



ECOSYSTEM SERVICES PROGRAMS IN ALBERTA

Conservation groups, governments, municipalities and individuals have an increasing interest in ecosystem services (ES) programs that support conserving wetlands, riparian areas, wildlife, wildlife habitat, carbon balance and the environment as a whole. Producers who provide ecosystem services are interested in doing so but are also open to receiving some level of compensation for that service. This has been defined as Payment for Ecosystem Services (PES). To encourage PES, governments, municipalities, conservation groups and corporations are willing to use various mechanisms for compensation such as direct financial payments, tax considerations, assistance with fencing and dugout construction, or purchase of protected grazing land for conservation, and sold at a reduced price.

Producers are looking for a simple way to access these payments: what to do, where to go, and how to implement PES. Some programs work directly with the provider, and others are done through the municipal, provincial or federal government. The following is a list of prominent programs that are available, or might soon be available in Alberta. Some recently developed programs that are not operational due to complications have also been included.

Producer Programs

Agroforestry and Woodlot Extension Society

Overall: Increase awareness of the values of agroforestry and woodlots in the landscape.

Payment: Technical assistance and contract services to assist in repairing riparian areas and upland forests through afforestation. Potential funding support options for related services.

Where: Across Alberta

More info: awes-ab.ca

Alberta Conservation Association

Overall: Funding supports conservation activities by individuals, organizations, and communities that contribute to healthy fish and wildlife populations; to a healthy environment for fish and wildlife in Alberta; and to the understanding, appreciation and use of that environment.

Payment: Varies

Where: Across Alberta

More info: ab-conservation.com/grants/aca-grant-programs/

Alternative Land Use Services (ALUS)

Overall: Designed to protect wetlands and other natural features by paying farmers and ranchers for increased ecosystem services they produce when adopting agro-environmental beneficial management practices (BMPs). This is a producer-driven program with producers and local "Partnership Advisory Committees" making project decisions.

Payment: Establishment (or BMP implementation) costs are shared and an annual payment for ecosystem services is made for the duration of the contract. Payments vary by community. For example, in Red Deer County \$30/acre/year for ecosystem services from pasture lands, or \$40/acre/year for ecosystem services from croplands. Contract length varies by community, from one to 10 years.

Where: Participating counties as of May 23, 2017: Lacombe, Northern Sunrise, Lac Ste. Anne, Wetaskiwin-Leduc, Red Deer, Parkland, Mountain View, Flagstaff, Brazeau, Vermilion River.

More info: alus.ca

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Offset Program

Offset programs are described for conservation purposes to balance action taken in one location with a similar action in another location. For example, replacing a documented loss of wetland in one area with protection of a similar wetland in another area, or replacing excessive carbon formation in one area

(such as use of hydrocarbon fuels) with conservation of carbon uptake in another area (carbon sequestration in soils). Not all conservation programs are defined as being offsets, while all offset programs are conservation plans.

Wetland Offsets Program

Overall: Direction is provided by the Government of Alberta (GOA), Environment and Parks. This program is still in development as of January 12, 2017. Landowners will be able to participate in wetland offsets by providing historically drained wetland areas for restoration to wetland replacement agents. The Wetland Restoration Directive, which captures how wetlands are to be restored to generate wetland offsets, has been finalized and is being implemented. The Wetland Offset Program is the first offset program from the GOA. It meets the requirements for wetland replacement outlined in the Alberta Wetland Policy. Development of a Wetland Construction Directive, which captures new wetlands constructed to generate wetland offsets, where wetlands did not historically exist, has a draft written and is currently under review. Wetland enhancement and stewardship protocols will follow thereafter.

Payment: To be negotiated between landowners and replacement agents (third party financing).

Where: Once the program is launched it will be available throughout Alberta.

More info: [Wetland Offset Program Description: aep.alberta.ca/water/programs-and-services/wetlands/documents/WetlandOffsetProgramDescription-Sep2015.pdf](http://aep.alberta.ca/water/programs-and-services/wetlands/documents/WetlandOffsetProgramDescription-Sep2015.pdf)
[Wetland Restoration Directive: aep.alberta.ca/water/programs-and-services/wetlands/documents/WetlandRestorationDirective-Nov2016.pdf](http://aep.alberta.ca/water/programs-and-services/wetlands/documents/WetlandRestorationDirective-Nov2016.pdf)

County and Municipal Environmental Units

Overall: Counties and Municipal Districts providing services to their landowners for the care of wetlands and other environmental initiatives.

Payment: Ranges from technical advice to cash payments from various sources to cover partial costs. Sourcing can come from different areas and programs including industrial environmental accounts. For example, Red Deer County Off the Creek Program pays for off-stream watering systems, fencing, manure management and septic system improvements. Several MDs provide a low flow toilet program with rebates up to \$100 for purchase of low flush/dual flush toilets. Others offer subsidized compost bin and rain barrels; no cost barbed wire disposal in Red Deer County; blended with the ALUS program in some counties; agriculture plastics program in Mountain View County and Yellowhead County; and others.

Where: Various counties and municipalities with active environmental divisions including Red Deer County, Lacombe County and others.

More info: Check with individual MD or County Ag Service Boards.
aaaf.ab.ca/uploads/pdf/2016 AAAF Directory as of August 12 2016.pdf

Waterton Biosphere Reserve Grizzly Bear Program

Overall: Dealing with grizzly bear management.

Payment: Compensation for deadstock pickup, supply of deadstock bins, compensation for steel grain bin doors for grain storage and electric fencing.

Where: Alberta, Waterton area: MDs of Pincher Creek, Cardston, Ranchland and Willow Creek.

More info: watertonbiosphere.com/projects/carnivores-communities/
Nora Manners, Executive Director/Biosphere Reserve Coordinator, phone: 403-627-1473, email: nmanners@watertonbiosphere.com

Cows and Fish (Alberta Riparian Habitat Management Society)

Overall: Assists producers with managing wetlands and riparian areas.

Payment: Technical support

Where: Across Alberta

More info: cowsandfish.org
Norine Ambrose, Executive Director, phone: 403-381-5538, email: nambrose@cowsandfish.org

Ducks Unlimited Canada (DUC) 10-year Wetland Restoration Lease Program

Overall: Aimed at restoring wetlands, while letting the landowner continue to manage the land.

Payment: Wetland restoration costs are paid by DUC, followed by an upfront payment and 10 annual payments based on current fair market value for the restored wetland area. The landowner can manage the restored area during the lease, which may include haying or grazing. Once restored, the wetlands are secured by the provincial Wetland Policy.

Where: DUC priority areas throughout Alberta.

More info: ducks.ca/resources/landowners/ten-year-lease-program, phone: 1-866-479-3825, email: restoremywetlands-ab@ducks.ca

Ducks Unlimited Canada Revolving Land Purchase (RLP) Program

Overall: DUC purchases land, restores wetlands and upland habitat (e.g., former wetlands and cultivated land restored to wetlands and grasslands), places a conservation easement on title protecting the habitat in perpetuity, and the land is then sold. Producers have the opportunity to purchase the land. Current land listings can be found on the DUC website below.

Payment: Dependent on current land values.

Where: DUC priority areas throughout Alberta.

More info: ducks.ca/resources/landowners/revolving-land-conservation-program, phone: 1-866-479-3825, email: restoremywetlands-ab@ducks.ca

Ducks Unlimited Canada Hay/Graze Tender Program

Overall: As part of their conservation program, DUC makes land available for haying and/or grazing with annual tenders. Information about the bidding process and available land locations are posted online or made available from the area DUC

representative during the spring of each year. DUC agreement forms must be used in the bidding process. For a copy of the agreement specific to each area, please contact the DUC representative identified on the listing or call 1-866-479-3825.

Payment: Leasing hay and grazing land with environmental conditions.

Where: DUC priority areas throughout Alberta.

More info: ducks.ca/resources/landowners/alberta-haygraze-tender-program, phone: 1-866-479-3825

Ducks Unlimited Canada Forage Program

Overall: Subsidizes forage seed costs in return for keeping restored land in perennial cover and conserving associated wetlands for a 10-year term.

Payment: DUC pays up to \$100 per 50-pound bag of forage seed on varieties purchased from Crop Production Services.

Where: DUC priority areas throughout Alberta.

More info: ducks.ca/resources/landowners/forage-program, phone: 1-866-301-3825 ext 1872, email: c_bishop@ducks.ca

Nature Conservancy of Canada (NCC)

Overall: To promote the diversity of plant and animal life by conserving healthy natural lands, wildlife and water. The Nature Conservancy of Canada is a not-for-profit land trust active in Alberta and throughout Canada. Their mandate supports voluntary, private conservation initiatives.

Mission: NCC works cooperatively with producers to find voluntary win-win solutions, primarily on private land, to advance the conservation of biologically rich natural areas and open spaces¹.

Although NCC helps develop the process, it has limited funds and relies on a high level of producer participation. NCC uses a variety of conservation tools to accomplish conservation objectives:

Conservation Easements

- **Donated land** – Sometimes producers wish to know their land will always be managed to conserve grasslands, wetlands and wildlife attributes. For this, NCC sometimes accepts land donations and the landowner continues to own the deeded land under the easement. As with land not under an easement, it can be sold subject to restrictions the producer places on land-use. The easement restrictions are registered on the title of the land. If donated as a conservation easement the producer can receive a tax receipt for any deemed reduction in land value. This receipt can be applied against income for a period of 10 years from the year of donation².

1. The key to sustaining healthy natural lands and waters in the settled region of Alberta is to help retain well managed ranches. In the settled region of western Canada these natural lands and waters are generally a byproduct of habitat kept intact by well managed ranch operations.

2. Property owner's consideration: If a producer would like their land conserved as it is in perpetuity, a conservation easement on the property may be a practical tool. However, if the property is needed for any economic opportunity or purpose that may arise, then a conservation easement is probably not a good fit for their ranch operation.

- **Purchased conservation easements** – These are the same as donated land. Pending available NCC funding, the producer is paid up to 20 percent of the appraised land value for a conservation easement. Depending upon the location of the land the producer may also receive a tax receipt that can help, in some cases, more than fully offset taxes payable on income received from the conservation easement payment.

Land Purchase

Land with a high conservation value may be purchased by NCC, pending available funds. Offers on these land purchases are made to landowners for an amount up to the appraised land value.

Grazing Land

NCC-owned lands will usually be leased for grazing, unless there is some rare extenuating circumstance that prevent this.

Where: NCC focus areas in Alberta, since 2017 (see map, Appendix 1).

More info: Producers should always speak with an NCC representative before they include a land or conservation easement donation in their wills to ensure the property is a good fit for NCC goals and priorities. Landowners who have question are welcome to call Larry Simpson at 403-617-1253.

Growing Forward 2 On-Farm Water Management

Overall: Designed to help producers achieve greater water security and more effective and efficient management of their on-farm water. Includes wells, dugouts, dams, water tanks, buried pipelines, livestock waterers, etc.

Payment: Cost share of projects, 30-50 percent with various maximums.

Where: Throughout Alberta

More info: As of April 1, 2017, this program will enter its fifth and final year of operation, terminating March 15, 2018. growingforward.alberta.ca

Growing Forward 2 Plastic Rollers (Agricultural Waste Management) Program

Overall: Rolling and compacting agricultural sheet plastics allows for more convenient and safe storage on farm prior to being transported to a recycling site or licensed landfill. This practice will eliminate the need to dispose of plastics on farm. Must have completed Alberta Environmental Farm Plan.

Payment: Funding maximum \$5,000; cost share 70 percent.

Where: Throughout Alberta

More info: Alberta Agriculture and Rural Development, agric.gov.ab.ca, phone: 310-3276

Growing Forward 2 Programs

Overall: Programs that include ecosystem services assistance dealing with improved efficiencies, watershed enhancement, water supply management, environmental stewardship, farm energy management and others. Some are presently accepting applications, and others are not.

Continuation into the Canadian Agricultural Partnership to be determined.

Where: Throughout Alberta

More info: Alberta Agriculture and Rural Development, growingforward.alberta.ca/programs, phone: 310-3276.

Wetland Policy in-lieu fee Program

Overall: Financial compensation is available to producers from the Wetland Policy in-lieu fee Program through Wetland Mitigation/Restoration agents for restored wetlands.

Payment: Negotiated between the Wetland Mitigation/Restoration agent and the producer.

Where: Throughout Alberta, as of June 2017: (i) the County of Vermilion River Municipal boundary of the County of Vermilion River (CVR), and (ii) Ducks Unlimited Canada for the Entire Province.

More info: Wetland Mitigation Directive: aep.alberta.ca/water/programs-and-services/wetlands/documents/AlbertaWetlandMitigationDirective-Jun2017.pdf

County of Vermilion River: vermilion-river.com

Ducks Unlimited: ducks.ca/resources/landowners/wetland-restoration

Conservation Auctions

Overall: The University of Alberta is piloting a study where producers get paid to let wetlands be restored.

Payment: Bids are submitted and the amount paid varies depending on the results of a reverse auction.

Where: Rocky View County

More info: restoreourwetlands.ca

email: wetlands@ualberta.ca, phone: 780-248-1073

Ecological Gifts Program

Overall: Canada's Ecological Gifts Program provides a way for Canadians with ecologically sensitive land to protect nature and leave a legacy for future generations in perpetuity.

Payment: Via terms of the Income Tax Act of Canada. This offers significant tax benefits to landowners who donate land (full or partial) to a qualified recipient.

More info: Administered by Environment and Climate Change Canada in cooperation with other partners. canada.ca/en/environment-climate-change/services/environmental-funding/ecological-gifts-program/overview.html

Ecosystem Services and Biodiversity Network

Overall: The Ecosystem Services and Biodiversity Network engages a broad range of stakeholders from many disciplines to focus on ecosystem services issues that require significant collaboration in research and management. A market-based instruments (MBI) sector is being developed. Working group led by Alberta Innovates Bio Solutions, Alberta Innovates Technology Futures, Alberta Biodiversity Monitoring Institute, Silvacom Group, Land Stewardship Centre, and the Government of Alberta.

Payment: Presently under development. Something to keep your eye on.

More info: ecoservicesnetwork.ca

Agricultural Carbon Offsets

Overall: By voluntarily adopting improved agricultural practices to create carbon credits for trade in Alberta's carbon market, producers can earn extra income and realize long-term benefits to their farm operations. The program is compensation to producers to not provide business as usual. For example, not for providing grasslands that are already a carbon sink with carbon sequestration, but for providing an ecosystem service that is "additional". Producers need to provide records for the programs. Several Alberta companies are in the business of aggregating agricultural credits³ and can help with contracts, records and verification needed for the carbon offsets program⁴. As such, the aggregator is financially compensated by the producer for their services.

Compensation to producers for the Alberta Carbon Offsets Program is not a subsidy for pollution control, but from funds provided by industry, in part, through Alberta's Carbon Levy Program as their offset.

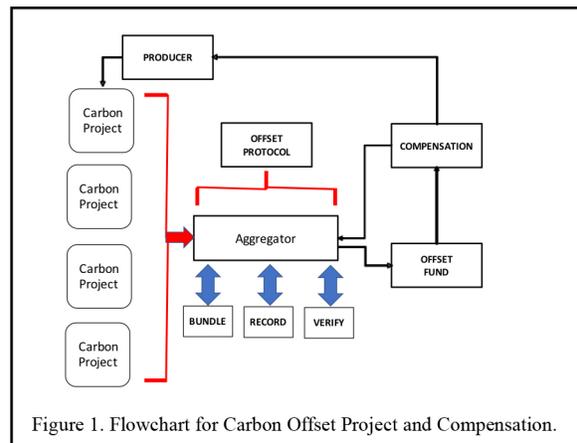


Figure 1. Flowchart for Carbon Offset Project and Compensation.

3. List of Carbon Offset Aggregators in Alberta (resource information only) [www1.agric.gov.ab.ca/\\$Department/deptdocs.nsf/all/ofa15056/\\$FILE/aggregators.pdf](http://www1.agric.gov.ab.ca/$Department/deptdocs.nsf/all/ofa15056/$FILE/aggregators.pdf)

4. Note: Some producers have used aggregators that have defaulted with offset contracts; however, they continue to promote their business. The Farmer's Advocate Office should be contacted for advice.

Benefits producers receive if they participate in carbon offset programs:

- Gaining experience with green markets and the records needed to access them
- Payment to improve agricultural management and record keeping
- Improving efficiencies
- Increasing sustainability
- Reducing your carbon footprint
- Contributing to the positive reputation of Alberta's agricultural industry
- Improvements to agricultural practices can reduce and/or remove/replace greenhouse gas emissions.

Programs for agriculture: These are listed below and indicate if they are presently active or not. Some protocols have been tested and deactivated by the GOA and may or may not be reactivated at some time. Producers can access "more information" for updated protocols.

Where: Approved protocols available across Alberta.

Payment: Depends on approved protocol. Not all programs are offered at any one time. All programs are reviewed and reassessed periodically.

Approved protocols: Many protocols have been developed, some have been launched, and others have had poor uptake. Many producers find that the amount of paperwork and time taken to administer these programs can be excessive and not worth the effort based on the compensation.

1. Conservation Cropping (operational)

Summary: Conservation Cropping is still the protocol of use to Alberta farmers looking at the carbon market, but other protocols are getting closer to becoming operational. The carbon price has increased by 25 percent within the last year.

Overview: Conservation Cropping replaced the old tillage protocol from 2012-13. Like the tillage protocol, Conservation Cropping is based on direct or two pass seeding building up organic matter, and thereby storing atmospheric carbon in the soil. The carbon yield is fixed at 0.11 tonnes per acre of carbon in the Parkland area and 0.06 tonnes per acre in the Dry Prairie region. This works out to around \$1.40 and \$0.70 per acre for the farmer.

Soil disturbance must stay under certain specifications, less for two pass than for single pass systems. Default right for the offset is to the landowner, but most landowners sign off the right to the farmer if renting the land. It's used on a wide scale on cropland in Alberta and is set to expire at the end of 2021, but like all protocols can be reviewed at any time.

Update: Generally working well, the main carbon protocol of use to farmers at present. Income has increased somewhat over time.

2. NERP "Agricultural Nitrous Oxide Emissions Reduction" (not operational to date)

Overview: This protocol is based on improving nitrogen fertilizer efficiency by putting more in the crop and less nitrous oxide, a potent greenhouse gas, in the air. It uses the 4R principle: right source, right rate, right time, and right place. The carbon harvest is variable depending on crop yield versus nitrogen applied, the degree of nitrogen management, and the improvement over previous yields. Fertilizer savings or yield advantages may result in addition to the carbon payment, plus the bonus of accurate agronomic records. Crops do not need to be direct seeded, but if so, Conservation Cropping carbon payments may also be collected off the same field, 'stacking' income from both. This protocol has been approved for some years but has been difficult to use, largely because of the complexity and the measurements and proofs required.

3. Beef: Feedlot-Fed Cattle (operational)

Overview: Aimed at beef cattle, this protocol rewards shortening time in the feedlot by improving efficiency. Like the NERP protocol the carbon yield is variable, depending on the improvement over a three-year

baseline. Feed savings should result from the earlier harvest dates in addition to the income from the carbon payment. While this has been available for a few years, the amount of work that goes into finding practical methods to obtain and prove records has been the main challenge.

Update: This protocol was revised this past February to make it easier to use. Feeding of edible oils is now included. It is hoped to become operational this year.

4. Beef: Genetics "Residual Feed Intake (RFI)" (not operational yet)

Overview: Cattle bred for more efficient feed use, thus reducing methane and nitrous oxide. Carbon yield is variable. Feed savings appear to be the main benefit so far.

Update: Two research trials at Lacombe and Brooks are underway.

5. Beef: Lifecycle "Reduced Age at Harvest" (not operational yet)

Overview: This protocol of lifecycle analysis rewards shortening the entire lifespan of cattle from birth to harvest. While this has been available for a few years, the amount of work that goes into finding practical methods to obtain and prove records has been the main challenge. Plus the tendency of backgrounding time to vary depending on market conditions, feed availability, etc.

Update: No projects to date.

6. Dairy (not operational yet)

Overview: More efficient production of milk from dairy cattle, which reduces methane and nitrous oxide emissions. A market advantage from reducing the carbon footprint of milk is expected to be a benefit, plus feed savings and carbon income. Another complex protocol, it would seem to be well matched to the highly managed dairy industry, but implementation has been a challenge.

Update: This protocol is a work-in-progress. One trial was completed on 50 farms in Alberta with Alberta Milk and the Atlantic Dairy and Forage Institute, and a case study was completed on record keeping technologies.

7. Wind Powered Electricity (operational)

Overview: Wind generated electricity as a replacement to coal or natural gas fueled power is used on a wide scale, and the second largest generator of offset carbon tonnes after the Tillage/Conservation Cropping protocols. The carbon yield is currently fixed at 0.59 tonnes of carbon for every megawatt/hour generated; under a tenth of the income of the power generated. Record keeping is relatively easy to measure compared to other protocols.

Update: Carries on after being reduced from 0.65 to 0.59 tonnes of carbon per Mw/h in March 2015.

8. Biogas "Anaerobic Decomposition of Agricultural Materials" (operational)

Overview: Biologically produced gas such as

methane from manure is used to create heat or electricity as a substitute for coal or gas fueled power. Two feedlot projects have posted credits.

Update: Flagged for revision, possibly minor. Can be used if special permission is granted.

9. Biomass “Energy Generation from the Combustion of Biomass Waste” (operational, but not used by agriculture)

Overview: Combustion of biomass material (wood, straw, and others) to replace energy from fossil fuels.

Update: Revised, making it easier to claim credits for using straw as fuel. No agricultural projects yet, has been used in forestry.

10. Energy Efficiency “Projects/Commercial and Institutional Buildings” (operational, but not used by agriculture)

Overview: Carbon offsets for improvements in energy use. This project has been adopted by several industries and the City of Calgary. Research has been done to see if upgrades (furnaces, lights, etc.) to barns and other farm buildings would qualify. Difficulties have been with measurement and proof, especially as improvement must be shown from a recorded baseline.

Update: Neither of the two protocols have been workable so far for farmers.

11. Solar and Wind Micro-generation “Distributed Renewable Energy Generation” (not operational yet)

Overview: Carbon credits for small scale solar and wind power. This protocol is relatively new and has not been used yet. The power generation should be small scale (under one megawatt) and connected to the grid. Carbon would be credited at 0.64 kg for each kWh generated.

Update: No projects yet.

12. Trees: Standing “Afforestation Conservation” (development stopped)

Overview: Carbon dioxide from the air is stored in trees. The current draft is for planted trees only with land not being forest for at least 20 years previously. Carbon must be locked in the trees for at least 60 years. The trees could have been planted in 2002 or later, but the carbon would be only claimable from the start of the carbon project.

Update: Was undergoing a technical review but development has been stopped for now. Conservation offsets may offer another source of income in the future.

13. Trees: Harvest “Afforestation Harvest” (development stopped)

Overview: Carbon dioxide from the air is stored in trees; however, the trees could be harvested and the carbon would be locked in if the end use is lumber. Pulp or paper is not allowed as an end use because they are considered to result in methane (CH₄) being released in landfills.

Update: Development has been stopped.

14. Forages “Conversion Crop Land to Perennial Forages” (development stopped)

Overview: Converting cropped land to perennial forages, which results in increasing the carbon dioxide stored in the soil as organic matter (carbon sequestration). Some form of locking the land into forages for a time was thought to be necessary.

Update: Progress has been difficult, and the offset value small. Development has been stopped. ALUS programs in certain Alberta counties offer other incentives for forages, and other programs exist or are in development (see wetlands).

15. Wetlands (presently rejected)

Overview: Incentive for wetlands.

Update: Development of the wetland carbon protocol has been rejected, however other wetland incentives are available or in development. See Wetland Incentives for Agriculture: agpartners.ca/aepa/ResourcesPublications/InformationSheets.aspx

More information about any of the carbon offset programs: agric.gov.ab.ca or contact the Ag-Info Centre toll-free in Alberta 310-FARM (3276).

Provincial, Municipality and Group Programs

Funding from these programs is not available directly to producers but may be available or considered as collaborative programs in the province. Some of these programs are being assessed and reviewed by the province, municipalities and other groups.

More info: See specific programs for individual funding or grants; check individual MDs or counties; check the Alberta Association of Municipal Districts and Counties aamdc.com, phone: 780-955-3639

Grants and Conservation Funds

Land Stewardship Centre Watershed Stewardship Grant

Overall: Provides funding to support collaborative, community-based stewardship efforts.

Payment: Grants up to \$10,000 are generally issued once/year to eligible groups on a per-project basis.

Where: Throughout Alberta

More info: landstewardship.org/apply-grant, email: grant@landstewardship.org, phone: 1-877-727-5276 ext: 222

National Wetland Conservation Fund

Overall: Restores degraded or lost wetlands, assess wetland functions and ecological goods and services, and encourages wetland stewardship. Available to individuals, MDs, province, NGOs and others. The 2017-18 call for proposals has ended. The next annual call for proposals will occur in the fall 2018.

Payment: Typical funding ranges from \$50,000 to \$250,000, with a maximum amount available of \$500,000/year/project. A minimum of 1:1 matching contributions (from non-federal sources) required.

Where: Throughout Alberta

More Info: canada.ca, email: ec.fncmh-nwcf.ec@canada.ca

Watershed Resiliency and Restoration Program

Overall: Money available to NGOs, stewardship groups, municipalities.

Payment: \$14 million available over four years.

Where: High priority areas for flood mitigation or drought prevention.

More info: aep.alberta.ca/water/programs-and-services/default.aspx

World Wildlife (WWF) Loblaw Water Fund

Overall: This grant initiative is open to Canadians working on the ground to address the major threats to the health of our water wealth.

Payment: Grants are made possible through partial proceeds from Loblaw's charge-for plastic bag program in stores, which removed more than 10 billion plastic bags nationally since 2007.

Where: Critical projects that aim to conserve, protect, or restore freshwater and riparian habitats and the species living within them.

More Info: wwf.ca/conservation/freshwater/loblaw_water_fund/

The following MD and group programs include i) Conservation Easements, ii) Transfer of Development Credits (TDC), iii) Conservation Directive and iv) Conservation Offsets. For more information about the general structure of these programs go to the Miistakis website: rockies.ca.

Conservation Easements

Overall: A conservation easement is a device whereby a landowner gives up certain rights or opportunities to protect the conservation values of all or part of their land. That "interest in the land" is granted to an eligible conservation organization or government agency. The conservation easement is typically negotiated in perpetuity, and is registered on the title of the land. The landowner retains title, and continues using the land subject to the restrictions in the easement. They are free to sell, gift or will that property, but the easement binds future landowners to the same land use restrictions.

Under the Alberta Land Stewardship Act (ALSA), a "qualified organization" is an organization that can hold a conservation easement granted by a landowner. There are two broad classes of qualified organizations under ALSA:

- Government bodies, which include the Alberta government, provincial government agencies and local (municipal) government bodies; and
- Charitable, non-government organizations with a land conservation purpose often referred to as land trusts or conservancies.

Payment: Tax receipts are available for most conservation easements. Cash payments are also available.

Where: Producers need to choose an organization to work with: land trust, municipality or provincial agency. See the resource material for easement holders operating in Alberta.

More Info: ce.alberta.ca/resources

Transfer of Development Credits

Overall: A Transfer of Development Credits (TDC) program is a county program that has four fundamental components: 1) 'sending' areas, the areas targeted for increased conservation; 2) 'receiving' areas, the areas targeted for increased development; 3) a transfer system which facilitates the valuation and transfer of development potential from one parcel to another; and 4) an oversight body that develops and maintains the principles of the program and use of the tool.

Payment: TDC programs are not self-organizing. Once a program is created, it needs on-going administration, and the ability to adapt.

- **Rural Land Use Process** – TDC programs enjoy the support of the Rural Land Use Process. This is a staffed, associate initiative with the goal of assisting landowners who wish to develop their property while maintaining their land in agriculture or other open space. Promotion of the idea and/or explicit recognition of the value of these sorts of programs by the Government of Alberta would greatly assist TDC program development.
- **Regional Partnerships** – Alberta has recently seen the development of several informal and formal regional partnerships seeking to better coordinate and collaborate on land use issues of regional concern. The Government of Alberta can support both the TDC tool and these partnerships by, for example, making policy and enabling legislation as applicable to these partnerships as they are to individual municipalities.
- **Purchase of Development Rights (PDR) Programs** – Counties used PDR programs as a complement to their TDR programs. These programs essentially pay for conservation easements to be placed on valued landscapes, perpetually retiring the development potential, and are supported through public financing (lottery dollars, cell phone taxes, bond initiatives, sales taxes, etc.). Similarly, the non-government 'land trust' community in Alberta made a proposal to the provincial government to support the purchase of conservation easements, a third-party approach used as an explicit complement to county land conservation programs.

Where: The City of Calgary, Cypress County, Wheatland County, Red Deer County, Beaver Hills Initiative, and MD of Bighorn have all explored or implemented some form of TDC. The Canada West Foundation, Government of Alberta, Agriculture and Food Council of Alberta, and Agriculture and AgriFood Canada have initiated comprehensive investigations of the tool. The Alberta Association of Municipal Districts and Counties and Alberta Urban Municipalities Association have both passed resolutions in favour of pursuing the tool.

More Info: tdc-alberta.ca

Conservation Directives

Overall: A conservation directive is one of multiple new Conservation and Stewardship Tools created by Alberta Land Stewardship Act (ALSA) to protect “environmental, natural scenic, esthetic or agricultural values” and is intended for use in regional planning under ALSA. The conservation directive tool is used for projects that explore multiple ways for the tool to be used. Pilot projects could include:

- Completion of wildlife corridors;
- Voluntary private conservation and/or municipal planning;
- Management tools for working landscapes (public land); and
- To guide agricultural practices in ecological sensitive areas.

Payment: Compensation can result through development of regional plans in Alberta. It will be based on a decrease in market value of the land, damages for other losses specified in the regulations, and damages for “injurious affection” resulting from regional planning.

Where: Environmental Law Center, Edmonton

More Info: elc.ab.ca, phone: 780-424-5099

Conservation Offsets

Overall: Also known as Biodiversity Offsets, Habitat Compensation, Compensatory Mitigation, or Conservation Allowance for Alberta MDs and counties. The Alberta Land Stewardship Act, s45-47, allows the exchange of “stewardship units” to “counterbalance” adverse effects on the land.

Payment: Depends on federal, provincial or MD program.

Where: Currently used for wetlands; future use for caribou range restoration, native grasslands, linear disturbance (grizzly bear habitat), and water quality.

More Info: communityconserve.ca, ablawg.ca, or Dave Poulton, Environmental Strategies, email: dpoulton@telus.net, phone: 403-607-8525



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Appendix 1. NCC Focus Areas in Alberta

