

Grassland Conservation

Tools Project: Summary Report



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Policy and Planning Division, Planning Branch 3rd Floor, South Petroleum Plaza
9915-108 Street, Edmonton, Alberta T5K 2G8

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Introduction

The South Saskatchewan Regional Plan (SSRP) came into effect on September 1, 2014. The regional plan provides strategic direction for the region to achieve long-term economic, environmental and social goals. As part of the management intent for the South Saskatchewan Region, the Government of Alberta committed to numerous strategies to support biodiversity and ecosystem function, including long-term planning around management and conservation of the grasslands.

Strategy 3.14 of the SSRP provides direction to “Explore opportunities for further conservation management approaches using a collaborative approach in areas of grasslands” (SSRP, 72). This strategy is divided into Strategy 3.14 a) “explore the potential for additional conservation areas”, and Strategy 3.14 b) “work collaboratively with stakeholders and partners to explore and implement other conservation approaches and expand the range of tools used to conserve grasslands” (SSRP, pg.72).

Project Objectives

This Grasslands Tools Project will assist with the implementation of Section 3.14 b). More specifically this project conducted initial research on conservation tools that currently exist and/or could be applied to Alberta’s grasslands. These could then be used by provincial and municipal governments, non-government agencies and private land owners. This project delivered on three objectives:

1. A broad three categorization of tools;
2. A spreadsheet summarizing the types of tools complete with examples; and
3. A brief explanation of each conservation tool type and discussion on the potential for combining conservation tools.

Essentially, this project examined the intent for each type of tool, who is involved, whether it is market or non-market, and provides links to examples found here in Alberta, North America, and internationally (e.g. grass meadows) where grassland and grass management is occurring.

The Grasslands Tools Project has **not** addressed the following items: making recommendations as to a preferred suite of tools; outlining the economic, social, or environmental benefits of each tool; and providing a decision-making matrix for tool choice or selection. It simply provides an overview of what is being used as a grasslands conservation tool (or other types of conservation tools that are adaptable to grasslands conservation) and how tools may be combined. The categorization provides the lens for the project. This report provides a summary of that compilation of work including an outline of potential future research direction and a bibliography of selected resources.

Methodology

Information for this project was collected from various provincial, national, and international resources including the internet, knowledgeable Government of Alberta staff, and grassland organizations' literature. It was reviewed for relevance and current or potential use in Alberta's grasslands conservation efforts.

In order to understand the objective of this grassland tools project, a review of the relevant legislation including the *Alberta Land Stewardship Act* (ALSA) and the SSRP was completed. The *Alberta Land Stewardship Act* identifies provisions to explore and test market-based conservation products (ALSA, pp. 26-43). The Act specifically identifies conservation easements, conservation directives, and exchange/conservation units/conservation off-set programs as three tools that can be supported (ALSA, pp. 27-36). It also provides the mechanism for three other avenues for conservation. These are:

- Market-based and non-market based instruments - allows support, “research and development into the creation, application and implementation of instruments, including market-based instruments...” (ALSA, pg. 26).
- Regional Plan Support - through the establishment, support or participation in programs and other measures to implement the regional plans in accordance with the Act and other legislation and policies (ALSA, pg. 26).
- Funding and Cost-Sharing – to support conservation, environmental, and agricultural values that provides protection, conservation, and/or enhancement of the environment, natural scenic or esthetic, and agricultural values and purposes (ALSA, pg. 27).

The SSRP (pg. 72) identifies provisions for collaborative work with stakeholders and partners including:

- Grazing communities
- Grazing associations
- Energy industry
- Conservation organizations, and
- Stewardship groups and other local groups

The regional plan also notes that groups such as MULTISAR and the Prairie Conservation Forum are to be given consideration in their approaches for managing and protecting grasslands on public land (SSRP, amendment 2017, pg. 73).

Projects and approaches to conservation available for grasslands conservation in Alberta and beyond were next identified. This was completed by reviewing the webpages of the types of stakeholders identified in the SSRP, local, provincial, municipal and federal government

departments involved in grasslands protection, and identifying any program, approach, or tool the organization is currently using for grassland conservation. Information collection was expanded to include communications with key Government of Alberta grassland staff experts and further expanded to include organizations and government departments outside of Alberta that also have an impact on grasslands conservation. Additional information identifying conservation projects, approaches, and tools for other types of resources that could be adapted for grassland conservation were also reviewed.

The final step was to compile the results into a comprehensive and easy to follow document. However, upon review of each program, project or approach collected, it was observed that slightly different terminologies, methods to implementation and, in some cases, grouping of tools, exist. The information was then sorted into a categorization to uncover commonalities amongst the tools, as this would provide some order to the listing of tools and provide clarity for each type of tool. To sort the projects, questions were asked:

1. What is the purpose of this project?
2. Who is involved (government, industry, landowner, land trust, etc.)?
3. What other conservation tools might be involved?
4. Are there similarities to other projects?

Tool Categories

Categorization

When identifying grasslands conservation tools used in various projects and approaches, it became apparent that each could be grouped with other tools into a typology based on common attributes. The tools were first sorted into one of three broad categories or groups based on tool function. These are 1) Foundation tools, 2) Extension tools, and 3) Socio-Economic.

Foundation tools: are the legislation, regulation, plan, and policy documents that provide the foundation for grasslands conservation. Interprovincial and international treaties, agreements, and commissions that operate to provide a larger scale information exchange and/or governance mechanisms that impact grasslands conservation.

Extension tools: are the organizations, physical tools, and knowledge building blocks that provide the understanding and perform the outreach for grasslands conservation.

Socio-Economic tools: are the market and non-market tools that start and keep the act of conservation continuing.

A descriptive listing of the tool types was created with additional information including 'common names', a description of each, notes, and examples (Table 1).

Foundation Tools

- Acts, Regulations, Policies, and By-laws
- Land-use (Zoning), legal land designations (e.g., grassland protected areas); municipal, Sub-regional and Regional Management Plans, Conservation Directives
- Species Management Plans
- Interprovincial and International Agreements

Extension Tools

- Volunteer Conservation Groups and Conservation Non-Governmental Organizations
- Land Stewardship Programs
- Information Management Systems; Environmental Reporting; Monitoring Services
- Range Management Plans
- Education and Outreach; Demonstration Sites; Guideline Documents: Beneficial Management Practices/Sustainable Practices; Communication Pathways; Technical Training and Support; Toolbox Development
- Public Acknowledgement
- Building Social License

Socio-Economic Tools

- Land Donations
- Land Purchases
- Land Exchange; Resource Allocation Trading
- Conservation Easements
- Payments for Ecosystem Services; Land Conversion Programs
- Conservation Offsets; Credit Banking Systems; Land/Grass Banking Systems; Development Credits
- Tax Credits; Tax Breaks; Tax Differentiation
- Event Specific Taxes (Carbon/Biodiversity/Zoning)
- Restoration and Reclamation Fees; Performance Bonds/ Deposit Refund Systems; Area Use Permits; User Fees and Fines
- Grants, Subsidies, Low-Interest Loans
- Certification and Labeling

Multiple Tool Interactions

When sorting the individual programs into the tool types, two things became apparent, 1) many of the tools can and are used in conjunction with one or more tools /combination with other tools, and 2) one person or institution cannot do conservation alone. For example, a conservation easement might be initiated by a land owner, but the government creates the foundational pieces - the legislation - that allow for the easement to exist. The government also runs the land titles office which records the event. The easement would be administered and monitored by a land trust. Further to this, the land owner, by placing a conservation easement on their own property, may then qualify for reduced grazing fees in another non-governmental organization owned grass bank system (such as the case with Montana's Matador Grass Bank) or a tax credit (such as Ontario's land tax incentives program). In other words, because of the strong connections that exist among some tools, using one tool for conservation does not exclude the use of other tools (Figure 1).

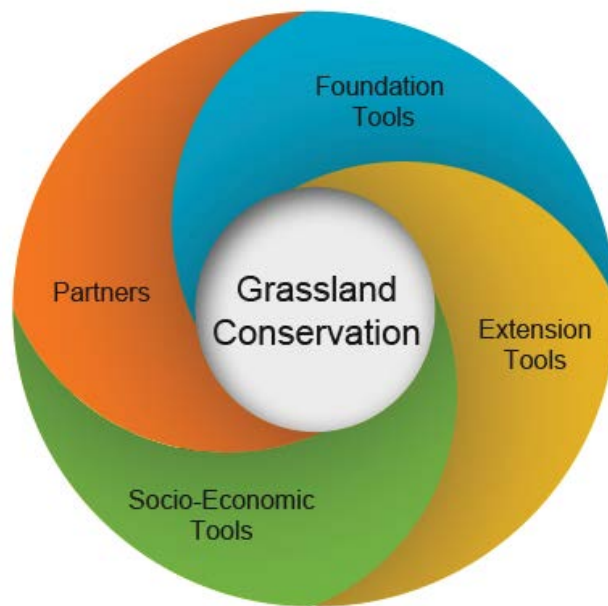


Figure 1: Depiction of how conservation tools can be combined to achieve grassland conservation.

Future Research Recommendations

There are three avenues for future research on grassland conservation tools. These opportunities could be completed by a number of agencies that are interested in pursuing a specific tool or approach, including government, academia and other interest groups (i.e. The Land Stewardship Centre).

1. Research the effectiveness, the cost, ease of use/adoption, and the policy requirements of each of the tool types. Each tool would need to be evaluated on its potential social, environmental and economic performance before determining its applicability and practicality to Alberta. A policy analysis, including policy gaps, would be needed as well as policy development.
2. Determine the benefit – neutral, positive or negative – of each tool. As a tool can be both positive and negative – depending on the stakeholder – what is a positive incentive or benefit to the land owner may be a negative benefit to the government. For example, payment for ecosystem services is a benefit to the land owner but a cost to whoever is paying for the service.
3. Create a decision-making matrix for determining choice or selection of a tool from the perspective of the government, the non-governmental organization or land trust, the business or industry, and from the landowner. As each type of stakeholder (government, non-governmental organization or land trust, business or industry, and landowner) would have different needs and access to different resources, a multi-perspective matrix would better assist in evaluating and determining the appropriate tool for conservation for the stakeholder in question.

Additional Work in Progress

Information from the initial stages of this Grasslands Tools Project was shared with the Great Northern Landscape Conservation Cooperative (GNLCC) as a contribution to the terrestrial connectivity toolbox for the Alberta portion of the GNLCC. The GNLCC is currently building a framework for classifying action across the GNLCC, particularly related to connectivity conservation. Their framework is adapted from the International Union for Conservation of Nature (IUCN) – The Open Standards for the Practice of Conservation’s Actions Classification (The Open Standards for the Practice of Conservation, 2016,

<http://cmp-openstandards.org/using-os/tools/actions-taxonomy/>) and includes information from regional examples, such as this grasslands tool project. Good partnerships are essential for ensuring conservation actions are effective across landscapes.

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Table 1: Categorization or Group based on tool function

Categorization	Conservation Tool Name	What it Does	Who is Involved	Other Conservation Tool Components	Notes	Website Resources (Examples)
Foundation	Acts, Regulations, Policies, and By-laws	Legislation - the body of laws, rules, rulings, regulations, acts, bills, statutes, enactments, ordinances, etc. - that determines the legal course of action for conservation. Various policies exist at all levels of government that guide the conservation process. The policies can be as specific as detailing the steps required to reclaim disturbed land or more general, such as the Wetlands Policy, that guide management decisions. Local governments can set rules for conservation practices within their boundary through by-laws.	Provincial and Municipal Government	Acts, Regulations, Policies, By-laws, Management Plans	Examples: <i>Alberta Land Stewardship Act</i> ; <i>Public Lands Act</i> ; <i>Public Lands Administration Regulation</i> , <i>Public Land Use Zone</i> ; <i>Wilderness Areas</i> , <i>Ecological Reserves</i> , <i>Natural Areas</i> and <i>Heritage Rangelands Act</i> ; <i>Provincial Parks Act</i> ; <i>Special Management Areas</i> Municipal District of Taber (in Alberta) Bylaw No. 1845-- Prairie Conservation Bylaw (Ensuring the conservation of municipally owned Grasslands)	www.qp.alberta.ca/documents/acts/a26p8.pdf http://mdtaber.ab.ca/DocumentCenter/Home/View/959
Foundation	Land-use (Zoning), Sub-Regional, and Regional Management Plans; Conservation Directives Parks Specific /Site Management Plans	Developed by provincial and local governments to set rules within a specific area. Each type of land zone or management unit has goals and rules and guidelines that determine the type of acceptable activities for the area. "Conservation Areas" is one name for the type of zoning that promotes conservation activities.	Provincial and Municipal government	Policies, Management Plans, By-laws; Land Zoning; Conservation Directives	Examples: South Saskatchewan Regional Plan (amended 2017), Majorville Landscape Management Plan, Environmental Frameworks, Pekisko Heritage Rangeland and Special Management Area Management Plan Examples of zoning types: Preservation Zone, Wilderness Zone, Natural Environment Zone, Critical Wildlife Zone, Integrated Resource Plans Example of a Conservation Area: The Ann and Sandy Cross Conservation Area - the land owners donated the land to the Provincial Government and the government designated the area as a Conservation Area. Initially was managed by a Land Trust, then by a foundation specifically created to manage the land. NOTE: Not all Conservation Areas are created from donated land. Example of a municipality zoning for grasslands protection is Saskatoon and its Saskatoon Natural Grasslands park	Plan www.landuse.alberta.ca/LandUse%20Documents/South%20Saskatchewan%20Regional%20Plan%202014-2024%20-%20February%202017.pdf Conservation Area www.crossconservation.org/about-us Non-Alberta Municipal http://meevasin.com/visitors/saskatoon-natural-grasslands Conservation Directive http://elc.ab.ca/media/103996/ConservationDirectivesELCRecommendations.pdf

Category	Conservation Tool Name	What it Does	Who is Involved	Other Conservation Tool Components	Notes	Website Resources (Examples)
Foundation	Species Management Plans	A management plan to guide the recovery of a species-at-risk. Outlines goals, objectives, and provides strategic direction.	Federal, Provincial and Municipal Government; Land Owners; Experts and Specialists; Industry	Policies, Acts	<p>Alberta Examples:</p> <p>Species at Risk Program No. 30- Alberta Sage Grouse Recovery Plan 2013-2018</p> <p>Species at Risk Program No. 24- Alberta Small-flowered Sand-verbena Recovery Plan 2012-2017</p>	<p>http://aep.alberta.ca/fish-wildlife/species-at-risk/default.aspx</p> <p>http://aep.alberta.ca/fish-wildlife/species-at-risk/species-at-risk-publications-web-resources/birds/eaterSageGrouseRecoveryPlan-2013-2018.pdf</p> <p>http://aep.alberta.ca/fish-wildlife/species-at-risk/species-at-risk-publications-web-resources/plants/documents/SAR-Small-floweredSandVerbenaRecoveryPlan-Oct2012.pdf</p>
Foundation	Interprovincial & International Agreements and Partnerships	Agreements or partnerships between governments - either provincially or nationally - that promote and encourage the management of a resource or large-scale area.	Provincial Government	Monitoring organizations; Conservation Groups	<p>No direct grasslands agreements between Alberta and other provinces or states.</p> <p>Indirectly, the North American Waterfowl Management Plan (NAWMP) works to retain important habitat of migratory waterfowl, including grassland wetlands.</p> <p>There is a tri-country commission - The Commission for Environmental Cooperation (CEC) - which is a partnership between Canada, the US, and Mexico for the Central Grasslands.</p> <p>Transboundary Grasslands Partnership between Alberta, Saskatchewan and Montana within a defined boundary (initiated).</p>	<p>NAWMP</p> <p>http://nawmp.wetlandnetwork.ca/what-is-nawmp/</p> <p>CEC</p> <p>www3.cec.org/islandora/en/item/1964-grasslands-toward-north-american-conservation-strategy-en.pdf</p> <p>Transboundary Grasslands Partnership</p> <p>www.albertapcf.org/transboundary/transboundary</p>

Category	Conservation Tool Name	What it Does	Who is Involved	Other Conservation Tool Components	Notes	Website Resources (Examples)
Extension	Voluntary Conservation Groups and Conservation non-government organizations	Non-profit organizations, often registered under Alberta's Societies Act although there are informal groups that have a mandate focused on conservation. These groups deliver on their mandate through projects, education and outreach programs, research, public awareness campaigns, etc. Some of the non-government organizations are Land Trusts and practice conservation and purchase of land, the purchase and administration of conservation easements, and agreements with landowners.	Land Owners; Individuals; Business Community; Non-Profit Organizations; Industry	Government	There are many non-government organizations and voluntary conservation groups involved in grasslands conservation in Alberta. Examples of voluntary and non-government conservation groups include the Alberta Prairie Conservation Forum, Alberta Native Plant Council, and the Foothills Restoration Forum, Nature Conservancy of Canada, Canadian Parks and Wilderness Society (CPAWS), and Ducks Unlimited.	<p>Alberta Prairie Conservation Forum www.albertapcf.org/home</p> <p>Alberta Native Plant Council http://anpc.ab.ca/</p> <p>Foothills Restoration Forum https://foothillsrestorationforum.ca/</p>
Extension	Information Management Systems; Environmental Reporting; Monitoring Services	This suite of tools are used for gathering, recording, reporting, and monitoring information for conservation needs, goals and objectives, etc.	Government; Non-Profit Organizations; Industry	Monitoring organizations; Conservation Groups; program developers/ technicians; etc.	There are many tools out there to collect, analyze, manage, and monitor information and/or conservation sites. These tools range from GIS-based applications to the forms to collect data, to the databases used for data analysis and retention. They can be custom-developed and suited to a particular organization or project need such as the Grasslands Vegetation Inventory or they can be 'off-the-shelf' such as programs like Marxan.	<p>Grasslands Vegetation Inventory www.albertapcf.org/native-prairie-inventories/gvi</p> <p>Marxan www.uq.edu.au/marxan/</p>

Conservation Tool Name	What it Does	Who is Involved	Other Conservation Tool Components	Notes	Website Resources (Examples)
<p>Extension</p> <p>Education and Outreach; Demonstration Sites; Guideline Documents; Beneficial Management Practices or Sustainable Practice Steps; Range Management Plans; Communication Pathways; Technical Training and Support; and Toolbox Development</p>	<p>These are the tools that translate the regulatory and non-regulatory pieces into actual on-the-ground processes. It includes the day-to-day conservation management practices as well as the education and outreach (including demonstration sites) programs and tools. These are the tools that help the people involved in conservation to perform their daily work.</p>	<p>Government; Non-Profit Organizations; Industry; Landowners; Land Trusts</p>	<p>Education specialists; writers; facilitators</p>	<p>These tools range from best management practices such as how to evaluate, plan and execute a controlled burn to documents providing guidelines on reclamation to educational programs. This suite of tools include public education/ participation activities such as grasslands tours or invasive weed pull events as learning devices such as the Alberta Weed Spotter app for smartphones.</p> <p>An example is the Antelope Creek Ranch – for range management planning within a habitat development area.</p>	<p>Conservation and Reclamation Guidelines for Native Grasslands http://aep.alberta.ca/land/programs-and-services/reclamation-and-remediation/conservation-and-reclamation/general-guidelines-technical-resources/default.aspx</p> <p>Best Management Practices for Pipeline Construction in Native Prairie Environments www.aer.ca/documents/applications/BestManagementPracticesPipeline.pdf</p> <p>Alberta Weed Spotter (app for phone) https://itunes.apple.com/ca/app/alberta-weed-spotter/id889877970?mt=8</p> <p>Antelope Creek Ranch www.antelopecreekranch.ca/</p>
<p>Extension</p> <p>Public Acknowledgement</p>	<p>Public acknowledging individuals, companies, organizations, departments, etc. that have made achievements in conservation or that have supported conservation as a way to encourage further conservation, and also a way to build positive social license. Events can be local, regional, provincial or national.</p>	<p>Government; Land Owners; Business; Non-Profit Organizations; Industry</p>	<p>Community leaders and members</p>	<p>Public acknowledgement can be as simple as listing donors to a project in a presentation or brochure to gala events that draw in the broader public. An example of a provincial award/acknowledgement program is Alberta's Emerald Awards and the Prairie Conservation Award.</p>	<p>Emerald Awards http://emeraldfoundation.ca/emerald-awards/</p> <p>Prairie Conservation and Endangered Species- Prairie Conservation Awards www.pcesc.ca/awards/prairie-conservation-awards.aspx</p>

Category	Conservation Tool Name	What it Does	Who is Involved	Other Conservation Tool Components	Notes	Website Resources (Examples)
Extension	Building Social License	Social license is the community or society's acceptance or approval of something that has impact on individuals, communities, or society as a whole. It is often used in reference to resource extraction situations where community reservation is overcome through ongoing sustained investment and relationship building. Although intangible and often informal, actions centered on timely and effective communication, transparency, and responsible behavior are core to building social license. While it is most often referred to in resource extraction, it is also a key requirement for any project that needs broad community acceptance in order to be accomplished. Areas that are seeing an increasing need for social license include agriculture, government, neighborhood development/renewals, waste management, and conservation/green programs.	Government; Business Community; Non-Profit Organizations; Industry	Community leaders and members	Building social license is more about the actions of those involved in the project or situation rather than the intent of the project or situation. In other words, what is said and done is more influential than what is promised.	Research article www.albertafarmexpress.ca/2016/04/06/grazing-grasslands-is-good-for-the-environment-study-finds/
Socio-Economic Non-Market	Land Donations / gifts	The land owner initiates the process with either a level of government or with a non-profit land trust. Land is donated for the purpose of conservation and can be called a nature reserve, nature sanctuary, conservation area, etc.	Provincial Government, Local Government; Land Trusts; Land Owners	Land Titles; Land Zoning; Land-use, Sub-Regional, and Regional Management Plans	Examples: Coyote Lake Nature Sanctuary, Ann and Sandy Cross Conservation Area, OH Ranch (near Longview) Antelope Hill Land donation (380 hectares) of undisturbed native grassland that became Alberta's 76 Provincial Park	www.village.breton.ab.ca/coyote.html http://www.albertaparks.ca/coyotelake.aspx www.albertaparks.ca/albertaparksca/about-us/public-consultations/archives/antelope-hill-pp.aspx

Category	Conservation Tool Name	What it Does	Who is Involved	Other Conservation Tool Components	Notes	Website Resources (Examples)
Socio-Economic Market	Land Purchases	Governments may purchase private land for a specific conservation purpose, often used as a last resort. Land trusts and conservation non-government organizations (e.g., Nature Conservancy) may also purchase private land.	Conservation Organizations, Provincial Government; Local Government; Trusts; Land Owners; Private Individuals	Land Titles; Land Zoning; Land-use, Sub-Regional, and Regional Management Plans	Example for a non-profit organization: Ducks Unlimited Canada (DUC); Landowner Programs - Revolving Land Program where DUC purchases land and then sells it with a conservation easement. Private individuals may also purchase lands to promote conservation, or enter into agreements with established organizations to purchase properties together.	www.ducks.ca/resources/landowners/revolving-land-conservation-program/
Socio-Economic Market	Land Exchange; Resource Allocation Trading	A government may swap government held or public land for private land deemed necessary to further conservation goals. Can also take place between land trusts and land owners.	Provincial Government; Local Government; Land Trusts; Land Owners	Land Titles; Land Zoning; Land-use, Sub-Regional, and Regional Management Plans	Examples: The land exchange with the Bow Valley Wildland Provincial Park and Stone Creek Properties (Silvertip Golf Course)	www.albertaparks.ca/albertaparksca/about-us/public-consultations/archives/bow-valley-wpp-land-exchange-silvertip/
Socio-Economic Non-Market	Conservation Easements	Initiated by the land owner (private or government). Creates a set of rules that conserve land in perpetuity.	Provincial Government; Local Government; Land Trusts; Land Owners	Land Titles	Examples: Waldron Conservation Project - 30,535-acres (12,357-hectares) of deeded land owned by the Waldron Grazing Co-operative Ltd was placed under a conservation easement with the Nature Conservancy of Canada King Ranch (now incorporated into the Waldron Ranch) - the historic ranch was purchased by the Waldron Grazing Co-operative and the Co-operative placed an additional easement on the 4,200 acres (1,700 hectares) in partnership with the Nature Conservancy of Canada These conservation easements will ensure the preservation of a large portion of Alberta's native fescue grasslands. Numerous other Land Trusts including Southern Alberta Land Trust Society, Western Sky Land Trust, Ducks Unlimited, Foothills Land Trust, Legacy Land Trust and the Alberta Conservation Association have worked with a number of private landowners to place conservation easements on properties throughout the province, including the grasslands region, to preserve private properties with high ecological value.	www.natureconservancy.ca/en/where-we-work/alberta/featured-projects/waldron/ https://salts.land/protect/ www.ab-conservation.com/programs/land/overview/

Website Resources (Examples)	Notes	Other Conservation Tool Components	Who is Involved	What it Does	Conservation Tool Name	Categorization
<p>Ecosystem Services Approach Pilot on wetlands www.canadianfa.ca/wp-content/uploads/2013/12/ES-approach-pilot-on-wetlands-in-AB.pdf</p> <p>ACA Landowner Habitat Program www.ab-conservation.com/programs/land-projects/landowner-habitat-program/</p> <p>USDA example http://www.fsa.usda.gov/FSA/webapp?area=home&subject=copr&topic=crp</p> <p>Conservation Auction www.environment.gov.au/biodiversity/conservation/tender-and-auctions/conservation-payments http://awsassets.wwf.org.au/downloads/wa013_auction_for_landscape_recovery_1oct05.pdf</p> <p>SODCAP - Agricultural Projects www.sodcap.com/Docs/AnnualReport1617.pdf</p>	<p>There are no government-led programs at this time in Alberta.</p> <p>Trials of an Ecosystem Services approach in Alberta are: 1) the Ecosystem Services Approach Pilot on wetlands (in an area on the east side of Calgary) in 2010-2011 to help provide information for wetland management and test how the Ecosystem Services approach can support decision-making, and 2) current work on various projects related to how Ecosystem Services assessments can be used for specific projects (Lower Athabasca region) (e.g. LEAP Algar project).</p> <p>Example: Alberta non-governmental organization program - Alberta Conservation Association's Landowner Habitat Program.</p> <p>Example: land conversion/conservation program - run by the United States Department of Agriculture (USDA).</p> <p>Other examples: Conservation Auction - run by the Australian Government - Bush Tender Trial and Habitat Management Agreements - the South of the Divide Conservation Action Program (SODCAP) in Saskatchewan.</p>	<p>Land Titles; Land Zoning; Land-use, Sub-Regional, and Regional Management Plans</p>	<p>Provincial Government, Local Government; Land Owners; Land Trusts; Non-Profit Organizations</p>	<p>Creates a system where land owners or industry is compensated for the removal and/or management of sensitive or high ecological value land out of development ability. Some Land Conversion Programs are not permanent and are used to allow land recovery time over 5 to 25 years. It also gives the land owner an option to renew. Conservation auctions allow an individual to submit a bid to carry out conservation actions on their property and determine the cost of carrying out this work; this provides incentives for private participation while utilizing funds for conservation.</p>	<p>Payments for Ecosystem Services; Land Conversion Programs; Conservation/Reverse Auctions</p>	<p>Socio-Economic Market</p>
<p>Ontario Conservation Land Tax Incentive Program www.ontario.ca/environment-and-energy/conservation-land-tax-incentive-program</p> <p>www.web2.mnr.gov.on.ca/cltip/CLTIP_Community_Conservation_Lands_Guide.pdf</p>	<p>No grassland conservation tax incentive programs at this time in Alberta.</p> <p>Ontario has a conservation land tax incentive program.</p>	<p>Land Titles; Finance Departments;</p>	<p>All levels of Government; Landowners; Industry</p>	<p>Provisions are made in the local, provincial or federal level of taxation for conservation initiatives.</p>	<p>Tax Credit; Tax Breaks; Tax Differentiation</p>	<p>Socio-Economic Market</p>

Category	Conservation Tool Name	What it Does	Who is Involved	Other Conservation Tool Components	Notes	Website Resources (Examples)
Socio-Economic Market	Event Specific Taxes (Carbon/Biodiversity/Zoning)	Provisions are made in the local, provincial, or federal level of taxation for negative behaviors or activities. The amount of tax paid depends on the amount of activity the individual or business does.	All levels of Government; Landowners; Industry	Finance Departments; monitoring organizations	No grassland conservation programs at this time in Alberta but the carbon levy program through the Climate Change and Emissions Management Fund was an example of an event or activity specific tax.	https://open.alberta.ca/dataset/climate-change-and-emissions-management-fund-credit-amount-order
Socio-Economic Non-Market, Market	Conservation Offsets; Credit Banking Systems; Land/Grass Banking Systems; Development Credits; Stewardship Credits	Actions are taken at one location to balance (fully or in part) negative impacts that are anticipated to occur at another location due to development or use. To encourage mitigation, restoration, and conservation projects, a credit banking system can be used. Land owners, businesses, non-profits, and industry are given credits for mitigation, conservation or restoration activities. These credits can then be either purchased from those holding credit or from the credit banking system by others as part of a condition to receive development permits or dispositions or as social accountability. Can be developed and operated by governments, Non-Profit Organizations, private.	All levels Government; Land Owners; Business Community; Non-Profit Organizations; Land Industry; Land Trusts	Land Titles; Financial Departments; Purchase/Transfer of Development Rights; Land use plans	<p>Alberta offset examples: Southeast Conservation Offset Pilot; Wetland Policy; Carbon Offset System.</p> <p>International Offset programs include: Conservation Banking in the US; Habitats and Birds Directives in the EU; Brazil - Forest Regulation; Switzerland - Nature and Landscape protection laws. Can require a great expense to start up and requires long-term management and financial support (through grants, endowments or foundations) as well as an external monitoring/auditing system.</p> <p>Alberta example of Purchase or Transfer of Development Rights/Credits: Two counties have policies that incorporate some aspects of this: Wheatland County and Bighorn Municipal District. A pilot project has been run in the Beaver Hills Initiative Area.</p> <p>See also "Transfer of Development Credits in Alberta: A Feasibility Review" prepared by Greenaway & Good - Mistakis Institute for GoA (http://www.rockies.ca/project_info/TDCFeasibilityReview/Mistakis.pdf) and Practical Guide to Transfer of Development Credits (http://www.tdc-alberta.ca/)</p> <p>The Nature Conservancy of Canada (NCC) has been piloting a new conservation tool – the Stewardship Credit Pilot Program that provides incentives for private land holders who maintain and enhance their own ranches to off-set fees to graze on NCC lands.</p>	<p>Southeast Conservation Offset Pilot www1.agric.gov.ab.ca/\$Department/deptdocs.nsf/all/sag14846</p> <p>Alberta Carbon Offset System http://aep.alberta.ca/ climate-change/programs-and-services/alberta-carbon-offset-system.aspx</p> <p>Grass banking example www.nature.org/ourinitiatives/regions/northamerica/unitedstates/montana/placesweprotect/matador-grassbank.xml</p> <p>Conservation banking www.wildlife.ca.gov/Conservation/Planning/Banking</p> <p>Development Rights Transfer: Beaver Hills Initiative www.beaverhills.ca/</p> <p>NCC- Stewardship Credit Pilot Program www.flagstaff.ab.ca/images/Nature-Conservancy-of-Canada-Stewardship-Credit-Program.pdf</p>

Category	Conservation Tool Name	What it Does	Who is Involved	Other Conservation Tool Components	Notes	Website Resources (Examples)
Socio-Economic Non-Market, Market	Restoration & Reclamation Fees and Work; Performance Bonds/Deposit Refund Systems; Area Use Permits; User Fees & Fines	Those seeking to conduct activities that could harm conservation efforts pre-pay and/or pay after the fact to restore and reclaim areas damaged.	All levels of Government; Land Owners; Business Community; Non-Profit Organizations; Industry	Monitoring organizations	Applies to a wide variety of activities from oil and gas well site/pipeline restoration and reclamation (both pre-pay and pay after) to recycling fee attached to beverage containers (pre-pay).	For information on security for land reclamation performance in Alberta: http://aep.alberta.ca/land/programs-and-services/reclamation-and-remediation/conservation-and-reclamation/general-guidelines-technical-resources/financial-security-for-reclamation.aspx
Socio-Economic Non-Market	Grants, Subsidies, Low-Interest Loans	Grants, subsidies, and low-interest loans can provide incentives to encourage conservation. Grants can come from all levels of government, businesses, trusts, and non-profit organizations. This manner of funding can range from grants that are given to support organizations in the pursuit of conservation to grants given to support specific projects. Subsidies and low-interest loans typically come from governments; however, some organizations also provide these types of incentives. Conservation subsidies are often used to replace income that would be lost due to pursuing an activity that has other benefits than economic (for example, paying for fallow field vs the cash made from a crop). Low-interest loans are used to improve or build a best management practice or infrastructure or to assist in the purchase of lands for conservation.	All levels Government; Land Owners; Business Community; Non-Profit Organizations; Industry	Finance Departments; monitoring organizations	Grassland grants and subsidies come in many forms. Examples include: The Alberta Ecotrust Foundation has many collaborators and funders for their program providing environmental grants to various environmental non-government groups and First Nations. The Alberta Land Trust Grant Program focuses on conserving areas of ecological importance with grants available to land trust agencies for new conservation easements and projects. The Government of Canada also has the Habitat Stewardship Program for species at risk habitat protection. Additional examples: Canada-Columbia Basin Trust- Grassland and Rangeland Enhancement and Rangeland Enhancement program and internationally, there are programs such as Cut and Chew – UK, Georgia Land Conservation Revolving Loan Fund – USA.	<p>Alberta Ecotrust Environmental Grant Program https://albertaecotrust.com/what-we-do/environmental-grants/</p> <p>The Alberta Land Trust Grant Program http://aep.alberta.ca/land/programs-and-services/alberta-land-trust-grant-program/default.aspx</p> <p>Habitat Stewardship Program www.ec.gc.ca/nsp-pih/default.asp?lang=En&n=59BF488F-1</p> <p>Columbia Basin Trust- Grassland and Rangeland Enhancement Program https://ourtrust.org/funding-support/funding-support-programs/grassland-and-rangeland/</p> <p>Cut & Chew - UK www.cutandchew.org.uk/index.php/information/funding.html</p> <p>Georgia Land Conservation Revolving Loan Fund https://glcp.georgia.gov/sites/gcp.georgia.gov/files/lowinterestloans.pdf</p>

Categorization	Conservation Tool Name	What it Does	Who is Involved	Other Conservation Tool Components	Notes	Website Resources (Examples)
Socio-Economic Non-Market, Market	Certification & Labeling Programs	Certification and labeling programs can be consumer or industry-driven. Provides a set of standards and guidelines for a process or product (series of products) that, once established, become locally, regionally, nationally or internationally recognized (depending on the scope). Can lead to increased social license and positive impact on market share.	Provincial Government; Land Owners; Business Community; Non-Profit Organizations; Industry	Monitoring organizations	<p>No direct grasslands program at this time in Alberta.</p> <p>McDonald's is piloting a beef certification program for verified sustainable beef with the Canadian Roundtable for Sustainable Beef that includes a portion on healthy range/grasslands. The Verified Sustainable Beef framework is intended to be completed for implementation in 2017. For a review of beef certification programs that have a conservation aspect, see report "Grassland Stewardship Conservation Programming: Grasslands Stewardship Certification Schemes" by Miistakis Institute.</p> <p>An Ontario example of a grasslands certification program is Credit Valley Conservation - Bird-Friendly Certified Hay program.</p> <p>A good example of a long running program is the Sustainable Forestry Initiative (SFI)</p>	<p>Grassland Stewardship Conservation Programming report www.rockies.ca/project_info/Grassland_Stewardship_Consevation_Programming_CBP_SEP_2013.pdf</p> <p>Canadian Roundtable for Sustainable Beef http://crsb.ca/</p> <p>Bird-Friendly Certified Hay Program https://secure.creditvalleyca.ca/your-land-water/grassland-bird-recovery-program/bird-friendly-certified-hay/</p> <p>Sustainable Forestry Initiative www.sfiprogram.org/</p>