the two initiatives together, and to talk about the dynamic process that is always changing, in addition to the technical comments. Paul will work with Rob Davis on the verbiage for the Pathway 2020 material.



Comment: As mentioned earlier, one of the classifications might want to be changed for Stone Road Alvar.

Develop a Common Set of Guiding Statements

- Next step: Are the CAs in a position to explore options for a common set of statements to help practitioners identify protected areas, particularly with respect to Primacy of Nature Conservation Objectives, Effective Means-1, Effective Means-2, Long-Term, and Dedication? Summarize the results of the discussion and address any recommendations from the Workshop.

Outcome: The group agreed on the value of a common language on screening assessment, etc. but no decision was made as to who should do it and who would fund it.

Comment: Paul mentioned that we struggled a bit with the questionnaire because we were worried about unduly biasing the people who filled it out by providing examples or other words that might better describe it. So what you see is the raw data back, which helped us identify where there are potential issues of understanding the IUCN or CCEA statements that we use, or the level of the person in the organization who completed the questionnaire. In addition to that, there seemed to be opportunity around the idea of a common language theme and whether or not CAs might be interested in having a discussion around this. This will help us with the language which people will understand. Knowing how NCC language is embedded in their documents, they would probably use these keywords in a quick and consistent manner. We bring up this question up to help manage Phase II, and whether or not it is up to the CAs, Conservation Ontario, or others to look at how certain words are used throughout CAs in the province and if there is room to make this more consistent in application.

Comment: One of the special things that CAs do is manage inland waters and Aichi target is for representation of terrestrial areas and inland waters. Maybe one of the special things that CAs could bring to the Aichi table is the inland waters because they deal with water and this is outside of what you are looking at right now. But I am not aware of a lot of work done on inland waters portion of the Aichi target. Because their mandate deals with inland waters, I wonder whether that would be something that CAs in Ontario might be able to bring to the table because of their mandate, and their knowledge of inland waters. And maybe they would be able to bring forward knowledge on biodiversity areas are in inland waters. Perhaps working in conjunction

with the MNRF and helping to fill in that part of the picture.

Comment: CWS has asked that a number of properties that are water based be included in Phase II of the project. When we started this project, Parks Canada was trying to figure out what parts of the Great Lakes were protected areas. In Phase II, we are looking at where CAs extend into the Great lakes. We had not considered inland lakes in those waters.

The discussion point on inland waters was placed on the "Bike Rack" (see Appendix 1).

Comment: Developing guiding statements for CAs would be helpful in terms of the screening process, but I also suggest looking at how other lands or groups of lands have been screened would be helpful as well. For example, how have provincial parks been assessed? Are they all considered to be protected? And if not, then what was used to help guide that? Are Crown Lands all protected? If not, what was the process there?

A response was that provincial parks, national parks, are all reporting to the CARTS system, so we did not run this system on any provincial or federal lands. Right now, all provincial parks and reserves count towards the 17% except the recreation-utilization zone in Algonquin Park.

Question: I know there are a number of case studies already done and being reviewed by CCEA people, at some point there will be a guidebook but for participation in Phase II, I wonder if there is an opportunity to get hold of some of these examples that have already been produced. They may not be available to the public.

Laura shared that these are not available to the public yet, but will be included in the guidebook, which will be out this spring. If this is for the purposes of furthering a pilot to this, I can bring that up to the group there. We are looking for people to test out the criteria. We are in the middle of going through case study by case study and then it goes back to the group to see if they are comfortable with it being included in the guidebook.

Question: Are we being overly critical of CA areas? What is the hesitation with making the leap and assuming (which is what we have done with national and provincial parks) that they are protected areas? Because once you go through the classification and you go through the tools, there are provisions in there for management action, sustainable use of resources, etc. The challenge is getting to that point. We seem to be hung up because we are not sure if it is a protected area. Is there a hesitation/reason why we are not making that same assumption as we did for national and provincial parks that is causing us to take this extra step for CAs and non-governmental lands? It seems like the screening tool allows us to do everything that we are doing in CAs.

Graham responded that CA lands are incredibly diverse (they manage things in a unique way); it is hard to make a blanket statement across all of them because they are quite different. Also, we are dealing with protected areas, national parks, provincial parks, land trusts, etc. where CAs, their water managers are taking an ecosystem approach to manage water. But a lot of people who answered the surveys do not think of themselves as parks managers; so you need a consistent set of terms.

Comment: If you ask these questions to the provinces and territories and the federal government, would you not expect to these the same level of diversity?

Graham mentioned that provincial and federal lands have a set of policies and internal guidance when dealing with recreation. However, we do not necessarily know that these exist from CA to CA. What do people state they do and the outcome.

Comment: I understand the positives that come from this, but part of me is thinking that we can invest a lot of effort in CAs and help strengthen the language, and go through the work to have our lands designated or assessed. But I am trying to figure out why CAs should care if our lands are designated. What is the bigger carrot that we can look forward too with having our lands designated. There is value in meeting federal targets, but those having to manage these huge resources, what value is there to us putting in all this effort to designate our lands when there are other important things to get done. If we can look towards future funding for additional lands, or improve the values on those lands through restoration, and support comes through the government with emphasis on these designated lands, I can do some creative writing to make sure our lands meet the criteria to be designated.

Robb asked the group to answer this question. The following represents the responses:

If you are counted it puts you in line for other funding programs.

Suddenly those protected areas are recognized at the international level. If you market that appropriately, you are part of an international movement with high level recognition. This can be marketed to bring in more funds to manage that piece of land.

Having a recognized standard is important fundamentally to meet the highest level of protection that we can achieve and be counted because that is part of our missions. But being able to say that 100% of the land we own meets the threshold to be considered towards the 17% is something we can promote amongst our immediate network, but from a funding standpoint it gives you a marketing edge. You can persuade donors that we are a really good bet to invest in because this is the standard that our properties achieve in the long term. I can see no downside. I see the challenge to go through the screening, etc. but once you are there it is only positives in terms of marketing.

When we first got notice of this exercise I thought it was about time. We use our 150 hectares as part of our assets so it seems like it is a no brainer that we would aspire to have those lands recognized for the value that they are. It is good for investors too. The programs that have motivated the authorities to undertake certain acquisitions have varied, but the authorities have responded to that in a positive way and in many cases they are the biggest player in town. This is an opportunity – the authorities should write the benefit statement for embarking on this. It will be some effort and it would be great if there are better resources, but the upside is being able to leverage more, being able to market, adding value, creating awareness, etc.

It does relate back to resources, and what does have to be recognized is there are capacity issues. For example, you had some people who were easily able to provide this information and some struggled to provide it. It would helpful to have overarching support and being able to provide a forum to assist the CAs in doing that. If there was guidance continued to be provided by CWS to go through this exercise that would be appreciated.

CAs have been doing all this wonderful protection work all along, and if you get designated under the IUCN the entire planet will know about it. And you are already doing the conservation work so you might as well get the credit for it.

Comment: These are the responses I wanted to hear and glad we heard in this format – people around the table are likely to be more invested in this process going forward. This is the message that I can take back to my directors – that there is good value in this initiative.

Complete Integration of the CCEA Attributes into the CA Database

- Next step: Integrate the nine perspective CCEA attributes (Geographic Space, Scope of Conservation Objectives, Primacy of Nature Conservation Objectives, Governance, Effective Means-1, Effective Means-2, Long-term, Dedicated, and Timing), the protected area attribute, and the CCEA-based evaluation of IUCN's Status' attribute into the CA database. Populated these attributes with data.

Outcome: No decision at this point in time.

Paul explained further that the idea behind this is to follow up on the earlier discussion that we have these attributes scoped out and they need to be integrated into the database. Is there agreement that the CAs are comfortable with this new information going into the database? Because it is a CA database. If you look at page 12 in the workshop binder, in order for this to work there needs to be an initiative to integrate some of the right side into the left side. The question is: is there permission going forward to do this?

Jocelyn explained that the CA database attributes could (in theory) be populated by each CA who would have someone fill out the criteria with these fields; however, what we found is that they did not translate properly into the criteria. Not all the attributes were populated by the CAs (and we are not sure whether that was due to resources, or due to the expertise of the person filling out the form). The CCEA attributes are ones that translate directly to the criteria, so if this became a spatial exercise, the person updating the CARTS database would be able to populate those fields and then output the results (i.e. protected areas, partially protected area, etc.). The CCEA data attributes are what we have done in house, and I do not think that individual CAs have all of the fields on the left in their own databases.

Comment: We need time to go through it at the office with our GIS staff. We need to combine their expertise and my expertise in the field.

Comment: First thing is that CAs need to do is get consistent in their language between each other before being consistent with others. Sometimes we do not even talk the same talk as the GIS people.

Question: On page 33 you reference "geographic space" and on page 12 it is mentioned as "geographic scale". If it is "geographic space", what is that, a lot line description? If we do not know what it means, then it will be hard to include in the database.

Jocelyn explained that the definition is unstandardized, so there is no common definition. When we're talking about integration of CCEA attributes, we mean there would be one attribute for each of the criteria. For example, geographic space is one of the criteria, so that becomes an attribute. There are only three options that you can populate that field with (green, yellow and red). So if you used these attributes you would only have certain answers, and the person filling out the table would choose one of these three based on the property. Based on those attributes you would be able to assess whether it is a protected area.

Comment: But there lies the problem: how can you answer yes if there is no clear understanding of what some of the attributes are?

The discussion point on geographic space vs. geographic scale was placed on the "Bike Rack" (see Appendix 1).

Comment: What would help us in achieving some of those definitions and consistency is having those yes/no questions. For example, does it have a management plan? That would help us lessen the variety of response you would get. Seeing the results, we might change how you approached the questions and how you assessed the land. Developing that common language.

Comment: I am hearing from everyone here today is that we cannot really answer that question until they have more information. When you are talking about data and databases, more information is metadata. So if we have good metadata behind this it will ensure consistency.

Comment: Do we want to develop a set of guidance statements? Yes, but you can see the challenges. It will take a lot of work. Again, with support from someone like CWS whether through workshop/webinars – it will take more than just one gathering. This is going to take time; we have a lot of other competing resources, so the more structure/framework that can be provided to assist us, we would be happy to be involved. But we have competing priorities, so it would need support to facilitate those dialogues/discussions.

Link the Database Decision Tools

- Next step: Explore the merit and feasibility of linking database decision tools – for example, link the screening tool to the database of CA lands and add repository categories for reports and publications, maps, photographs, and field notes.

Outcome: It is a great idea, but hard to tackle.

Comment: This is not a huge priority for us in the short term, but it is great and maybe something that we could work towards over time. We need to ensure we have a consistent standard before moving on to this.

Comment: This is a question/debate that we have been having for a number of years – there has always been a desire to have a consistent and accessible area for all the great information that is being developed from different agencies from across the province. So it is a great idea, but it is hard to tackle.

Comment: Sometimes there are policies attached to original land acquisitions which stat how the lands were supposed to be managed, and those get lost over the years. For those purposes, this would be helpful to have.

Robb suggested a trial close: We agree with the spirit and intent of this idea of amassing, assembling and making available all of the information that would be necessary to a planner/manager to make assessments about property. However, in terms of our current level of development, we have earlier priorities that are around the basic screening/assessment techniques, language, conversations, etc. So at this point it is a great idea, but it is longer term and is currently not our focus.

CA Case Studies in the CCEA Guidebook

- Next step: Is there value in including some CA case studies in the CCEA guidebook? If so, decide who does it, select examples, and seek permission from the relevant CAs.

Outcome: Agreement, it is worth doing this.

Question: Are there already some CA examples going into the guidebook?

Review of case studies from across Canada is currently taking place, but no CA examples have been put forward to date. The ones that have been put forward from Ontario have been Crown Land examples. But it would be valuable to include CA examples.

Comment: When I submitted I put in an example of one that was considered protected and one that was not a protected area. It would be good for people to see one that worked and one that did not work.

Question: Does anyone object to pursuing this course of action?

There is agreement that it is worth doing this, but the window is still open but closing quickly. Paul will look after this and consult with people from different CAs to make changes and to see if it is worth sending along.

Comment: It is a bit discouraging to see that people are hesitant to do this – this should be a no-brainer; if this tool will be useful for people, seeing how it would be applied would be very useful. To save Paul some time, CAs should take the initiative here and offer a few examples.

Comment: What is in the report would be good. Paul can pull them out, send them to the appropriate agency, and with feedback that might be enough comfort for people to include them in the process.

Comment: It sounds like a great idea, but given that some people have had some second thoughts about how they filled it out the survey the first time, and that there is a need for more consistency with the way that we are reporting; if we are going ahead with soliciting specific examples, the team should sit down with those CAs to ensure consistency.

Laura will work with Paul to make sure it is being filled out, and she can represent the example at the peer review table.

Comment: Worst case scenario is that you include an example in there and it is not a good example or was not done correctly.

We can pick a representative one, an area that would be common amongst multiple CAs. We will make sure that it is not submitted as a no when it should be a yes.

Paul responded that we could focus on those that come out as protected and not worry about the partially protected sites right now because we will look at those again. But there are 5 options, 3 focused on habitat and 2 focused on monuments. We could send a few to the CAs to see if people are comfortable with the language and can send it off. If you wait until the common language is developed, then we will not make this deadline.

Question: Do we want to only include example of protected areas? Or should we also include examples of partially protected areas, areas that are not protected, etc.? Including areas that are not considered protected would show people what does not work.

Comment: In the absence of doing the common language exercise so that all CAs are all comfortable with their answers, I am not sure you are ready for a no example because the answer might change when a common language is developed. The learning does come from the "no's" but the yes will be promotional.

Comment: I think there is benefit in having an example of each, and based on the information we have already, we can at least screen a slam dunk for each of the three and then go back to the CAs to have them affirm that yes, this is an absolute 'No'.

Comment: I do not think we have the time to do that and to come to some level of consistency about what is a partially protected area, what is a 'No', etc.

Comment: Remember that CAs are only one example of other organizations, so we should focus on the definite 'Yes' and leave 'Maybe' and 'No' to other organizations who have already gone through this rationalization process. By having a positive example in there it would get around this perception that the federal/provincial lands got in automatically while the CAs have to have this broader discussion to justify having our lands included.

Robb suggested a trial close: Our objective is to increase the visibility of non-government lands and waters, we are trying to get some visibility there, and we would like to exploit this opportunity that exists. We are asking Paul to spearhead this and we would like to concentrate on the positive cases, not the 'Maybe' and 'No' examples. We would be happy if we get one case study in shape to submit.

Add-on: The CCEA tool is just one learning opportunity and is the first one coming out; Pathway 2020 is going to come out next winter and after the national response, there will be future opportunities. The learning does come from the 'No' and partially protected areas; but there will be other learning opportunities in the future. What I am hearing from the group is that there is a need for more Ontario examples on those hard ones that might not be published but for the sake of our collective learning. This could be a project down the road, separate from this initiative.

Partially Protected Areas

- Next step: If there is value in recognizing important cultural and ecological values encompassed in areas that do not qualify as protected areas (i.e. partially protected areas), what are the next steps? Definition and Description of categories? Current examples of application? Options for application?

Outcome: Agreement.

Comment: In a testament to my agreement with you on the database, I am thinking of putting those ones in the database for provincial record for natural heritage areas (and classify them for the IUCN areas). Of course there will be ones that will not meet the criteria, so the ones that do not, we want to use that and have them come out as something. So that they will have a category (e.g. partially protected).

Question: Is there any chance the MNRF can take the lead and get a group of people together to talk about this? There needs to be more rigor in terms of methodology and what the attributes are. So develop a flushed out version of the screening tool. For example, what do we mean by biodiversity area?

Comment: The notion of pursuing partially protected as a new category is an interesting one, and we have partially protected lands in our CA. So it would be good to look at a new category or clarifying something so it could be fully protected.

Comment: I think that a lot of the CA properties find themselves within that category of partially protected, so it makes sense to do this.

Comment: We are thinking about making protected areas, but I do not see here anything regarding what is going to be the next step of how many will come, how it will increase resources on workforce. Even our own migratory bird sanctuary, we have lots of problems with enforcing our Act under our mandates. This seems to be helpful for target 1 or Aichi 11, but in the meantime, we only have a few years left to do this.

Comment: Given there are only two years left and we want to designate as much land as possible to get to that 17% target, these lands are not going to get us there the way the target is set up currently. Unless there is a secondary piece – how to move from partially protected areas to protected areas – I do not see much value in going through this exercise. To get there, I think it would take more time than we have.

Comment: I think the partially protected areas represent an opportunity. What are some expedited ways by which we can move those partially protected areas to protected areas status?

Comment: Even in past meetings, we always seem to get stuck with partially protected areas; so we need a process that allows lands to move from partially protected areas to fully protected areas, otherwise things forever remain partial.

Comment: If we see that a lot of lands in Ontario are coming in as partially protected, this information will send a message to the Pathway 2020 folks about whether they set that correctly.

Comment: If we are talking about CAs and demonstrating the value of CA lands, and if we agree that most of it will fall under partially protected areas, then I think it is still worth mentioning it so we show value there.

Comment: I think it needs to be included because so many of our lands are partially protected.

Comment: It is worth having that category recognized, but I caution that whatever lands we put in there, that they are truly only partially protected, that they are not a "catch-all" for things that we cannot decide on. So we need to be clear on what is protected and what is not.

Robb suggested a trial close: The answer for the group is yes, there is value in recognizing partially protected areas. We want to keep this alive and we want Paul and the other team members to keep it alive. However, we are not identifying any specific steps that we are going to undertake to pursue it at this stage.

Complete Phase II

- Next step: Employ the Phase I methodology to assess the merits of clustering adjacent smaller properties and screening them as larger properties (Phase II project).

Outcome: Agreement.

Paul explained that we are currently working on Phase II and that 18 potential sites have been identified. CWS requested this work be done by prioritizing clusters of areas that are closely juxtaposed to each other (some might be separated by a hydro line or small road), including some water properties. On the basis of those criteria, we identified 18 areas. Maps have been produced and letters have gone out to 12 CAs with these 18 areas asking if they would be willing to participate in Phase II (which is an extension of Phase I in terms of the methodology, which we will tweak after today's session). The idea is provide a background document with case studies with larger areas (multiple properties) but where these properties could function as a whole in terms of a protected area. We have not heard from each of the CAs, so we do not know what the final count will be. In addition, there is a lot less information on these clusters of properties than we had in Phase I; while we still will not be looking to use up CA time, we may need assistance in identifying grey literature for these areas. We will address issues around properties that are split, properties that are together, but at the same time might have one hydro line running through it. So there are a variety of new issues that will force us to ask a different set of questions of ourselves and look at the potential designation/management of those areas from the same perspective that we talked about today. Phase II is to grow our experience with these test sites and to continue to talk about this as we grow our experience, put together case studies, and get down to the business of training and encouraging the CAs to do their own assessments.

Questions: What do you actually mean by partially protected? For example, we have a 600 acre collection of land that is separated in one location by rail, one location by a river, etc. I would say that 300 acres is partially protected and the other 300 acres are fully protected. How do you get that protected acreage into full? I am struggling with that. So is this why you are focusing on clustering adjacent properties in Phase II?

Paul responded that both of those questions will come up depending on the type of impacts occurring in between them. The whole point is to grow knowledge.

Question: In terms of the cluster of properties in Phase II, would that expand to lands that are owned by others that are adjacent to CAs (e.g. forests owned by the region)?

Paul responded that he hopes that is the way we go. That is the only way to go, particularly if you are looking at amalgamating connected larger ecologically robust areas. Hopefully the

agencies and organizations who have these areas would come to the table to talk about that. Maybe Phase II will help with that.

Workshop and/or Webinar Series

- Next step: Explore interest and feasibility of a Regional or Canada-wide workshop or series of webinars (part of the Pathway Approach?) to apprise practitioners on the development of definitions and criteria that help practitioners distinguish between Protected Areas and OEABCMs. Perhaps under the auspices of the Pathway Project?

Outcome: Agree there is a need for it.

Paul explained that the question here is about whether there are ways to keep in touch, organize a committee or a team, etc. These issues will keep coming up, so is there some way to bring the groups together? Under the Pathway approach? The Ontario NGO's and government agencies have a long history of cooperation and collaboration. Does this need fit into that collaborative framework? Because there is a need for extension and training, there are databases to build, a common language to develop, all of which is to support the practitioner who is asked to go out there and understand these properties, translate that to paper, and move that up the pipes. Is there a way to add some energy to some existing process or create a new process that keeps it going?

Comment: I think there are existing avenues where a workshop and/or webinar could happen (e.g. Latornell Symposium, CA meetings, etc.) where people are already getting together.

Comment: The MNRF sponsored a working group on climate change and it had enough energy that there were monthly call in's and most ministries that had a mandate for climate change participated. It was not just about updates, but included discussions of issues and resolution of policy issues. If you had a group like that provincially, that had energy and was being fed properly, it might be a good way to keep the protected areas technology and advancement and decision-making tools available and accessible to people. This will become increasingly more important on government agendas.

Comment: Please let Tom know that we saw his reference to the Natural Heritage League in the report. The Natural Heritage League worked because it was fed with resources. There was always an organization who fed it, and there needs to be a lead coordinating body to take this on and ensure we are all continuously engaged. The concept is right, but it just boils down to how we make it work again.

Comment: Again, this is a priority area for the Ontario Biodiversity Council. So until 2020 and beyond, we

really need to push this file. So the Ontario Biodiversity Council plans to push this along with the MNRF. We might not be the only vehicle, but we want to play a part in pushing this forward.

Robb suggested a trial close: We agree there is a need for it, we need to keep the momentum up, we are not sure how to do it but there are a few models that are based on having one or two people be the leaders to push it forward, however we do not know who it is at this point in time. But we want to keep it alive, keep talking about it, and keep moving it forward.

Question: Do we see getting together again after Phase II? That could create some momentum.

CWS will try to support the best way they can but are out of resources for the next fiscal year. What is important is getting on the larger agenda (Pathway 2020) and finding out who your connections are on the national advisory committee to get your message out. CWS will try and support the CAs as best as they can, however a champion is needed.

Wrap-up and Next Steps

- Robb asked the project team to identify the major themes and key points or issues they heard during the session. He then opened up the floor for participants to add their additional key points. The summary is as follows:

Key Points from the Project Team

Comment: We have heard a lot about the lack of resources. There is the question of the value of being counted towards Aichi, and I think we collectively highlighted that value of screening/ assessing and reporting on CA lands/waters with a potential to contribute. When it comes to partially protected areas, we heard that there is value in reporting those lands. We had good discussions here today that had not happened yet but needed to happen. Overall, the group is willing and ready to have further discussions amongst themselves about what the status of CA lands will be.

Comment: There is collective acceptance of the process, but there is a need for common language. The criteria is not clear and is not being interpreted consistently across the CAs and within each CA who is actually filling out the survey. Perhaps there should be a team or a group of people to review the final assessment. The CA Act is under review and there is an opportunity there to insert some of the language around protection and perpetuity to make the process easier and to clarify the process for CAs.

Comment: There was a good sense of trust in the room today, which is important in these types of issues going forward. In terms of the workshop takeaways – happy with it all.

Comment: I appreciated the point in the conversation where we were challenged with the value of this whole exercise, the value of participation and the value of contribution moving forward. The answers I heard were impressive – it means that the people here believe in this and have found ways to recognize the benefits in this whole exercise; this was uplifting. There were points throughout the day where we heard contributions from some people who recognize the challenges but were thinking and communicated ways to overcome those challenges. There were a lot of positive vibes and comments.

Key Points from the Participants

Comment: I am fully supportive of this work. There is no question that CAs hold wonderful parcels of land; why are we not just accepting the fact that they are contributing to the targets? The reality is that we have to go through the exercise, but this means work. So it boils down to competing

interests and where we have to place our priorities. It is really challenging to keep this at the top of the priority list, but we have to take all of this good information and making it work. How do we get to that next step in the absence of dollars, in absence of commitments from our boards and our general managers? The reality of doing it is tough.

Comment: I have not heard the word standardization. With the National Wildlife Areas we are trying to get people to know our properties specific to outreach, science, conservation and protection. So there are things that are allowed/tolerated and things that are prohibited, and we are trying to standardize those things; but this is a huge task. Nationally, it has not been done this way before because each of those areas are geographically different, ecologically different, etc. Therefore, it might be a good idea to standardize, within your protected areas, specific activities that can be done there and what cannot be done there, so you start at the same level. I have not seen that in the report and think that would bring good alignment.

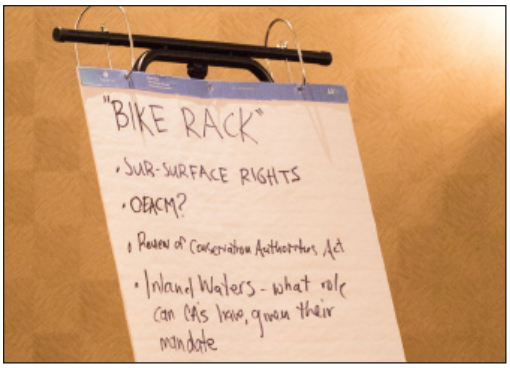
Comment: This is an opportunity for a sense of pride for something that is unique to CAs; there is no other jurisdiction in Canada that manages on a watershed basis and has lands that have been designated that are ecologically significant and many of which quality for protected area status with international recognition. So if we can get those lands recognized, and elevate those partially protected areas, because of that unique ecosystem management approach, that shines a bright light on something you should all be proud of. Hopefully this could be emulated elsewhere across Canada. So here is a great opportunity to show how we can be world-class and contribute to a world goal.

The End - Workshop adjourned

Appendix 1: Bike Rack

During the workshop, a few discussion points came up that were outside the scope of the workshop but required further dialogue. These items were placed on the "bike rack" for future consideration:

- A. Sub-surface Rights
- B. OEABCMs
- C. Review of Conservation Authorities Act
- D. Inland Waters and the Role of CAs
- E. Definition of Attributes
- F. Geographical Space vs. Geographical Scale



Appendix 2: "I didn't get a chance to say…" forms

A. Managing Data and Databases

- We talked a lot about the CA data, the ECCC/CA database collected by CO and CARTS (the Conservation Area Reporting and Tracking database), but we never discussed them directly or how they come together to inform this initiative. Is the intent to keep them updated? Who will be the custodian of these data and who will/should have access?

B. Ability vs. Capacity

- I strongly support the notion of incorporating/reflecting ability versus capacity when referring to Effective Mechanisms.

C. Setting up Priorities and Critical Paths

- For actions moving forward, there is a need to set up priorities and determine critical paths in order to establish/schedule deliverables and final priorities.

D. Considering Scale

- There is a need to consider scale of the Conservation Authorities; while they are provincially-based (Provincial Act), they are locally-based and have no overarching, provincial directive.

E. Area to Consider for Phase II

- Cootes to Escarpment EcoPark System would be another potential area to consider for inclusion in Phase II. It encompasses ecologically significant land holdings of nine partner agencies (Conservation Halton, Hamilton Conservation Authority, City of Burlington, City of Hamilton, Royal Botanical Gardens, Halton Region, Bruce Trail Conservancy, Hamilton Naturalists' Club, and McMaster University).

F. Facilitating the Screening Process

- The screening process could be 'facilitated' by someone consistent between all CAs as a filter or guide to ensure all CAs are screening the same way. This could help with reducing the need for a common language document/training requirements for staff during screening. Or, host a training workshop for CA staff.

G. 'Partially Protected Areas' becoming a "Catch-All" for CAs

- My fear in further pursuing the 'Partially Protected Area' is that it will become a catch-all for all or most CA lands. TRCA's Altona Forest is a great example; they have a mixed-use recreational portion of the property (lower protection value) and the J. Murray Speirs Ecological Reserve in the south portion (higher protection value). This property, without zoning, would likely fall under 'Partially Protected Area'. I'd rather see effort made to coordinate zoning, to permit at least portions of CA lands to be advanced as 'Protected Areas'.


V.4

APPENDIX G: FACILITATOR'S AIDE-MEMOIRE – A WORKSHOP TO DISCUSS THE POTENTIAL CONTRIBUTION OF LANDS AND WATERS MANAGED BY THE ONTARIO CONSERVATION AUTHORITIES AND PARTNERS TO CANADA'S COMMITMENT TO THE AICHI BIODIVERSITY TARGET

Suggested Citation: Ogilvie, R. 2017. Facilitator's Aide-Memoire: Workshop on the Potential Contributions of CA Lands/Waters to the Aichi Biodiversity Targets - March 28, 2017. After-action Postmortem to My Earlier Article Entitled "Conservation Authorities - The Unrecognized Guardians of Biodiversity in Ontario?". Ogilvie, Ogilvie and Company.

Facilitator's Aide-Memoire

Workshop on the Potential Contributions of CA Lands/ Waters to the Aichi Biodiversity Targets - March 28, 2017

This is the after-action postmortem to my earlier article entitled "Conservation Authorities - The Unrecognized Guardians of Biodiversity in Ontario?"

The workshop held on March 28, 2017 at the Holiday Inn in Barrie, Ontario, to discuss the potential contribution of lands and waters managed by the Ontario Conservation Authorities (CAs) and partners to Canada's commitment to the Aichi Biodiversity Targets. Participants included representatives from 15 of the 36 Conservation Authorities in Ontario, Conservation Ontario, Ontario Nature, Ontario Biodiversity Council, the Ontario Ministry of Natural Resources and Forestry, the Environmental Commissioner's Office, the Nature Conservancy of Canada, as well as the Canadian Wildlife Service of Environment and Climate Change Canada (the Sponsor).

The workshop was designed, facilitated and a proceedings summary prepared by Ogilvie, Ogilvie & Company in association with The Ontario Centre for Climate Impacts and Adaptation Resources (OCCIAR) -under the auspices of the Environment and Climate Change Canada - Canadian Wildlife Service.


"Unrecognized Guardians" Posted on Linkedin

A workshop to discuss the potential contribution of lands and waters managed by the Ontario Conservation Authorities and partners to Canada's commitment to the Aichi Biodiversity Targets

Date: March 28, 2017
Venue: Holiday Inn Barrie Hotel and Conference Centre
20 Fairview Road, Barrie, ON

Under the auspices of the Canadian Wildlife Service – Environment and Climate Change Canada

Conservation Authorities -The Unrecognized Guardians of Biodiversity in Ontario?

Ogilvie, Ogilvie & Company in partnership with Ontario Centre for Climate Impacts and Adaptation Resources (OCCIAR) will be conducting a workshop in March, 2017 on assessing the value of CA lands for biodiversity. This workshop is being conducted under the auspices of the Canadian Wildlife Service of Environment and Climate Change Canada.

Why are we interested in assessing the value of CA lands for biodiversity?

The maintenance and enhancement of biodiversity is essential for long-term ecological sustainability, including human health and well-being. Protected areas are universally accepted as a critical means to conserve biodiversity. In 2010, the Convention on Biological Diversity updated its Strategic Plan for Biodiversity (2011-2020), which is organized under five strategic goals and 20 headline targets ("the Aichi Biodiversity Targets"). The intent of this project is to explore the values of lands and waters held in full or partial title by CAs and the potential application of these values to support Canada's commitments to the Aichi Biodiversity Targets. The best known and perhaps most difficult commitment is defined in Target 11.

Contribution to Aichi 2020 Target 11 on biodiversity

This project informs the development of a methodology to assess the protection status of conservation lands and waters managed by Ontario's CAs, and to comment on the potential contribution of these properties to Canada's Biodiversity Goals and Targets (Target 1) and the Convention on Biological Diversity (CBD) Aichi 2020 Target 11 commitment:

"By 2020, at least 17 percent of terrestrial and in-land water, and 10 percent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes".

The Aichi Biodiversity Target 11

- This is the Facilitator's description of what happened at the workshop. The focus of the workshop was to explore a proposed approach to cataloguing and assessing the conservation value of Conservation Authority (CA) lands and waters, and to discuss the potential contribution of these properties to Canada's commitment to the Aichi Biodiversity Targets.
- In 2010, the Convention on Biological Diversity updated its Strategic Plan for Biodiversity (2011-2020), which is organized under five strategic goals and 20 headline targets ("the Aichi Biodiversity Targets"). The best known and perhaps most difficult commitment is defined in Target 11:
  - ***"By 2020, at least 17 percent of terrestrial and in-land water, and 10 percent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes".***

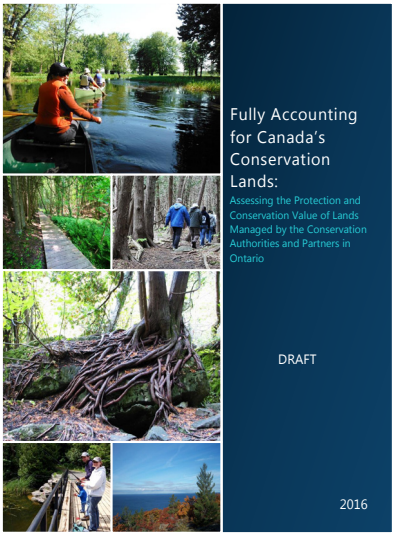
Graham Bryan, Manager, Protected Areas -Canadian Wildlife Service, ECCC

- Graham Bryan welcomed the group and provided a brief overview of the Fully Accounting for Canada's Conservation Lands (FACCL) initiative. He explained that a few years back, the different regions of the Canadian Wildlife Service (CWS) were tasked by Environment and Climate Change Canada (ECCC) to fully account for Canada's conservation lands in an effort to identify areas that could potentially contribute to Canada's 17% terrestrial Aichi Target commitment. Historically, only a few designations such as National Parks, Provincial Parks, and Territorial Lands were counted as formal protected areas and organized according to the International Union for Conservation Nature (IUCN) classification system. Given the diversity of protected area types in Canada, CWS was asked to identify other lands and waters that could be counted as part of the protected area estate.

- Other types of potential protected areas in Ontario include land trust lands and private lands managed by the Nature Conservancy, Ontario Nature and other organizations. In addition, Ontario is unique in that it has Conservation Authority (CA) lands. CWS worked with Conservation Ontario and the Conservation Authorities to develop a database, catalogue CA properties, and enter the data into the database. However, they could not say how much of that land was protected, conserved by other means, or did not have any conservation value. This was the reason for this project – to develop a way to catalogue CA lands and determine if they qualify for classification under IUCN, if they fall under the new category of Other Effective Area-Based Conservation Measures (OEABCMs), etc.

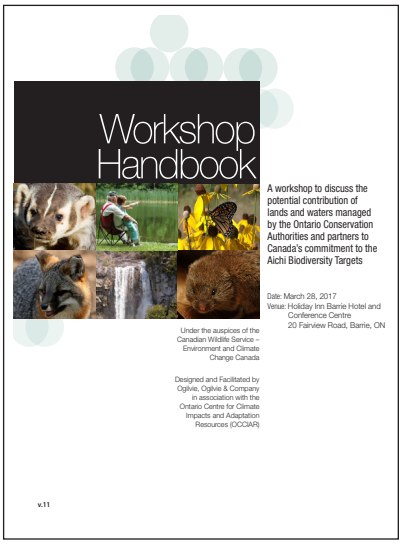
"Fully Accounting for Canada's Conservation Lands"

- Theoretical potential of 6,400 land parcels encompassing 150,000 ha. Collectively, CA holdings encompass more than 6,400 parcels with a total area of more than 150,000 hectares, most of which is compositionally and/or functionally important for biodiversity conservation.
- "CAs are a unique creation among the many agencies and organizations involved with protecting natural areas and biodiversity throughout Ontario and Canada. The extent and significance of their combined holdings for potential biodiversity conservation rivals that of provincial and federal efforts in southern Ontario. Many sites within CA properties, such as Minesing Swamp, Springwater Forest, Greenock Swamp, Wainfleet Bog, and Stone Road Alvar may be seen as nationally significant because they protect representative and unique ecosystems and species at risk.
- The unique organizational fabric of CAs enables them to be both nimble and robust in their dealings as conservation 'middlemen' across the public and private sectors. With this pedigree, the CA domain is rightly regarded as a conservation leader. Although these parcels represent only 1/10th of 1% of Canada's protected area estate, they are extremely important to the Target 11 commitment because they are located in or encompass ecosystems or parts of ecosystems in one of the country's most significantly modified landscapes."



The specific outcomes sought from the Workshop

- Explore CA comfort level with the methodology and results of Phase I of the project (see "Fully Accounting for Canada's Conservation Lands") and identify options for improvement.
- Outline and provide an update on Phase II of the project.
- Explore interest by CAs and partners in participating in future initiatives.



Converting a 146 Page Report into a 25 Page Workshop Handbook

- The major challenge in designing the workshop was how to simplify the report "Fully Accounting for Canada's Conservation Lands" without losing any of the important findings. In order to make this workshop as effective and efficient as possible, we created a Workshop Handbook (the Coles Notes version of the Study/Report) to facilitate the understanding and discussion of the methodology. The Workshop Handbook provided a short(er) version of the full report. The intent was

to highlight the major findings, conclusions and recommendations.

- In addition to sending advance copies of the Handbook and the Report, we created a workshop binder for each participant that included:
  - A copy of the Workshop Handbook (the Coles Notes version of the Study/Report)
  - Copies of all the presentation slides, and
  - A copy of "Fully Accounting for Canada's Conservation Lands"

Live-time Keyboarding and Projection

- Annette Morand (Community Adaptation Coordinator for OCCIAR) keyboarded the presentations and discussions on a 2nd screen. This is one of our normal techniques for showing participants that we are listening and that we value their comments. This is proof to them that we are paying attention and that their comments are important. We use a separate projection screen for this running summary. This increases our ability to facilitate and track the discussion so that we can write clear, crisp and accurate summaries of the workshop.

Agenda

- 8:15 – 9:00 .....Registration and Continental breakfast
- 9:00 – 9:10 .....Welcome – Graham Bryan, ECCC
- 9:10 – 9:15 .....Intro to the study – Allan Douglas, OCCIAR
- 9:15 – 9:30 .....Overview of the Workshop – Robb Ogilvie
- 9:30 – 10:30 .....Session 1: Presentation of the "Handbook" with interactive Q&As
- 10:30 – 11:00 .....Break and time to check messages
- 11:00 – 12:00 .....Session 2: Continued discussion of the "Handbook"
- 12:00 – 1:00 .....Lunch
- 1:00 – 2:30 .....Session 3: Presentation and discussion potential Next Steps
- 2:30 – 3:00 .....Wrap-up and Next Steps

Presentations and Discussions Divided into 3 Sessions

- **Session 1** -The purpose of this session was to make sure the participants understood the methodology so they would be able to critique it and understand its implications for them should they get involved. As the lead author, Dr. Paul Gray presented the Report's methodology and answered all the questions raised in an open and transparent manner. His open style encouraged people to ask questions and offer their opinions about the rather complex steps involved in determining the potential of a parcel of land/water to be classified as a protected area. Paul took the participants through a series of 15 slides that covered the four major components of the report:
  - An exploration of the definition of protection and related measures;
  - An evaluation of the CAs database and its capacity for assessing protection status and the International Union for the Conservation of Nature (IUCN) protection categories;
  - Development of a screening technique to evaluate protection status; and
  - A test of the screening technique on a sample of CA properties.

- **Session 2** - Paul took the participants through a series of 9 slides that focused on the findings of the 14 sites used to test the methodology. The idea was to look at results from the CA process and, starting off with the summary table (Slide 1, Session 2) developed by Graham, showed the ranking that occurred as a result of the surveys sent to the CAs. This slide illustrated a variation in responses by the CAs, which helped to illustrate the differences in perception and/or understanding of the criteria used to assess protection status.

- **Session 3** - Al Douglas, as one of the co-authors of the report, presented the slides highlighting the project team's suggestions for next steps. Al reminded participants that these suggestions are not "givens" or "cast in concrete"; they are suggestions from the project team.
  - Finish the 2016 Report
  - Develop a Common Set of Guiding Statements
  - Complete Integration of the CCEA Attributes into the CA Database
  - Link the Database Decision Tools
  - CA Case Studies in the CCEA Guidebook
  - Partially Protected Areas
  - Complete Phase II
  - Workshop and/or Webinar Series

Workshop Outcomes Achieved

- **The Report -"Fully Accounting for Canada's Conservation Lands"- was approved with minor edits** - With some qualifications (their desire to have the Report include/develop a common language to better explain the screening/assessment process and an additional opportunity to further review the report for potential edits), the CAs and the 2 NGOs indicated that they were prepared to support the Report and its findings.
- **Phase 2 was Accepted** - The update on Phase 2 was presented and accepted by the CAs and they saw Phase 2 as an opportunity to address/deal with a number of the issues raised with the screening and assessment process/methodology.
- **CAs and NGOs Interested in Participating but Lack of Resources is a Constraint on Degree of Involvement** - The CAs and the 2 NGOs indicated their interest in pursuing the screening and assessment of their lands/waters for their potential contribution to the Aichi Target 11 on biodiversity. However, they stressed the point that they have severe resource constraints that will constrain the extent to which they can actively support the proposed future initiatives.

Wrap-up

– ***"I appreciated the point in the conversation where we were challenged with the value of this whole exercise, the value of participation and the value of contribution moving forward. The answers I heard were impressive – it means that the people here believe in this and have found ways to recognize the benefits in this whole exercise; this was uplifting. There were points throughout the day where we heard contributions from some people who recognize the challenges but were thinking and communicated ways to overcome those challenges. There were a lot of positive vibes and comments."***

– ***"I am fully supportive of this work. There is no question that CAs hold wonderful parcels of land; why are we not just accepting the fact that they are contributing to the targets? The reality is that we have to go through the exercise, but this means work. So it boils down to competing interests and where we have to place our priorities. It is really challenging to keep this at the top of the priority list, but we have to take all of this good information and making it work. How do we get to that next step in the absence of dollars, in absence of commitments from our boards and our general managers? The reality of doing it is tough."***

Appendix H: Common and Scientific Names in Alphabetical Order

Acadian Hairstreak - *Satyrium acadic*

Alder Flycatcher - *Empidonax alnorum*

American Sweet Chestnut - *Castanea americana*

Beaver - *Castor canadensis*

Blackgum - *Nyssa sylvatica*

Blue Ash - *Fraxinus quadrangulata*

Blue Racer - *Coluber constrictor foxii*

Blue-gray Gnatcatcher - *Polioptila caerulea*

Bur Oak - *Quercus macrocarpa*

Caspian Tern - *Hydroprogne caspia*

Chinquapin Oak - *Quercus muehlenbergii*

Common Reed - *Phragmites australis*

Dog Strangling Vine - *Vincetoxicum rossicum*

Downy Wood Mint - *Blephilia ciliata*

Eastern Chipmunk - *Tamias striatus*

Eastern Flowering Dogwood - *Cornus florida*

Eastern Gray Squirrel - *Sciurus carolinensis*

Eastern White Cedar - *Thuja occidentalis*

Giant Swallowtail - *Papilio cresphontes*

Gray Treefrog - *Hyla versicolor*

Green Frog - *Lithobates clamitans*

Hackberry - *Celtis occidentalis*

Hackberry Butterfly - *Asterocampa celtis*

Heart Nut - *Juglans ailantifolia*

Holly Fern - *Polystichum lonchitis*

Hooded Warbler - *Setophaga citrina*

Hop Tree - *Ptelea trifoliata*

King Rail - *Rallus elegans*

Least Bittern - *Ixobrychus exilis*

Leopard Frog - Lithobates pipiens

Lime Saxifrage - *Saxifraga paniculata*

Long-tailed Weasel - *Mustela frenata*

Marsh Wren - *Cistothorus palustris*

Mink - *Neovison vison*

Moose - *Alces alces*

Muskrat - *Ondatra zibethicus*

Northern Harrier - *Circus cyaneus*

Paw Paw - *Asimina triloba*

Pied-billed Grebe - *Podilymbus podiceps*

Pileated Woodpecker - *Hylatomus pileatus*

Porcupine - *Erethizon dorsatum*

Puttyroot - *Aplectrum hyemale*

Raccoon - *Procyon lotor*

Rainbow Trout - *Oncorhynchus mykiss*

Red Fox - *Vulpes vulpes*

Red Pine - *Pinus resinosa*

Red Squirrel - *Tamiasciurus hudsonicus*

Redside Dace - *Clinostomus elongatus*

Ruffed Grouse - *Bonasa umbellus*

Sachem Skipper - *Atalopedes campestris*

Sassafras - *Sassafras albidium*

Serviceberry - *Amelanchier*

Silver Maple - *Acer saccharinum*

Slender Sedge - *Carex lasiocarpa*

Small-flowered Collinsia - *Collinsia parviflora*

Snapping Turtle - *Chelydra serpentina*

Spring Peeper - *Pseudacris crucifer*

Stinkpot Turtle - *Sternotherus odoratus*

Striped Skunk - *Mephitis mephitis*

Sugar Maple - *Acer saccharum*

Tawny Emperor - *Asterocampa clyton*

Tickseed - *Coreopsis tripteris*

Tufted Titmouse - *Baeolophus bicolor*

Tulip Tree - *Liriodendron tulipifera*

Virginia Creeper - *Parthenocissus quinquefolia*

Virginia Rail - *Rallus limicola*

White Mulberry - *Morus alba*

White Pine - *Pinus strobus*

White-tailed Deer - *Odocoileus virginianus*

Whorled Pagonia - *Isotria medeoloides*

Wild Turkey - *Meleagris gallopavo*

Yellow Mandarin - *Prosartes lanuginosa*

Yellow-breasted Chat - *Icteria virens*

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