



Southeast Alberta Conservation Offset Pilot

Background on the project area

Alberta's southeast native prairie landscape is a natural asset with important social, ecological and economic benefits to society. In addition to being home for numerous large mammals such as Pronghorn Antelope, Mule and White-tailed Deer, Elk and even Moose, native prairie grasslands provide seasonal breeding habitats for many bird species and critical habitat for a number of species at risk listed under Alberta's Wildlife Act as well as the federal Species at Risk Act (SARA). The dry mixed grass and moist mixed grass sub-regions which form the basis for this critical habitat have contracted to approximately 40% of their original extent from the cumulative effects of human activities over the past century. A commitment to good stewardship on the remaining prairie has been instrumental to ensure that critical wildlife habitat is provided, along with other important ecosystem services for the benefit of all Albertans. To encourage that commitment, more conservation and stewardship tools are needed to assist private landowners and industry to meet conservation values, most notably for species at risk and their associated habitat.

Within southeast Alberta, upstream petroleum development is widespread with municipal growth pressures concentrated near the numerous cities, towns and villages. Other industrial activities in the region include, but are not limited to, utilities, aggregate mining and an emerging wind energy sector. Current regulations encourage industrial developments to avoid highly sensitive areas and further minimize habitat impacts through beneficial management practices; however, there are unavoidable development impacts that can be addressed through offsets.

About conservation offsets

Conservation offsets are compensatory actions that address the unavoidable ecological losses arising from development. Offsets are the third step in the mitigation hierarchy to address any residual development impacts following avoidance and onsite mitigation. While offsets are not new to Alberta, this pilot is looking at testing a voluntary, market based approach to address industrial growth impacts on southeast Alberta's native grasslands by contracting with private landowners to convert marginal cultivated lands to native perennial species. Conservation offsets in other jurisdictions have helped industry, land owners, and government to reduce the impacts of land development, thus promoting biodiversity, species at risk habitat and healthy ecosystems.

About this project

Offsets are an important market based tool that was identified throughout the South Saskatchewan Regional Planning process to help meet conservation and stewardship values on private agricultural land. Key components for an offset system need to be considered at a local scale before being tested more broadly in Alberta. Alberta Agriculture and Rural Development (ARD) were asked to lead a pilot project and assembled the Southeast Alberta Conservation Offset Pilot Team.





Southeast Alberta Conservation Offset Pilot

The pilot team agreed upon the following objectives for the development and testing of several aspects related to voluntary conservation offsets for new industrial developments on native prairie habitat, including:

1. A workable approach to quantify new industrial site offset requirements;
2. Develop an approach to target offset habitat project development on privately owned agricultural lands with the greatest benefit for biodiversity and species at risk;
3. Develop an open price discovery approach to determine agricultural landowner costs; and
4. The role for a third party to facilitate habitat development and associated conservation offset obligations (including contracts, verification requirements and monitoring).

This pilot will encourage voluntary participation by all industry players to offset new development activity on native prairie landscapes within the Dry-Mixedgrass Natural Sub-region in the South Saskatchewan Regional Planning area (see attached map) (excluding parks and federal lands). Native prairie landscapes in this region are predominantly dry-mixedgrass prairie with inclusions of moist-mixedgrass prairie at higher elevations, especially surrounding the Cypress Hills.

The initial opportunity for voluntary agricultural offset will focus on conversion of privately owned cropland to a planned, and best available, native prairie species mixture for a minimum 10 year contract period. Following successful establishment, the offset site may be sustainably grazed. Offset selection will involve prioritization based on criteria related to habitat enhancement and species at risk through an offset suitability index developed as part of the pilot.

Who's involved:

Facilitation and technical support is being provided by ARD in cooperation with Environment and Sustainable Resource Development (ESRD), Alberta Conservation Association (ACA), Alberta Innovates Technology Futures (AITF), University of Calgary (U of C), University of Alberta (U of A) and LandWise Inc. ACA staff will play an important third-party role linking industry offset buyers with landowner offset providers, including requirements related to planning, contracting, verification and monitoring. Expertise, research and evaluation are being provided through LandWise Inc., U of C, U of A, AITF and Pilot Team Members. Industry developers who have provided input to metric development and may voluntarily purchase offsets. Agricultural landowners who have provided input and may voluntarily provide offsets through a contract with a third party.

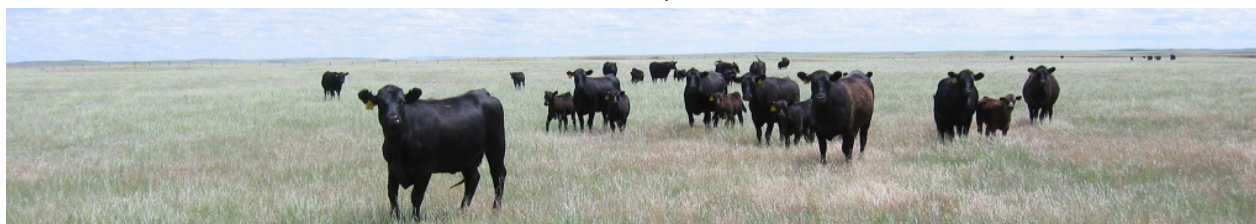
For more information

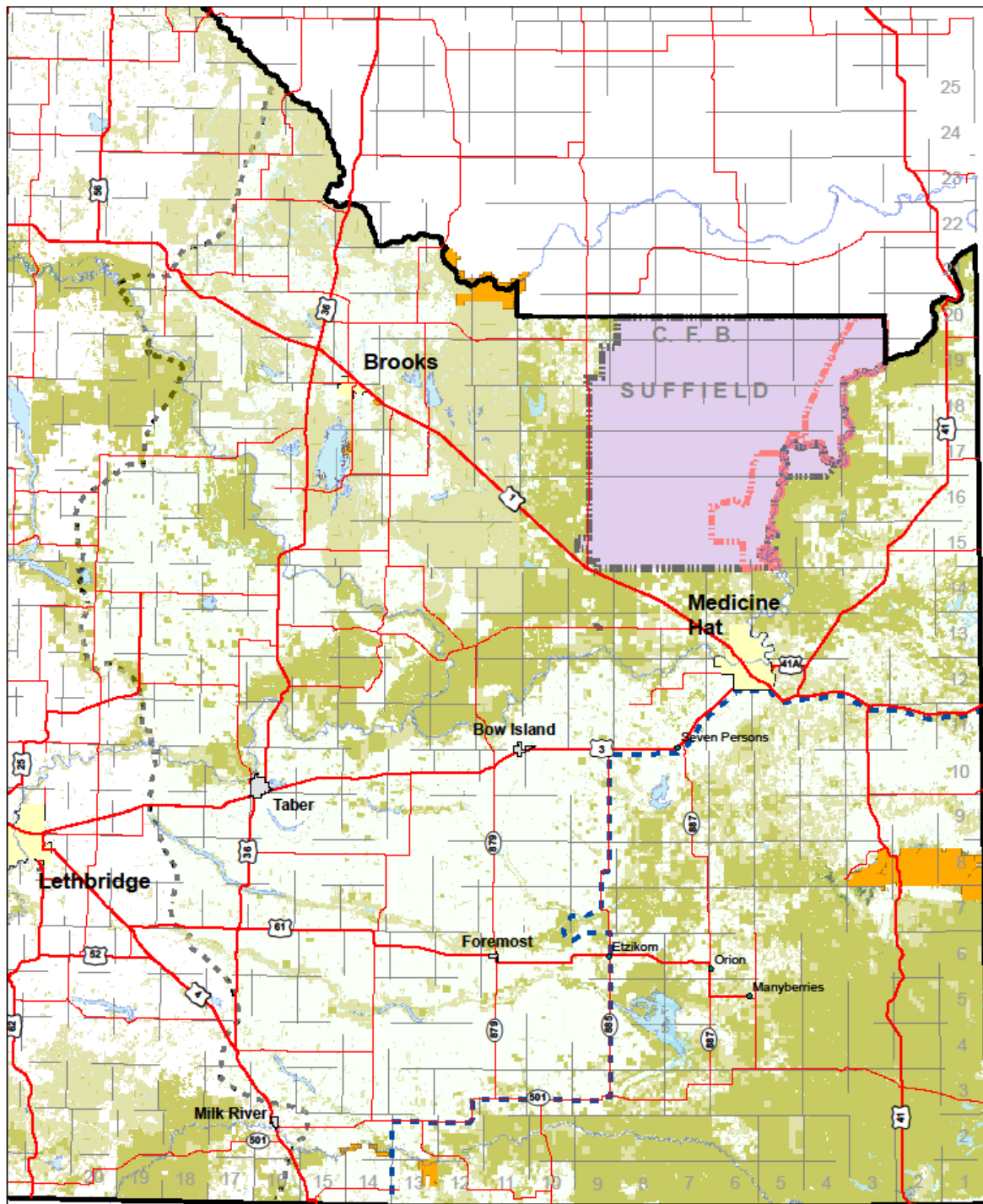
Karen Raven

Agriculture Land Use Specialist, ARD, Edmonton

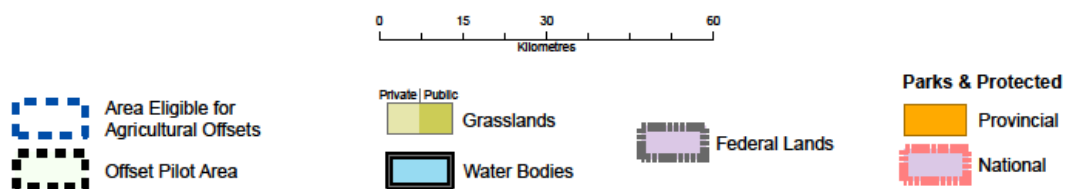
Phone: 780-638-4145 Email: karen.raven@gov.ab.ca

Photo credits: Barry Adams (ESRD), Kristen Rumbolt-Miller (Multisar Staff)





South East Alberta Conservation Offset Pilot



Base map data supplied by Spatial Data Warehouse Ltd.
 Landcover supplied by Agriculture and Agri-Food Canada, 2008.
 Map produced by Resource Information Unit, Prairies Area, January 2013.