



Miistakis
Institute

A Database for Private Land Conservation in Alberta

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Background Context

Private land conservation in Alberta plays a key role in biodiversity conservation. As we increasingly seek to use the same acres for more dense and complex land uses, private land conservation only becomes more important. However, there is currently no way to track the cumulative conservation impact of private land conservation in Alberta as each land trust, conservancy or municipality does their own tracking, which is geared towards a single organization or program.

Lack of a comprehensive database of privately conserved lands undermines private land conservation. Firstly, planning decisions (regional planning, municipal planning etc.) are made without the consideration of accurate spatial accounting of privately conserved lands. Secondly, government agencies, NGOs, municipalities, industry, and others make their own judgements about the conservation value of privately-conserved lands. Additionally, funding, credibility and inclusion are increasingly based on others' interpretation of privately conserved lands.

Recently however, there is growing need and interest from the private land conservation community across Canada to share data. This interest has been in part due to the development of the national *Pathway to Canada Target 1* initiative in 2010, which aligns Canada with Aichi Target 11: biodiversity is conserved by protecting 17% of the land-base and 10% of inland waters by 2020 (Pathway to Canada Target 1, n.d.). However, due to the lack of a comprehensive dataset of privately conserved lands, efforts to include these lands into Pathway to Canada Target 1 initiative have been (and are being) undertaken with limited involvement from land trusts and conservancies.

Incorporating privately conserved lands into the Pathway to Canada Target 1 initiative is a vision that the Miistakis Institute has been working on since 2018 when we first convened members of the Alberta private land conservation community to discuss the creation of a database. While earlier work focused on how best to align a private land database with federal initiatives our recent work focuses on the design of a database *for* the Alberta private land conservation community that would:

- Provide a:
 - Sustainable, accessible Alberta-based database
 - Catalogue of all private land conservation efforts in Alberta

- Credible representation of both private protected areas and private OECMs
- Viable validation process
- Support:
 - The needs of Alberta land trusts / conservancies for conservation planning and reporting
 - Municipal conservation planning
 - A variety of Government of Alberta conservation initiatives and regional planning
- Integrates with:
 - National and international conservation-area accounting systems
 - Other private land conservation data gathering efforts
- Recognizes the:
 - Data collection capacity of partners
 - Pivotal role of the land trust community
 - Concerns and needs of protected areas community
 - Ability to respect the privacy rights of landowners where Conservation Easements exist
- And considers the:
 - Inevitability of changes in the conserved land base
 - Implications of mixed use, and industrial land uses

In addition, a province-wide private land conservation database would bolster credibility with funders, governments and landowners demonstrating diligent strategic use of investments and put organizational and community-wide contributions to biodiversity, agricultural viability, open space or heritage in context.

We propose a database that is designed by and overseen by the holders of the data - Alberta's private land conservation community. The database would be an on-line portal database that organizations would submit their data to based on the agreed-to database structure. The database would cover all private land conservation (ecological, agricultural, recreation, open space preservation, scenic/aesthetic protection, Indigenous community priority, ecological research, environmental education) and serve multiple purposes, spanning program specific needs (Ecogifts, Alberta Land Trust Grant Program, Pathway to Target 1, etc.) and include an agreed-to set of fields that support the stated purposes.

This report details the stakeholder engagement that focused on issues that needed to be addressed as well as the resulting recommendations for creation of a

comprehensive database to track privately conserved lands in Alberta and allow for a more fulsome approach to private land conservation planning in the province.

We have developed three briefing documents to provide further context to the stakeholders during the engagement process (Appendix B):

- *Pathway to Target 1 and Private Land Conservation*
- *Protected Areas, Conserved Areas and OECMs outlines*
- *Canadian Protected and Conserved Areas Database (CPCAD)*

Issues to be Addressed

Based on prior research, Miistakis identified four key areas that required consultation with the private land conservation community to inform the design of a database for privately conserved land in Alberta.

1. Sharing and Privacy

Traditionally, land trusts and conservancies have been very private with their landowner relationships and land securement transactions. It is important that landowners can maintain the level of privacy necessary to them and that past and current agreements between land trusts and landowners are honored or amended.

Each land trust organization creates and stores their own information related to their conserved properties. It is important to consider how to gather and disseminate the data to be shared, determine who has access to the database and determine what information is shared.

2. Governance

The database is to be designed by and overseen by the holders of the data - Alberta's private land conservation community, therefore, it is important to enable them to provide on-going oversight of the database. It is also important to tailor the mechanism to the limited and/or varied capacities of Alberta land trusts and conservancies. The sustainability of the database also needs to be addressed to ensure the database and its support structure can persist over time.

3. Database Structure

There is a need to determine the database fields (metadata) to be included that balance the needs of including all of the information that is required for planning and reporting purposes and keeping it to the smallest number of fields as possible to facilitate ease of use with the database. Alignment with other initiatives (e.g.,

Pathway to Canada Target 1) comes with implications for consideration of fields to include.

To begin the conversation Miistakis created a proposed set of database fields that were confirmed as part of the stakeholder engagement process (see database structure recommendations).

4. Credibility

With data being shared from different sources and varying data collection methods across different organizations there is a need to ensure standardization of data to ensure accuracy and consistency of data. Additionally, there is a need for external verification or auditing.

Jurisdictional Review

Although a formal jurisdictional review was not conducted, we conducted interviews of key experts on private land conservation databases in British Columbia (B.C.) and Saskatchewan, as well as an expert involved at the National level in the on-going process to include privately conserved land to Pathway to Canada Target 1.

While their databases had different goals and approaches, some of the common features between the B.C. and Saskatchewan private land conservation databases include:

- The purpose of the tool drives the type of data collected
- The roll-up to the Pathway to Canada Target 1 initiative was one of the reasons for building a database
- The provincial government was a partner or driver of database development
- Database development was a collaborative process between provincial government and the private land conservation community
- The database was populated from provincial Land Titles information, provided by either the land trust organization or acquired by the database manager

Stakeholder Engagement

Stakeholder engagement was the focus of this project, and what we heard drove the recommendations for development of a database for the private land conservation community in Alberta.

Date	Format	Topic
November 18, 2020	Presentation	Overview of the project, introduction of the four focus areas and the challenges that need to be addressed
January 11 – 29, 2021	Survey	Questions relating to the four focus areas and the challenges that need to be addressed
February 17, 2021	Workshop Engagement	Present survey results, discussion of two of the focus areas (sharing and privacy, and database structure) and the challenges that need to be addressed
March 5, 2021	Workshop Engagement	Discussion of two of the focus areas (governance and credibility) and the challenges that need to be addressed
July 2021	Report distribution	Present the report on recommendations for an Alberta private land conservation database

Invitations for engagement were sent to all entities involved in Private Land Conservation in Alberta, including:

- Southern Alberta Land Trust Society (SALTS)
- Nature Conservancy of Canada (Alberta office) (NCC)
- Legacy Land Trust (LLT)
- Foothills Land Trust (FLT)
- Crooked Creek Conservancy Society of Athabasca
- Edmonton & Area Land Trust (EALT)
- Western Sky Land Trust
- Strathcona County
- Ducks Unlimited Canada (Alberta office)

- Alberta Fish and Game Association (AFGA)
- Alberta Conservation Association (ACA)

There was an overwhelming response by the community, with seven of the eleven organizations sending at least one person to participate in the engagement.

After the first engagement session (presentation) on November 18, we asked participants to complete a survey to capture preliminary feedback to inform the dialogue for the following workshop (Feb. 17). The survey had a total of 19 questions and was open from January 11-29, 2021. There were six responses to the survey, representing a 55% (6/11) workshop invitee response rate (for those invited to the second workshop).

Recommendations

The following recommendations are split into the four focal issues that were identified as needing to be addressed: sharing and privacy, database structure, governance, and credibility. The recommendations are based on the cumulative feedback gained through the stakeholder engagement.

Sharing and Privacy

Access

The proposed private land conservation community database would be accessible only to the private land conservation community and to government agencies (all levels of government), however, access would be restricted to planning and reporting purposes only through a data sharing agreement. While public access was discussed the private land conservation community agreed that the primary purpose of the database was to serve the private land conservation community for conservation planning and reporting purposes.

A new online tool being developed by the [Land Stewardship Centre \(LSC\)](#) aims to provide the public and industry with information on private land conservation in Alberta. All data from LSC's tool will be obtained from the public record, and will not contain exact spatial boundaries of each project. The LSC tool will include less detailed information than the proposed database but will fulfill a critical knowledge gap for the public regarding education on private land conservation in the province. The LSC tool also provides this information to industry for their use when siting projects.

It is recommended that access to the proposed private land conservation community database be reviewed by a Working Group annually, as access by academics and other organizations (conservation organizations) could be considered on a one-off basis for projects that would add value to the conservation community or support the broader mission of conserving important habitat in Alberta.

To address data sharing and privacy concerns, the following safeguards are recommended to be foundational components of access to the database:

1. Private Land Conservation Community
 - a. Develop a data sharing agreement for the private land conservation community that is required for access and contribution to the

database. This agreement will outline that the tool is used for planning and reporting purposes only and would indicate that data is not to be shared by the user accessing the database.

- b. This agreement will stipulate that the third party manager (Miistakis Institute) will not be supplying data but will require access to data to manage the database and provide requested reports as agreed by all other organizations.
 - c. Create log in credentials for each private land conservation community member. The data sharing agreement would need to be confirmed every time a member accessed the database online.
 - d. Data would be updated by each member of the private land conservation community annually to keep records up to date.
2. Government Agencies
- a. Develop a data sharing agreement that is required to access the database but does not allow data to be entered. This would be for agency users such as the Government of Alberta, municipalities, etc. This agreement will outline that the tool is used for planning and reporting purposes only and would indicate that data is not to be shared by the user accessing the database.

Landowner Willingness to Share Data

There is some uncertainty on the willingness of landowners to add a data sharing clause to their current agreements but progress is being made by some land trusts that are beginning to ask this of their current agreement holders. Much of the uncertainty is regarding concerns about public access to the property with a fear that once property information is on a map, the public will want to access the property despite this not being part of the vast majority of private land conservation agreements. In contrast to that, some landowners are explicit that they would like their conservation property shared on a map. With limiting access to the database to the private land conservation community and government, with additional organization being approved on a case-by-case basis, this concern regarding access to properties is alleviated if all users abide by the terms of the agreement they have signed.

In order to ensure a fully functioning database, the members would need to incorporate data sharing clauses into their new conservation agreements, a process that some land trusts are already doing. There was overall support for this, depending on how the uptake was with current landowners.

Types of Data to Share

Identifying landowner information is the only data that was identified as not being shareable, and this data isn't necessary for reporting or planning. The exception to this would be if the property was conserved through fee simple ownership by a conservation organization, then the organization name would be shared as the conserving party. All other information and associated metadata, including specific spatial information about a conserved property can be shared.

AGGREGATED DATA

Aggregated data is important from a collective sector reporting purpose (e.g., the private land conservation community has collectively protected 50 hectares of burrowing owl habitat). However, there is no need to build specific aggregation functions into the tool as the proposed structure of the database is such that each land trust would share their individual parcels and that aggregated data would be able to be accessed from the database. Each member could do their own analysis/aggregation based on their own needs. Additionally, the database manager could be asked to do an aggregated data analysis report on behalf of the members to show cumulative conservation impact of private land conservation, potentially through an annual report.

It is recommended that the need for pre-determined aggregate data be discussed with the Working Group. Key metrics could be decided on that are auto-populated on an annual basis. Considerable progress is being made in this area with a parallel initiative underway that identifies conservation contributions from the private land conservation community (see Progress to Date).

Database Structure

The private land conservation community is clear that there are certain fields that should be included in the database and certain fields that should be omitted. It is important for the database to align with other initiatives for the purpose of reporting and counting towards these initiatives, but that this is not the primary purpose of the database.

The fields that had a low level of agreement in the survey were discussed during the workshops to determine their inclusion in the database. The two categories below outline the recommendations for inclusion of fields, and any relevant justification provided by the discussion with the private land conservation community.

Alignment with Other Initiatives

ALBERTA LAND TRUST GRANT PROGRAM

Many land trusts are supported by the Alberta Land Trust Grant Program (ALTGP) – a provincially funded granting program that supports land trusts in establishing and administering new conservation easements and/or new conservation projects on fee simple lands owned by the land trust. The ALTGP requires specific annual reporting which could be built-in and supported by the database in the future. Additionally, proposals to the ALTGP require general spatial information (e.g., municipality, land use framework region, other conservation areas proximal to application property, etc.) and alignment with Alberta Environment and Park conservation priorities, many of which could be easily demonstrated by use of this spatial database, including:

- maintaining large areas of native landscape
- conserving connecting corridors
- sustaining disconnected pockets of native habitat within fragmented landscapes
- alignment with Key Biodiversity Areas and specific species ranges

It is recommended that ALTGP supported projects be recognized in the database. This could be achieved simply by the inclusion of a binary yes/no field that indicates if a property was supported by the ALTG (Government of Alberta, 2021). Additionally, agency personnel from the ALTG program could be included in the Working Group.

ECOLOGICAL GIFTS PROGRAM

The Ecological gifts program, administered by Environment and Climate Change Canada, supports landowners in conserving ecologically significant lands by offering a significant tax benefit (Government of Canada, 2021). It is recommended that Ecological Gifts supported projects be recognized in the database. This could be achieved simply by the inclusion of a binary yes/no field that indicates if a property was supported by the Ecological Gifts program.

PATHWAY TO CANADA TARGET 1

Inclusion of lands in the Pathway initiative is facilitated through the Government of Canada's, Canadian Protected and Conserved Areas Database (CPCAD) (see Appendix B - *Canadian Protected and Conserved Areas Database (CPCAD)* for more details). Before a privately conserved land is included in CPCAD, it must first undergo a review by the respective jurisdiction, which is facilitated by a Decision

Support Tool created by the Pathway initiative to help determine which conservation lands should be included and which should not. However, the decision support tool is not a necessary requirement for inclusion in CPCAD as seen in both B.C. and Saskatchewan jurisdictional review. Additionally, for both jurisdictions, the provincial government is either a partner or the developer/manager of the database and accepts all lands within the database as in-situ conservation and there is no government verification of these lands.

Both British Columbia and Saskatchewan include privately conserved lands in their database contributions to the Pathway initiative. In B.C., only fee simple lands are included in their private land conservation database which is then 'cross-walked' to the CPCAD required fields and submitted to the BC Government for their submission to CPCAD. In Saskatchewan, both fee simple and easements are included in their database, which is submitted to CPCAD for inclusion in Pathway.

We recommend developing a database that includes all the fields required for CPCAD, as well as additional fields that provide evidence of in-situ conservation of the environment (see section Fields to Include). This will allow for alignment with CPCAD requirements.

Our recommended fields are expansive for what is required for CPCAD. We recommend that a cross-walk document or automation be developed where the AB private land conservation database fields that relate to CPCAD and Pathway are easily extracted, and matched to the CPCAD fields. This cross-walk step can take place after the development of the AB private land conservation database. The AB private land conservation community does not see a role for the Government of Alberta to play in verifying whether or not a property is considered 'conservation' as they have already vetted the property themselves, as a conservation organization.

Fields to Include (a Summary)

The stakeholder engagement included a detailed dialogue on the fields to include. Points of consideration are included under the relevant field. Below are general points of consideration for the database fields:

- Agreement that there needs to be some drop-down categories, but it would be ideal to also allow for analysis of layer overlays when needed (see section on Sharing and Privacy – Aggregated Data).
- For field responses, use drop-down options when possible and qualitative fields when needed.

A detailed description of fields to include and response options are presented in Appendix A.

IDENTIFIERS

- *Name of conservation area*
- *Sub-zone of conservation area*
- *Sub-zone name*
- *Sub-zone description*
- *Unique identifier number*
- *Location (spatially-explicit)*
- *Municipality*
- *Area (size)*
- *Conservation agency*
- *Conservation agency type*
- *Property owner of conservation area*
- *Land owner type*
- *Land owner type: Conservation Partnership*

CONSERVATION FOCUS

- *Primary conservation focus*
- *Secondary conservation focus*
- *Tertiary conservation focus*
- *Natural region*
- *Course Ecosystem Type*
- *Ecological contributions*

PROTECTION

- *Conservation area type*
- *Type of privately protected area*
- *Protective mechanism*
- *IUCN Category*
- *Protection Time Frame*

MANAGEMENT

- *Management Regime*
 - This is required for alignment the Pathway to Canada Target 1, CPCAD screening tool. It is used to confirm that the area delivers in-situ conservation of biological diversity, e.g., management regime outlines mowing once/year – protecting endangered species. A management plan could be linked within this field, which states conservation purposes, and requires management practices to support them. It was decided to make

this field optional and to only fill in if the landowner wants to be included in Pathway to Canada Target 1.

ALIGNMENT WITH OTHER INITIATIVES

- Alignment with other initiatives

DATA MANAGEMENT

- Conservation status of area
- Date of effect
- Data provider
- Date of most recent data update
- General Comments

Fields to Exclude

- Public Access (Yes / No / Limited or by permission)
 - It was decided to exclude this field as public access is not part of the template for existing conservation easements as that is not the purpose of private land conservation when the tool used is an easement. Fee simple lands may include public access, however this is not a necessary field for the proposed database. It was decided this could be added at a later date.
- Agricultural contributions
 - It was decided by the private land conservation community to exclude agricultural details. It can be added at a later date if needed.
- Sub-surface rights
 - The private land conservation community agreed that this field would need to be discussed with the Government of Alberta for inclusion in the Pathway to Canada Target 1 initiative.

Governance

Roles

The private land conservation community expressed a desire to play a role in all aspects of the database (design, management, decision making, user of the database).

The following governance structure is recommended:

- Database Creation
 - This report describes the design of the database, which was based on the needs and engagement with the Alberta private land conservation community (see the stakeholder engagement section for more details).

- Building of the database (spatial and metadata) would be the responsibility of a third party. The private land conservation community determined the best party to build the database is the Miistakis Institute.
- Management
 - The day-to-day management of the database will be the responsibility of a third party. The private land conservation community determined the best party to manage the database is the Miistakis Institute
- Decision Making
 - Many decisions have been made during the design phase of this database, however, on-going management will face future decisions (e.g. unique users requesting access), therefore we recommend the development of a Working Group of stakeholders. We recommend that the Working Group consists of one representative from:
 - Each Alberta private land conservation organization
 - Miistakis Institute
 - Government of Alberta
 - Personnel from ALTG Program
 - Government of Canada
 - Pathway Target 1

Having a diverse working group enhances the credibility of the database by gaining buy-in from all stakeholders of the database. The Working Group should meet yearly, and on an 'as needed' basis at the request of the database manager (the Miistakis Institute).
- Users
 - The data sharing agreements will govern how different users access and contribute to the database.

Funding structure

There were two suggestions to fund the building of the database:

1. Secure project dollars from the private land conservation community either from project budgets or a user fee;
2. Pursue philanthropic funding support.

Once the database is built, the maintenance/management could be funded by stewardship dollars from the private land conservation community and the Government of Alberta. Yearly report creation of aggregated data of cumulative impact of the private land conservation community could be set up and funded as part of on-going maintenance, funded either by the private land conservation

community or the Government of Alberta, both of whom would be users of this yearly report.

Credibility

Accuracy

Accuracy can be addressed by creating a standardized data entry manual and developing a user-friendly database consisting of drop-down menus whenever possible, and offer training to all users. To ensure accuracy, it was decided that the database manager should conduct an annual random audit of the data.

Verification

The AB private land conservation community does not see a role for the Government of Alberta to play in verifying whether or not a property is considered 'conservation.' If the area is included in the database, it should be considered a privately conserved area and fall under either a Privately Protected Area or Other Effective Area-Based Conservation Measure, as defined by IUCN (see Appendix B – *Protected Areas, Conserved Areas and OECMs* for more details).

We recommend there be an annual intake call for data to be added or amended in the database, which is the process for the B.C. database. Some amendments could trigger removal from the database. The private land conservation community feels that only the fields that indicated if the area is no longer protected (Privately Protected Area or Other Effective Area-Based Conservation Measure) should constitute removal from the database. The specific field that indicates this is the 'conservation area type.'

Progress to Date

Building on the momentum of discussions around the creation of a private land conservation database for Alberta, the Nature Conservancy of Canada (NCC) (Alberta Office) and the Southern Alberta Land Trust Society (SALTS) recently developed and populated a tool (database) that focuses on the spatial data associated with private land parcels. This database is housed with NCC. The tool allows users to view spatial parcel data from all participating organizations (currently Nature Conservancy of Canada, Southern Alberta Land Trust Society, Ducks Unlimited Canada, Edmonton Area Land Trust, Western Sky Land Trust, Legacy Land Trust, Foothills Land Trust). The tool also includes additional layers of ecological importance (e.g., Species at Risk habitat, Key Wildlife and Biodiversity Zones.).

What the tool lacks is the detailed metadata associated with each conserved parcel, which our database recommendations address. This metadata can be added to the existing planning tool retroactively, along with migrating the maintenance and management of the tool to the Miistakis Institute as per the recommendation of the private land conservation community.

Another benefit of expanding on this tool is that a data sharing agreement has already been established and signed by the participating land trusts and all data from these organizations is being collected and added to the database as of the spring of 2021. The data sharing agreement stipulates the purpose for the agreement, the types of data to be shared (spatial and metadata), data sharing guidelines, the term of the agreement and includes a confidentiality statement.

Additionally, the database is being used to develop a report (being developed by the Miistakis Institute) demonstrating the conservation impact of private land conservation in Alberta using metrics focused on wildlife populations, human well-being, water quality and watershed services, demonstrating the functionality and value of this database.

Next Steps

Securement of funds for the expansion of the database held by NCC to include recommended metadata (fields to be included), establishment of the Working Group, creation of data templates and verification structure is required and is actively being sought by the Miistakis Institute. Once funds are secured, migration of the database from NCC to the Miistakis Institute should occur. This would not impact access to the database by other entities, it would just change the management organization. Miistakis would then create a manual and user-friendly data entry form to populate fields in the database to expand on the data already existing in the database started by NCC and SALTS, including the recommended fields that are not currently in the metadata of the existing tool. A call for this metadata will go out to all private land conservation organizations in Alberta. Once funds are secured a Working Group will also be formed to govern the overall management of the database.

References

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<https://www.alberta.ca/alberta-land-trust-grant-program.aspx>

Government of Canada. (2021). *Ecological gifts program: overview*.

<https://www.canada.ca/en/environment-climate-change/services/environmental-funding/ecological-gifts-program/overview.html>

Pathway to Canada Target 1. (n.d.). *The Pathway*. Retrieved November 1, 2020, from

<https://www.conservation2020canada.ca/the-pathway/>

Appendix A: Detailed Database Fields

Field	Response Options	Description
Identifiers		
Name of conservation area	<ul style="list-style-type: none"> Name Name - Zone Name 	<ul style="list-style-type: none"> If conservation area is split into 'sub-zones', each sub-zone name would start with the parent area name
Sub-zone of conservation area	<ul style="list-style-type: none"> Yes/No 	<ul style="list-style-type: none"> Some agencies may want to separate a single conservation area into sub-zones with different attributes All information from that point would apply to the sub-zone rather than the whole conservation area
Sub-zone name	<ul style="list-style-type: none"> [if yes] Zone Name 	<ul style="list-style-type: none"> Added to parent name in case where 'sub-zone' field returns TRUE
Sub-zone description	<ul style="list-style-type: none"> [if yes] text 	<ul style="list-style-type: none"> E.g., wetland area, specialized grazing management area, <ul style="list-style-type: none"> special management areas
Unique identifier number	<ul style="list-style-type: none"> XXXXX 	Assigned at time of data entry
Location (spatially-explicit)	<ul style="list-style-type: none"> Provide a shapefile (KMZ file) 	Shapefile could auto-populate the other fields
Municipality	<ul style="list-style-type: none"> Drop down list of all municipalities and special areas (county, city, town, RM, MD, etc.) 	Shapefile could auto-populate this information
Area (size)	<ul style="list-style-type: none"> Number (ha) 	Shapefile could auto-populate this information

Field	Response Options	Description
Conservation agency	<ul style="list-style-type: none"> Agency/organization name 	<ul style="list-style-type: none"> E.g., holder of conservation easement, authority responsible for enforcing use restrictions, land management authority, community responsible for area management
Conservation agency type	Select one: <ul style="list-style-type: none"> Land trust / conservancy Municipal government Company Community other 	<ul style="list-style-type: none"> This is the type of entity responsible for ensuring that biodiversity is conserved on the property
Property owner of conservation area	<ul style="list-style-type: none"> Name 	<ul style="list-style-type: none"> E.g., municipality, land trust, company, private owner No identifying landowner information will be included
Land owner type	Select one: <ul style="list-style-type: none"> Private individual Municipality Company / corporation Conservation NGO Other NGO Community group Conservation Partnership 	<ul style="list-style-type: none"> Choice of one - the most appropriate In case of overlap, add details in 'General Comments'
Land owner type: Conservation Partnership	<ul style="list-style-type: none"> Comment field: List the partners 	<ul style="list-style-type: none">
Conservation Focus		

Field	Response Options	Description
Primary conservation focus	Select one: <ul style="list-style-type: none"> • Ecological • Agricultural • Recreation • Open space preservation • Scenic/aesthetic protection • Indigenous community priority • Ecological research • Environmental education 	
Secondary conservation focus	Select one: <ul style="list-style-type: none"> • Ecological • Agricultural • Recreation • Open space preservation • Scenic/aesthetic protection • Indigenous community priority • Ecological research • Environmental education • N/A 	
Tertiary conservation focus	Select one: <ul style="list-style-type: none"> • Ecological • Agricultural • Recreation • Open space preservation • Scenic/aesthetic protection • Indigenous community priority • Ecological research 	

Field	Response Options	Description
	<ul style="list-style-type: none"> • Environmental education • N/A 	
Natural region	<ul style="list-style-type: none"> • Alberta Natural Regions • Sub-regions 	<ul style="list-style-type: none"> • Shapefile could auto-populate this information
Course Ecosystem Type	<ul style="list-style-type: none"> • Marine - % • Terrestrial - % • Fresh water - % 	<ul style="list-style-type: none"> • This mirrors the only ecological field currently in CPCAD
Ecological contributions	<p>Select all that apply:</p> <ul style="list-style-type: none"> • Ecological connectivity • Important patches of terrestrial or aquatic wildlife habitat • Important areas of natural vegetation • Vulnerable, rare, or irreplaceable species and their habitat • Riparian, wetland and riverine systems • Buffering known areas of biological diversity • Mitigating known threats to areas of important biological diversity • Protecting evolutionary pathways important in the face of climate change • Sequestering carbon above or below ground using natural vegetation communities 	

Field	Response Options	Description
	<ul style="list-style-type: none"> Restoring ecological structure and function to a natural state 	
Protection		
Conservation area type	Select one: <ul style="list-style-type: none"> Privately Protected Area (PPA) Other Effective Area-based Conservation Measure (OECM) Other Private Land Conservation 	
Type of privately protected area	Select all that apply: <ul style="list-style-type: none"> Privately owned and conserved by land trust or conservancy Privately owned and conserved by company Privately owned and conserved by community group Privately owned and conserved with third-party restrictions 	
Protective mechanism	Select one: <ul style="list-style-type: none"> Enforceable restrictions and/or prescriptions on the allowable land use activities that could significantly affect the identified ecological values Conservation easement Ownership by land trust or conservancy Enduring management plan 	

Field	Response Options	Description
	<ul style="list-style-type: none"> • Binding agreement with rights holders • Community covenant • Restrictive covenants • Term agreements • Municipally-owned conservation lands 	
IUCN Category	Select one: <ul style="list-style-type: none"> • Ia: Strict Nature Reserve • Ib: Wilderness Area • II: National Park • III: Natural Monument or Feature • IV: Habitat/Species Management Area • V: Protected Landscape/Seascape • VI: Protected area with sustainable use of natural resources • N/A 	<ul style="list-style-type: none"> • Only relevant to protected areas (PA) or privately protected areas (PPA). There are no categories for OECM's however conservation is demonstrated by management regime
Protection Time Frame	<ul style="list-style-type: none"> • Start Date • End date 	<ul style="list-style-type: none"> • The date at which the conservation area was effectively conserved
Management		
Management regime	<ul style="list-style-type: none"> • Qualitative field • Upload document or write a description of the management regime 	<ul style="list-style-type: none"> • Optional field (e.g., management regime outlines mowing once/year – protecting endangered species; A management plan could be linked within this field, which states conservation purposes, and requires management practices to support them)
Alignment with Other Initiatives		

Field	Response Options	Description
Alignment with other initiatives	Select all that apply: <ul style="list-style-type: none"> • Alberta Land Trust Grants Program • Ecological Gifts Program on a portion of the property • Pathway to Canada Target 1 	
Alignment with other initiatives	<ul style="list-style-type: none"> • Comment box: please describe the amount of land (ha) that aligns with each initiative 	
Data Management		
Conservation status of area	Select one: <ul style="list-style-type: none"> • Designated • Established – ENGO or Private • Established - Interim • Proposed • Delisted 	
Data provider	<ul style="list-style-type: none"> • Name • Contact Information 	<ul style="list-style-type: none"> • Name of organization, conservation manager, or agent who is responsible for the transmission and accuracy of the data • Contact information can and should be included
Date of most recent data update	<ul style="list-style-type: none"> • Date 	
General Comments		

Appendix B: Briefing Documents

Three briefing documents were developed to provide further context to the stakeholders during the engagement process (Appendix B):

- *Pathway to Target 1 and Private Land Conservation*
- *Protected Areas, Conserved Areas and OECMs outlines*
- *Canadian Protected and Conserved Areas Database (CPCAD)*



Tracking Private Land Conservation in Alberta: Pathway to Target 1 and Private Land Conservation

Origins

In 2010, the Convention on Biological Diversity, of which Canada is a part of, adopted a Strategic Plan for Biodiversity which resulted in 20 biodiversity targets, now known as the Aichi Biodiversity Targets. Shortly after, Canada developed the 'Pathway to Canada Target 1,' which is Canada's interpretation of Aichi Target 11: biodiversity is conserved by protecting 17% of the land-base and 10% of inland waters by 2020¹.

With the creation of the Strategic Plan for Biodiversity, the Convention on Biological Diversity introduced the term *other effective area-based conservation measures* (OECMs). Both *protected areas* and OECMs can contribute to the 17% protected target.

Structure

The National Steering Committee leads all of the activities of Pathway to Canada Target 1. The Committee is made up of representatives from eight provinces, two territories, the federal government, the Assembly of First Nations, the Métis National Council, Canadian Parks Council, Local government, and Parks Canada Agency. The Committee is co-chaired by:

- Environment Climate Change Canada, on behalf of the Government of Canada,
- BC Ministry of Environment and Climate Change Strategy, on behalf of the provinces and territories

There are two advisory groups, the National Advisory Panel and the Indigenous Circle of Experts. The National Advisory Panel created

¹ See <http://www.conservation2020canada.ca/the-pathway/> for more information.



recommendations on how governments, NGOs and Canadians could collectively achieve Canada Target 1. The Indigenous Circle of Experts created recommendations and guidance on Indigenous Protected and Conserved Areas (IPCAs) for consideration by Indigenous, federal, provincial and territorial governments. See Resources section for these documents.

Reporting

All jurisdictions regularly report their protected areas and OECMs to the Pathway to Canada Target 1 accounting system CPCAD (Canadian Protected and Conserved Areas Database)². The jurisdiction is empowered to choose what does / does not count, but all submissions are subject to a screening tool before addition to CPCAD. This screening tool was created by the Canadian Council on Ecological Areas (CCEA), which consists of various protected areas staff members.

Challenges

Although there are many opportunities created by Pathway to Target 1, there are just as many challenges, especially for the private land conservation community.

- Aichi Target 11 is very broad, but when Canada interpreted it to create Pathway to Target 1, they trimmed down the target, making it much more narrow
 - Example: Canada removed consideration of ecosystem services and integration into the wider landscape
- Privately-held lands and municipally managed lands are all considered under the “provincial” jurisdiction in Alberta, therefore it is up to the province to determine which of these lands are included or not
- The screening tool does not reflect private land
 - It was created by a group of protected areas staff members (CCEA)
 - This tool is voluntary but is regarded as mandatory by CPCAD

² An up-to-date table of protected and conserved lands can be found at <https://www.canada.ca/en/environment-climate-change/services/national-wildlife-areas/protected-conserved-areas-database.html#toc1>



- There is no explicit consideration of full-title land or conservation easements
- A tension was created by the inclusion of OECMs in Aichi Target 11 and the Pathway to Target 1, as these were perceived by the protected areas community in Canada as a threat to 'real' protection.

Resources

[One with Nature](#) – A Renewed Approach to Land and Freshwater Conservation in Canada_A Report of Canada's Federal, Provincial and Territorial Departments Responsible for Parks, Protected Areas, Conservation, Wildlife and Biodiversity (i.e. National Steering Committee), this report provides guidance to meet the 17% and 10% targets of Pathway to Canada Target 1.

[Canada's Conservation Vision](#) – A Report of the National Advisory Panel to provide guidance on how Canada can meet Pathway to Canada Target 1 goals of 17% protected lands and 10% of inland waters by 2020 and “address quality issues related to the target, as part of a long-term response to threats to biodiversity.”

[We Rise Together](#) – Achieving Pathway to Canada Target 1 through the creation of Indigenous Protected and Conserved Areas in the spirit and practice of reconciliation. This is a report created by the Indigenous Circle of Experts to make progress on Pathway to Canada Target 1.





Tracking Private Land Conservation in Alberta: Protected Areas, Conserved Areas and OECMs

Context

With the development of the Aichi targets, and subsequent creation of Pathway to Canada Target 1 initiative (an effort to protect 17% of the terrestrial land base and 10% of inland waters by 2020), a light has been shone on the question, “what does ‘protected’ mean?” Many countries, including Canada, looked to the International Union for Conservation of Nature (IUCN) for guidance. IUCN has created protected area management categories to classify protected areas according to their management objectives. The categories are recognized by international bodies such as the United Nations and by many national governments as the global standard for defining and recording protected areas and as such are increasingly being incorporated into government legislation. The following are the **Protected Areas (PA)** Categories from IUCN¹:

- **Ia: Strict Nature Reserve**
- **Ib: Wilderness Area**
- **II: National Park**
- **III: Natural Monument or Feature**
- **IV: Habitat/Species Management Area**
- **V: Protected Landscape/Seascape**
- **VI: Protected area with sustainable use of natural resources**

Although the IUCN and the Convention on Biological Diversity (CBD) have gone to great lengths to say these are “categories” and not “ratings,” they are being used as such.

IUCN also defines **Privately Protected Area (PPA)**: “a protected area, as defined by IUCN, under private governance (i.e. individuals and groups of

¹ More details can be found at <https://www.iucn.org/theme/protected-areas/about/protected-areas-categories>



individuals; non-governmental organizations (NGOs); corporations – both existing commercial companies and sometimes corporations set up by groups of private owners to manage groups of PPAs; for-profit owners; research entities (e.g. universities, field stations) or religious entities).”² There is universal agreement that private land conservation should be part of the calculation for Pathway to Canada Target 1, but this presents some unique challenges when it comes to terminology and interpretation of the guidelines set by Canada. The primary challenge is that all categories and PPAs in Canada are focused on ‘ecological’ protection in Canada, yet not all private land conservation is ecological (some are focused on cultural or agriculture values).

In addition to the Protected Area and Privately Protected Area terms, the CBD inadvertently created a new term: **Other Effective Area-based Conservation Measure (OECM)**. The CBD’s definition of OECM is: “A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values.”³

OECMs are controversial as every country/organization seems to put their own twist on the definition. One critical difference between PAs and OECMs is that OECMs can have a non-ecological primary conservational goal (ex. agricultural conservation) but will counts towards the calculation if it conserves ecological values.

The phrase ‘other effective area-based conservation measure,’ was never intended to be a term but it has become one. To complicate matters more, the term OECM has transitioned to being called ‘**Conservation Areas**,’ but there is still limited direction as to what this means and how it can contribute to Aichi Target 11 and Pathway to Canada Target 1.

² The Future of Privately Protected Areas:

<https://portals.iucn.org/library/sites/library/files/documents/PATRS-001.pdf>

³ Recognising and reporting other effective area-based conservation measures

<https://portals.iucn.org/library/sites/library/files/documents/PATRS-003-En.pdf>

Challenges for Private Land Conservation

- Terminology and guidelines around protected areas and conserved areas were not made for privately-conserved areas, and use tools (like legislation and gazetting) that private land conservation does not use
 - E.g, lands subject to conservation easements struggle to find a place in this categorization
- The arbiters of what is or is not a protected or conserved area come from a background of public land conservation (e.g. Parks agencies)
 - As a result, screening tools are made for publicly-protected areas

Resources

[The Futures of Privately Protected Areas](#) – this document by the IUCN supports the contribution of privately protected areas to Aichi Target 11 by creating a framework to allow governments to expand their use and support of privately protected areas and by raising awareness that privately protected areas can and should be reported to the World Database on Protected Areas and the Convention on Biological Diversity under the Protected Areas category.

[Recognising and reporting other effective area-based conservation measures](#) – this document by the IUCN provides guidelines to assist parties in the interpretation and operationalization of OECMs, and aims to develop a body of good practice around recognition and reporting of OECMs.





Tracking Private Land Conservation in Alberta: Canadian Protected and Conserved Areas Database (CPCAD)

Background

CPCAD is Canada's National database used to track marine and terrestrial protected and conserved areas. It is maintained by Environment and Climate Change Canada (ECCC) and data is contributed by jurisdictions (i.e. federal government agencies, provincial and territorial governments). The data in CPCAD feeds directly into IUCN's World Commission on Protected Areas (WCPA) database.

The precursor to CPCAD was the Conservation Areas Reporting and Tracking System (CARTS), which was created by the Canadian Council on Ecological Areas (CCEA). CARTS has evolved into CPCAD, managed by ECCC on behalf of Pathway.

Current Use

CPCAD is now being used as the database for Pathway to Canada Target 1. It includes 'protected areas' as well as 'conserved areas' (OECMs) and uses a screening process to evaluate contribution of areas to the database. The screening process is technically voluntary but functionally mandatory.

The screening process is a decision support tool that jurisdictions use to determine if their candidate protected area or OECM qualifies for inclusion into CPCAD. The screening tool does not include assessment criteria that are specific to privately conserved lands and their protective tools.

Structure of CPCAD

CPCAD consists of many data fields; below is a summarized list:



Descriptive

- Name
- Official Area
- Location

Administrative

- Parent Identification Number
- Zone Identification Number
- Zone Description
- Reporting Jurisdiction Identification Number
- Type Designation
- Status
- Protection Date
- Delisted Date
- Ownership
- General Comments
- Internet Link

Protective Mechanism / Governance

- Aichi Target 11 and Canada Target 1
- IUCN Management Category
- Other Effective Area-based Conservation Measure
- Managing Authority
- Governance Type
- Enabling Legislation
- Sub-surface Right Status

Biodiversity

- Biome
- Note: 'Zones' (in the administrative section) may be based on ecological criteria



Challenges

CPCAD creates some challenges for the private land conservation community. Firstly, there is limited ecological data collected, it only collects information on the zone and biome (i.e. Marine or terrestrial/freshwater). Lack of ecological data makes it difficult to assess conservation of biodiversity, as required to contribute to Pathway to Canada Target 1.

Secondly, the screening tool used by CPCAD to determine whether lands 'count' as protected and conserved areas, is vague, subjective, and the fields do not align with CPCAD fields.

Lastly, the original database, CARTS, was not designed to include private land, and that has carried over to CPCAD.

Resources

[Canadian Protected and Conserved Areas Database \(CPCAD\)](#) – introduction to CPCAD, downloadable data, user manual and related links. This website also provides the running totals of protected and conserved areas in Canada, by region.

[Canada's Conserved Areas](#) – Provides detailed information on conserved areas in Canada

[Decision Support Tool](#) – For assessing areas against pan-Canadian standards for protected areas and other effective area-based conservation measures for terrestrial and inland waters.

