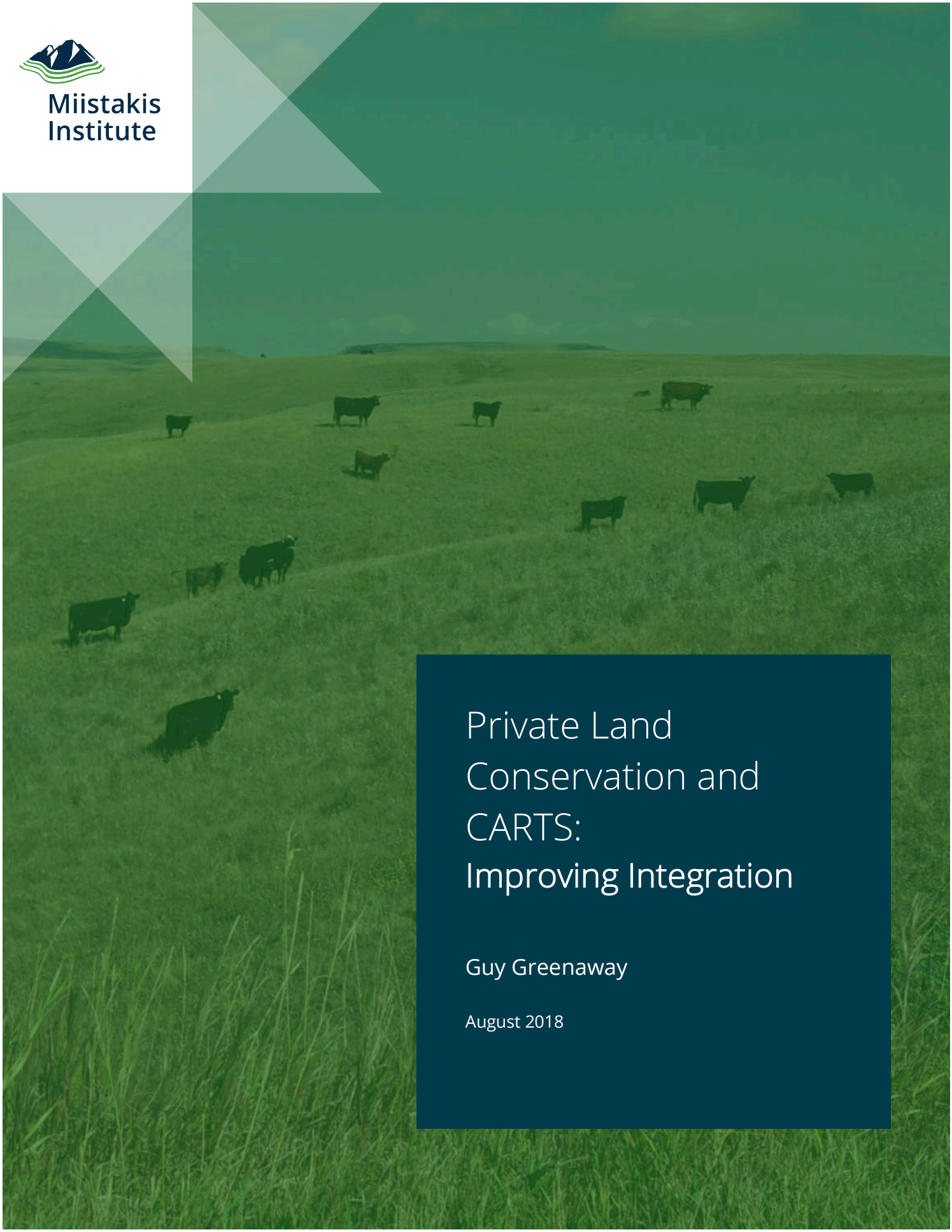

Miistakis Institute

Private Land Conservation and CARTS: Improving Integration

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August 2018

This work was made possible through a grant from Alberta Environment and Parks.

Miistakis is deeply appreciative of this support, as well as the respectful autonomy afforded to us by AEP that allowed us to pursue this analysis as an independent research institute.

Private Land Conservation and CARTS:
Improving Integration

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August 2018

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Introduction

As part of our work to help better account for the contribution of private land conservation to biodiversity conservation, the Miistakis has been analyzing the existing *Conservation Areas Reporting and Tracking System* (CARTS), with an eye to recommending revisions that will:

1. Better incorporate private land conservation (both Privately Protected Areas and OECMs which are privately conserved);
2. Expand the system to more ably include traditional Protected Areas (PAs), Privately Protected Areas (PPAs), and Other Effective Area-based Conservation Measures (OECMs);
3. Facilitate better vertical integration for both data entry and data use (including by land trusts and conservancies, municipalities, provincial governments, the federal government, and international catalogues);
4. Streamline data entry to ensure optimal participation; and
5. Address pernicious assessment and cataloguing issues.

The result has been the proposal of both a 'Screening Matrix' (*2_Proposed Screening Matrix for Conservation Area Inclusion in CARTS*) and a revised set of 'Database Fields' (*3_Proposed Revised Database Fields for CARTS*). While those documents contain the specific screening matrix and database fields detail, they do not relay some of the important considerations and underlying rationale.

The following sections identify several of those issues, and how we chose to manage them within our recommendations.

Considerations and Rationale Behind the Recommendations

General

Separation of Screening and Database Functions

RECOMMENDATION

- The 'Screening' function should be explicitly separated from the cataloguing function (the actual Database).

RATIONALE

- This allows for the "validation" information (the backing arguments and rationale) to be collected there, but not necessarily carried forward into the database.

CONSIDERATIONS

- Carrying forward some fields enhance data entry and consistency.

Use of Existing Proxies

RECOMMENDATION

- If a conservation area has already been successfully vetted by an existing, credible process, the screening step should be skipped.

RATIONALE

- Efficiencies can be found by simply accepting existing credible, vetting results for conservation areas, rather than applying a full screening assessment.
- Examples would include the certification of Ecological Gifts program, or the acceptance into the Alberta Land Trust Grants Program, each of which have robust vetting system.

CONSIDERATIONS

- A list of acceptable vetting processes will need to be developed.

Support for Vertical integration

RECOMMENDATION

- The database should be designed with 'vertical integration' in mind, meaning the same data can be used by a variety of jurisdictions and organizations.

RATIONALE

- Land use and conservation planning by land trusts, provincial park agencies, municipalities, regional planners, federal programs, etc. will benefit from these entities being able to incorporate this data.
- If the database is only used to report summary numbers to international accounting bodies, its usefulness will be greatly diminished.

CONSIDERATIONS

- Such integration requires that the database focus on foundation information, which agencies can then overlay with their own data and programmatic needs.
- Some basic locational, biological, and planning information must be standardized to facilitate this integration, and ensure each jurisdiction is not unintentionally creating incompatible datasets.

Use of the Term 'Conservation Area'

RECOMMENDATION

- We recommend use of the term "conservation area" as the generic term in the screening matrix and database fields, rather than "protected area."

RATIONALE

- This is to include areas that, by definition, are not protected areas, but which still represent valid biodiversity conservation.
- This also ties better to the actual name of the "Conservation Areas" Reporting and Tracking System."

CONSIDERATIONS

- The term 'conserved area' has in some cases been used to stand in for OECMs, so should be avoided, or as part of 'community-conserved area.'
- The term 'conservation area' has been used in the literature and professional discussions, but usually with a qualifier (marine conservation area, private conservation area, indigenous conservation area) indicating that it is already assumed to have a broader, overarching connotation when used alone.

Reference to Aichi Target 11 / Canada Target 1

RECOMMENDATION

- The database field dedicated to identifying Aichi Target 11 / Canada Target 1 compliance should be eliminated.

RATIONALE

- The intent of this database should be to provide base information; i.e., status of conservation areas in Canada.
- The database should have much larger application than a single program – even a large-scale one such as Pathway to Target 1 – and be applicable to land use and conservation planning for provinces, municipalities, land trusts and others (see *Support for Vertical Integration*, above).

CONSIDERATIONS

- Adding fields that relate to a single program is a 'slippery slope' in that there will be constant pressure from many stakeholders to include fields that relate only to their programmatic initiatives.
- The onus should likely be reversed – Pathway to Target 1 should make the determination of whether acceptance into the database satisfies their criteria.

User Interface

Ease of Data Entry

RECOMMENDATION

- Data entry and data updating processes should be as simple as possible
- As much as possible, database fields should have a pre-set list of answers to minimize inconsistencies in the data.
- The data entry system should be designed with as many auto-populate features as possible.

RATIONALE

- Data entry is a potentially onerous task that could easily overwhelm both Environment and Climate Change Canada, and all the conservation land managers across the country.
- Not all agencies contributing to the database will have the necessary in-house resources to allow them to populate complex databases (such as smaller land trusts and conservancies).
- Unlike park agencies, many private land conservation organizations have little incentive to participate in collecting data for what may be seen as a federal accounting exercise.

CONSIDERATIONS

- Uploading a spatial file could auto-populate location, ecoregion, municipality, area.

Ensuring Data Accessibility

RECOMMENDATION

- 'Pay-for-data' arrangements should be avoided as broad and democratic access to this data must be paramount.

RATIONALE

- 'Pay-for-data' arrangements tend to encourage convoluted and inefficient data sharing mechanisms ('data hoarding'), fundamentally discriminatory, and ultimately lead to limited distribution, and therefore limited use.

CONSIDERATIONS

- Not addressing this accessibility issue will likely contribute to decreased use of this critical conservation information.
- Privacy issues will be significant, but are surmountable (as evidenced by successful efforts such as the US National Conservation Easement Database, and the Collaborative Australian Protected Areas Database).

Data Management and Responsibility

RECOMMENDATION

- The following jurisdictions/communities should be charged with designing screening protocols and database standards for each type of conservation area:
    - Environment and Climate Change Canada (federally-protected terrestrial areas)
    - Provincial/territorial parks agencies provincially (provincially protected areas)
    - Land trusts and conservancies (privately protected areas and private OECMs)

RATIONALE

- The people with the most intimate understanding of the philosophical and practical needs for their jurisdiction/region with regard to each type of protected areas are the people best positioned to design effective protocols.

CONSIDERATIONS

- This recommendation does not speak to the unique needs and jurisdictions for marine protected areas and Indigenous Protected and Conserved Areas
- The private land conservation community in some provinces and territories has limited administrative capacity; Environment and Climate Change Canada should consider designating a provincial entity to coordinate data entry on behalf of their community to address this need, as well as provide consistency for data entry.

Data dictionary and definitions

RECOMMENDATION

- A data dictionary and glossary of definitions should be added to the database.

RATIONALE

- Although the current CARTS database has accompanying user guidance, it is still in need of a data dictionary and glossary; this need will grow as different types of conservation area are included in the database.
- As well as providing clarity, these definitions will facilitate more use of 'drop down' lists, and greatly streamline data entry.

CONSIDERATIONS

- Data dictionary items should include; parent conservation area, identification number, spatially explicit location, ecodistrict, conservation agency, protective measures, conservation area type, landowner, managing jurisdiction, management intent.
- Definitions that should be added (to name a few) include: protected area, privately protected area, OECM, biodiversity conservation, ecosystem type, and ancillary conservation.

Representing Biodiversity

Identifying Eco-districts

RECOMMENDATION

- Eco-districts should be added as a field to the database.

RATIONALE

- There are currently almost no fields that provide ecological information, which means the database cannot be used to measure even basic ecological metrics such as representativeness.

CONSIDERATIONS

- Every provincial jurisdiction has some method for categorizing broad ecological districts (natural regions, ecoregions, etc.); this information could be included based on a different list for each province.
- If geospatial file are uploaded, this field can be populated automatically.

Defining Biological Conservation

RECOMMENDATION

- There is a need for a clear, practical description of what constitutes 'biodiversity conservation.'

RATIONALE

- Although we have several definitions of what 'biodiversity' is or even what resultant conserved biodiversity might look like, we have limited guidance as to what 'actions' constitute biodiversity conservation.
- This makes it extremely difficult to assess when a particular action, policy, or legal clause will actually conserve biodiversity.

CONSIDERATIONS

- Our proposed definition for 'biodiversity conservation' is based on several sources, including the IUCN guidance on both Protected Areas and OECMs.
- A set of high-level categories of biodiversity conservation will help users of the database isolate for these ecological themes.

Validation

Validation Column in the Screening Matrix

RECOMMENDATION

- A 'validation' column should be added for each field in the Screening Matrix.

RATIONALE

- There will be a wide range of information that may be used to support a user's claims regarding a candidate conservation area satisfies, especially as the database expands beyond traditional protected areas in a more robust way.
- A 'validation' column would enable users to enter the documentation that they offer to support their assertion that the candidate area satisfies a given requirement.

CONSIDERATIONS

- Environment and Climate Change Canada should consider expanding the allowable evidence here to include corroboration by professional biologist, science-based organizational conservation plans, etc.

Limited Use of Certification

RECOMMENDATION

- The database should not be used as a basis for 'certifying' the validity of conservation areas.

RATIONALE

- The use of a 'certification' framework would move the database from a *catalogue* function to a *gatekeeper* function; the primary role should be to track how much of what type of conservation areas are being created/maintained.

CONSIDERATIONS

- Movement from Screening to Database inclusion will require a foundation of clear, transparent criteria.
- If individual agencies want to create certification processes for themselves, they can use the database information to support those.

Signed Assurance of Veracity

RECOMMENDATION

- Each submission to the Screening Matrix should come with a signed assurance from a senior officer of the organization that all the submitted materials and statements are true.

RATIONALE

- Vetting every single aspect of every single conservation area, existing and future, could very easily bog down the entire system for tracking conservation areas.
- A system based primarily on trust, supported by credible evidence, and backstopped by a constructive audit process, will ensure the most efficient process (Trust + Evidence + Audit = Efficiency).

CONSIDERATIONS

- As noted, this activity is one part of the Trust + Evidence + Audit = Efficiency line, so would need to be coordinated with the Evidence and Audit functions.

Constructive Audit Process

RECOMMENDATION

- In lieu of a full assessment of every single conservation area application, a constructive audit process should be created.
- This process would use the Trust + Evidence + Audit = Efficiency approach as well.

RATIONALE

- Again, vetting every single aspect of every single conservation area, existing and future, could very easily bog down the entire system for tracking conservation areas.
- An audit process would provide certainty to those using the system that the information contained within is valid, while using only a fraction of the resources.

CONSIDERATIONS

- Such a process would need to be "constructive" rather than "punitive" – concluding with recommendations for the improvement of the area's alignment with the criteria, rather than a stark threat of de-listing.

Management Regime

Allowing for Enhanced 'Zone' Information

RECOMMENDATION

- The 'zone' field should be re-envisioned to accommodate this while still ensuring the contribution to biodiversity conservation can be identified and calculated.

RATIONALE

- The existing CARTS database envisions 'zones' as sub-parts of a traditional publicly-Protected Area, but zones will likely look much different in Privately Protected Areas and OECMs.

CONSIDERATIONS

- Not all conservation agencies will want to identify zones, and should not be required to.
- IUCN has well-developed guidance regarding designation of zonation.

Representing Effective Management

RECOMMENDATION

- The screening tool (and associated fields in the database) should be constructed so as to facilitate assessment/measurement of 'effective' management.

RATIONALE

- The current national and international dialogue on tracking conservation areas has emphasized 'effectiveness' as a critical criterion.
- Facilitating that measurement, and aligning with current international best practice, will streamline reporting.

CONSIDERATIONS

- The proposed fields have all been created with either explicit or tacit reference to the existing definitions of in-situ conservation prevalent in the Aichi, Pathway, and IUCN publications.
- This includes consideration of:
    - Biodiversity contribution
    - Management regimes that supports conservation outcomes
    - Monitoring of both biodiversity conservation and protective mechanisms
    - Long-term nature of protection

Modifications to existing conservation areas

RECOMMENDATION

- The conservation area database should accommodate modifications to conservation areas, both in terms of area and management regime.

RATIONALE

- Conservation areas face a delicate balance trying to ensure enduring protection for biodiversity, on landscapes that face constant change ecologically, politically, managerially.
- The conservation area database needs to guard against a 'membership for life' that disregards the current biodiversity conservation contribution.

CONSIDERATIONS

- All types of traditional protected areas, from ecological areas to provincial parks to national parks have had boundary changes, often to accommodate industrial activity, so even the highest levels of 'protection' do not preclude the possibility of area changes.
- Environment and Climate Change Canada will need to consider whether modified conservation areas should be run through the screening process again (i.e., if the conservation area had originally been submitted it its modified form, would it still pass the screening test?).
- Environment and Climate Change Canada should explore whether a simple area-based threshold can be established to simplify the process (e.g., several land trusts have been examining whether an impact on less than 5 or 10% of the land base constitutes less than a material change).

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