Buying a Better Environment?

Market-Based Instruments & the *Alberta Land Stewardship Act*

Volume 4: Stewardship Units & the Exchange under the Alberta Land Stewardship Act

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The Environmental Law Centre (Alberta) Society

The Environmental Law Centre (ELC) believes that law is the most powerful tool to protect the environment. Since it was founded in 1982, the ELC has been and continues to be Alberta's only registered charity dedicated to providing credible, comprehensive and objective legal information regarding natural resources, energy and environmental law, policy and regulation in the Province of Alberta. The ELC's mission is to educate and champion for strong laws and rights so all Albertans can enjoy clean water, clean air and a healthy environment.

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Executive Summary

The Environmental Law Centre (ELC) has undertaken this project to review the market based instruments (MBIs) that are enabled by the *Alberta Land Stewardship Act (ALSA)*. Our goal in this project is to encourage the use of MBIs in a way that benefits the environment and to identify what regulations or other legal changes are necessary to do so.

The results of this project are published as a report in four volumes:

- Volume 1: An Introduction to Market-Based Instruments & the *Alberta Land Stewardship Act*
- Volume 2: Transfer of Development Credits under the *Alberta Land Stewardship Act*
- Volume 3: Conservation Offsets under the *Alberta Land Stewardship Act*
- Volume 4: Stewardship Units & the Exchange under the *Alberta Land Stewardship Act*

This particular volume looks in detail at Stewardship Units and the Exchange. Volume 1 of this report proposes and describes criteria for assessing MBIs under *ALSA* and this volume applies these criteria to Stewardship Units and the Exchange.

This report defines MBIs as a form of regulation albeit different from conventional command and control regulation. As generally believed, *ALSA* has significant potential to advance use of MBIs. In *ALSA*, MBIs are placed within a comprehensive suite of conservation tools that include options for voluntary or coerced conservation and which make tools available for public and private lands. Because these conservation tools have similar purposes, this should allow them to work together such that the protective tools secure the conservation outcomes of the MBIs.

While *ALSA* provides a broad mandate to develop MBIs, this report focuses on those MBIs that are specifically provided for by *ALSA*. These are:

- **Transfer of Development Credits** (TDCs), a tool used primarily by municipalities to redirect future development.
- **Conservation Offsets** which involve actions to compensate for the ecological impacts of development.

- **Stewardship Units and the Exchange** which could be understood as credits and the trading platform that could help facilitate TDCs and offsets.

All of these specific *ALSA* tools can be considered true "market" instruments in that all involve buying, selling or trading between private parties rather than simply the provision of financial incentives for environmentally beneficial behaviour.

This report proposes and applies three major criteria for the assessment of MBIs under *ALSA*. These criteria are the need for:

- guiding environmental principles;
- sufficient resolution of property law issues; and
- a strong regulatory framework.

These criteria are applied both to the general scheme of *ALSA* and to the specific MBIs contemplated by *ALSA*. Upon analyzing the general scheme of *ALSA* in light of these criteria, several conclusions can be made:

- *ALSA* is significant for recognizing principles of sustainable development and cumulative effects management that are lacking in other provincial land and resource legislation.
- *ALSA*'s potential adverse effect on property rights is likely overstated. *ALSA* largely provides purpose for use of pre-existing regulatory authority and it may have some impact on the existing property rights regime by offering compensation for regulatory action and incentives for voluntary private conservation.
- *ALSA* provides multiple options to strengthen the regulatory framework for MBIs through regional plans or regulations of general application. Regional plans have more ability to overcome systemic barriers to MBI use created by the larger framework for regulation of land and natural resources, while regulations of general application are more suited where the need is for principles and rules of general application.

However, in other ways, *ALSA* is an imperfect platform for MBIs:

- *ALSA* does not ensure a principled approach to MBIs. Sustainable development and cumulative effects have proven hard to operationalize through regulatory decisions without more specific sub-principles. *ALSA* leaves need to rely on other legislation for principles of pollution prevention and polluter pay, and it continues trends of restrictive public participation and no precautionary principle under provincial legislation.
- *ALSA* does not provide a private conservation tool for public lands or recognize property interests that could protect private conservation against minerals activity.

ALSA also leaves uncertainty around compensation for regulatory restrictions on property interests or property values.

In addition, while designed to implement the *Land Use Framework* (*LUF*), *ALSA* does not fully address all the policy gaps identified in the LUF nor does it fully implement all the strategies proposed by the LUF. *ALSA* also fails to directly fill the policy gaps which with MBIs might help.

There are some universal considerations respecting the regulatory framework for MBIs under *ALSA*:

- The legal effect of *ALSA* depends almost entirely on future regulations or regional plans for which *ALSA* provides Cabinet with broad discretion and little substantive guidance.

- *ALSA* is not a platform for development approvals that would be conditional on conservation, so there is ongoing need for the other land and resource legislation.

- *ALSA* was not necessarily needed for the MBIs in question, as authority to establish simple TDCs likely existed under the *MGA* and authority to require offsets on regulatory approvals exists under multiple other provincial statutes. The main need from *ALSA* was (and remains) guidance for use of these tools.

- *ALSA* does not clearly require legal securement of conservation activities related to TDCs, offsets or the recognition of Stewardship Units.

To date, *ALSA* has been primarily used for its regional planning provisions. Several needs can be identified from that experience: clear objectives, regulatory limits on the impact of activities, coordination of multiple uses, stronger direction to regulators, legal protection of identified conservation areas, and more attention to administrative functions. These motherhood issues with *ALSA* may become even more important if *ALSA* is to regulate the implementation of MBIs in Alberta.

General Recommendations

1. Adopt the precautionary principle in any policies, regional plans or regulations that could provide direction on the use of MBIs, especially the biodiversity frameworks.

2. Formalize public and stakeholder participation in the development and implementation of MBIs.

3. Protect private conservation activity carried out in pursuit of public policy objectives from the impacts of minerals activity, beginning with Conservation Easements.

4. Clarify and require legal securement tools for all conservation activities related to MBIs.

5. Explore direct use of regional plans and Conservation Directives as means to designate and protect conservation areas associated with MBIs.

Stewardship Units and the Exchange Recommendations

Stewardship Units and the Exchange are the only *ALSA* tools that would definitely require new regulations to enable. They are also the tools aimed more at market enablement than specific conservation purposes. As with Conservation Offsets, the authority to recognize Stewardship Units and assign functions to the Exchange through regulations is broad and unguided. The mere concept of a stewardship unit as a form of tradeable credit should not raise many issues as *ALSA* clearly attempts to separate Stewardship Units from interests in land. The main challenges vary with the conjunctive type of MBI. For TDCs, there is merit in keeping development credits out of the stewardship unit scheme at the early stages given their local purposes. For Conservation Offsets, the threshold issue is credit recognition. This is an area where the carbon system has more precedential value and is already being followed by development of offset protocols in the wetlands system. Conservation Offsets also involve more demand for the regulated system to enable credit banking. However, there are conflicting views on desirable market complexity and the breadth of functions of the Exchange.

Accordingly, we recommend:

1. Recognition of Stewardship Units should begin with separate types for specific conservation offset programs and not for TDCs.

2. Any offset protocols intended to recognize Stewardship Units should be adopted into the regulations, and if the Conservation Offset is simple then consider having regulations simply prescribe where Stewardship Units are recognized.

3. Functions of the Exchange should begin with a simple credit registry and tracking system that serves transparency and accountability purposes.

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Introduction

ALSA provides extensive powers to make regulations on **Stewardship Units** and an **Exchange**. However, like much of *ALSA* it provides little guidance along with broad discretion on what these tools are and the context for their use. A Stewardship Unit can be understood as a "credit", that is, a tradeable commodity that is recognized where conservation or stewardship activities occur and that must be spent to allow development activities. The Exchange could be understood as the market infrastructure for use of Stewardship Units. These could be considered indirect or facilitative tools that *ALSA* makes potentially available for TDCs and Conservation Offsets. This is an area where economic analysis weights heavy and there are some law and policy issues that are beyond the main focus of environmental law.

Several publications collectively capture a large number of the most noted issues, options and recommendations relevant to a regulated offset system under *ALSA*:

- An exploration of offsets in the boreal region that actually predates *ALSA*; however, it expressly foresees the *LUF* and identifies offset issues that *ALSA* has not yet resolved (Boreal Offsets).[1]
- A proposal for a Conservation Offset Framework by the Alberta Conservation Association (ACA Offset Proposal).[2]
- An Alberta Innovates evaluation of AI Offset Options focused on forested public lands in Alberta (AI Offset Options Paper).[3]
- A Conservation Offset Guide for Albertans (Offset Guide).[4]

1 Simon Dyer et al, *Catching up: Conservation and Biodiversity Offsets in Alberta's Boreal Forest*, (Canada: Canadian Boreal Initiative, 2008), online: Pembina Institute <https://www.pembina.org/pub/1650>.
2 Chad Croft, Todd Zimmerling and Karl Zimmer, Conservation Offsets: A Working Framework for Alberta (2011) Alberta Conservation Association.
3 Alberta Land Use Secretariat, Experimental Economic Evaluation of Offset Options for Alberta: A Summary of Results and Policy Recommendations by Marian Weber et al (2011), online: Alberta Environment and Parks <https://www.landuse.alberta.ca/LandUse%20Documents/Experimental%20Evaluation%20of%20Offset%20Design%20Options%20Summary%20-%202011-11.pdf> [AI Offset Options].
4 David Poulton, "Biodiversity and Conservation Offsets: A Guide for Albertans" (2015) Canadian Institute of Resources Law Occasional Paper #48, online: University of Calgary <http://prism.ucalgary.ca/retrieve/44155/BiodiversityOP48x.pdf>[Offset Guide].

- A law and policy issues paper comparing multiple jurisdictions, that while targeted at Ontario, captures many of the same issues around offsets in Alberta (Offset Issues Paper).[5]

- A paper on opportunities for Conservation Offsets in Alberta that is not limited to *ALSA* (Offset Opportunities Paper).[6]

These documents are referenced frequently throughout this report.

Stewardship Units

A stewardship unit is "a unit created or authorized" under section 46 of *ALSA*.[7] Section 46 of *ALSA* is the main provision on regulations for Stewardship Units. To paraphrase, regulations may provide for matters including:[8]

- creation, holding, issuance, approval, verification, authentication, distribution, modification, suspension, extinguishment and management of Stewardship Units;

- managing Stewardship Units;

- delegating authority to a Minister, local government body or decision making authority respecting use of Stewardship Units;

- whether or not the *Securities Act* applies to Stewardship Units; and

- compatibility with similar schemes in other jurisdictions.

ALSA does not prohibit credit systems existing under other legislation. However, authority to create credits would have to be found under that legislation. Also, Stewardship Units for the purpose of *ALSA* cannot exist without regulations.

Some issues to consider with Stewardship Units include:

- property in Stewardship Units;

- use of Stewardship Units in TDCs and Conservation Offset programs under *ALSA*;

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5 Ontario Nature, Key Issues in Biodiversity Offset Law and Policy: A Comparison of Six Jurisdictions by David Poulton (2015), online: Ontario Nature <https://www.ontarionature.org/protect/habitat/PDFs/Key_Issues_In_Biodiversity_Offset_Law_and_Policy_A_Comparison_of_Six_Jurisdictions_Final.pdf>[Offset Issues].

6 Morris Seiferling, "Opportunities to Move Forward with Conservation Offsets in Alberta" (2015) Alberta Biodiversity Monitoring Institute Discussion Paper, online: Ecosystem Services Assessment <http://ecosystemservices.abmi.ca/wp-content/uploads/2014/10/Seiferling_2015_OpportunitiestoMoveForwardwithConservationOffsetsinAlberta.pdf> [Offset Opportunities].

7 *Alberta Land Stewardship Act*, SA 2009, c A-26.8, s 2(dd) [*ALSA*].

8 *Ibid* at s 46.

- types of Stewardship Units;
- credit recognition;
- timing of credits and liability for conservation outcomes;
- credit for early action;
- credit banking; and
- credit stacking.

All of these issues could be settled by regulations under *ALSA*.

Property in Stewardship Units

ALSA specifically provides that a stewardship unit "is not and may not be created as an interest in land".[9] This is the only direct prescription on Stewardship Units in *ALSA* and it indicates intention to create a form of personal property separate from the land where conservation or development activities occur. This separation of Stewardship Units from land interests has added importance for Conservation Offsets on public lands due to the limited ability of private parties to acquire or alter transfer property interests without government consent.

Despite this direction in *ALSA*, there is some lingering debate over whether or not Stewardship Units are interests in land.[10] Some uncertainty may flow from the fact that Stewardship Units could be recognized following legalistic activities that do create interests in land, such as Conservation Easements, a fee simple title purchase, a protective zoning designation registered on title, or the terms of a public lands disposition. However, Stewardship Units could also be recognized following activities that do not create interests in land such as restorations and reclamations. At the very least, it is impossible to create Stewardship Units by acquiring land interests without recognition under *ALSA* regulations. This may imply that Stewardship Units are recognized for conservation outcome rather than activity, which again has added importance to Conservation Offsets.

The larger property law issue with Stewardship Units may be incompatible land interests such as Conservation Easements and sub-surface mineral rights impacting the recognition and value of Stewardship Units. Another issue, as discussed in Volume 1, is that courts may be unfamiliar with new forms of environmental property rights created by legislation.

9 *Ibid* at s 46 (2).
10 See, for example, presentations and discussion records in Public Lands Workshop Summary.

Types of Stewardship Units

ALSA provides three sets of provisions on Stewardship Units in total. The general provisions allow regulations to set the types and classes of Stewardship Units. *ALSA* further provides additional provisions on Stewardship Units in the sections on TDCs and Conservation Offsets respectively. The issues created by these TDC and offset specific provisions are different. This is because Stewardship Units are unnecessary for TDCs whereas they might be a key feature of Conservation Offsets under *ALSA*. Furthermore, *ALSA* suggests that regulations could integrate multiple MBIs into a common market for credits.

Stewardship Units and TDCs

The general stewardship unit provisions allow regulations to establish the "types or classes" of Stewardship Units "including development credits that are the subject of a TDC Scheme".[11] Also, the TDC section of *ALSA* require TDC schemes to include

- the "attributes of Stewardship Units established by the TDC scheme" in accordance with *ALSA* regulations on Stewardship Units, and
- the conditions on which a stewardship unit may be realized or used by a title holder in a conservation area.

These standard requirements for TDCS can be altered by regulations. TDC regulations can provide for: Stewardship Units that may or may not be used in TDC schemes and the conditions on use. [12]

Conditions for use of Stewardship Units in TDC schemes can include but are not limited to: [13]

- The title holder enters into a conservation easement, consents to a historic resource designation or provides another form of conservation protection, any of which are satisfactory to the Stewardship Minister or municipal authority.
- TDC regulations can also provide for: managing the realization, sale assignment or disposition of Stewardship Units.

These TDC-specific provisions further state that they do not limit general powers to make regulations on Stewardship Units.

ALSA creates uncertainty around the relationship between Stewardship Units and TDCs that complicate municipal use of TDCs. The TDC provisions affirm that "stewardship unit" is a specific designation under *ALSA* regulations beyond the general concept of "TDC development credits". However, these provisions:

11 *ALSA*, *supra* note 7 at s 46.
12 *Ibid* at s 50.
13 *Ibid*.

- do not clarify that TDC schemes may exist without Stewardship Units;
- allow provincial regulations to unilaterally incorporate TDC credits into larger stewardship unit schemes;
- do not clearly extend the specific types of securement tools and the need for them to be satisfactory to the Stewardship Minister or the municipality to TDCS where Stewardship Units are not used; and.
- do not provide for administration of TDC credit systems where Stewardship Units are not used.

All of the above uncertainties around the relationship between Stewardship Units and TDCs can and should be resolved by TDC regulations under *ALSA*.

Stewardship Units and Conservation Offsets

ALSA allows conservation offset regulations to: "set a limit or restriction on the maximum effect of an activity" and "for that purpose may" [among other measures]:

- Specify a stewardship unit to counterbalance the effect of an activity, the period of time within which the stewardship unit must be used, and prohibit an activity without extinguishment of a stewardship unit.
- Establish anything as suitable as a stewardship unit to counterbalance an activity.
- Provide means of assigning a stewardship unit an attribute indicating its benefit against the effect of an activity.
- Establish a program to certify an activity as a stewardship unit.
- Provide for management, monitoring and enforcement of a stewardship unit.

Thus, the same regulations that specify the impacts requiring offsetting can also determine: how offsets are certified, how offsets are valued in terms of Stewardship Units produced, the number of Stewardship Units required to offset the impacts, and administrative functions to help ensure the conservation outcomes that are impliedly necessary for a stewardship unit.

Integrated markets

There are divergent views on the merits of integrating MBIs. Most support concerns Conservation Offsets. The opportunities paper proposes integrating different types of offsets

including carbon, wetlands and conservation.[14] The AI Offset Options Paper suggested that market integration would fit into the "long term" phase of offset system development. The ELC did not find formal recommendations favoring integration of TDCs or MBIs from other jurisdictions. *ALSA* allows regulations to enable integrated markets. However, it is equally enabling of narrow types or classes of Stewardship Units for use in specific offset or TDC programs. *ALSA* provides additional authority for regulations to exclude TDCs from producing Stewardship Units or from using Stewardship Units produced elsewhere.

Recognition of Stewardship Units

A threshold issue for recognition of Stewardship Units would be have to be attribution of conservation outcomes to a particular actor. This issue is largest with types of Conservation Offsets where the additionality will come from "positive management action". It exists least with TDCs requiring securement by title restriction as this can surely be attributed to the landowner.

The most common credit recognition concern shared between offsets and TDCs is how to convert ecological complexity to fungible units. The opportunities paper makes some motherhood recommendations that Stewardship Units be "general enough to be measurable and fungible" but still "reflect ecosystem objectives and values". [15]

It may be helpful to distinguish the need to identify what types of conservation outcomes warrant credits from the need to calculate the number of credits attributable to land parcels or conservation outcomes. The same distinction applies to identifying the type of development impacts requiring credits versus the way to calculate those credits.

The need to identify credit sources and uses is fairly universal but the calculation needs differ. A TDC could be as simple as a 1:1 density transfer to protect open space identified in a plan document. The ACA offset proposal is similar in proposing 1:1 offsets of like for like ecosites in the same sub region.

More complex offset models appear to attract some consensus on using existing indexes or indicators to determine credits. Multiple proposals suggest the possibility of using the ABMI ecological intactness index to define "Stewardship Units."[16] However, the AI Offset Options paper still notes debate over use of this index in the southern Alberta agricultural context characterized by fragmentation and threatened species.

Credit recognition that requires scientific metrics might best be left to guidance documents and protocols that can be incorporated (adopted) into regulations yet still changed periodically. This would combine flexibility and adaptability with regulatory certainty.

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14 Offset Opportunities, *supra* note 6.
15 *Ibid*.
16 *Ibid*; Karen Haugen-Kozyra, *Conservation Offsets in Southern Alberta – Advice on Implementation Based on Alberta's Carbon Offset Market-Based Instrument* (np: KHK Consulting and The Prasino Group, 2012) [Carbon Advice Model].

Offset Protocols

The carbon regime provides a precedent for the use of offset protocols that is already being followed for wetlands and potentially for Conservation Offsets. Some notable recommendations in favor of this precedent include the Carbon Model Advice, *infra*.[17]

Support for the carbon precedent relies on the use of protocols and other design elements of the *CCEMA*[18] regulatory system that enable markets by establishing what an offset is and how it can be used. Some of the strongest recommendations of this nature emphasize the particular importance of the "offset quantification protocol" which defines what qualifies of as an offset and how to account for the difference between baseline and project activities. [19]

The wetlands system has three separate protocols under development for the "design", "validation", and "verification" of offsets. The design protocol provides that not all wetland replacements will qualify as offsets and provides site selection criteria. It also provides that most credits will only be recognized after verification "until a value prediction tool is working" and suggests that even then credits for high value wetlands or high risk projects should only be recognized after verification anyway.

The conservation offset framework states that eligibility requirements that must be met for use of offsets towards regulatory requirements include: clear ownership, quantifiability, adherence to protocols, verification, and being counted only once.

ALSA can assist with all of the above. For protocols, *ALSA* allows adoption of standards and guidelines. Establishing ownership and tracking use would be functions of the Exchange. Verification and other attestations required by protocols could be done by the Exchange under *ALSA* however need not be.

Protocol challenges

One of the main challenges identified with the carbon system has been in ensuring that offsets are real. The July 2015 report of the Auditor General of Alberta included the *CCEMA* regime, as have past reports. It found lack of assurance that specific types of offsets were real. Accordingly, it found risks that facilities may not be meeting their compliance obligations and government will not achieve the emissions reductions that it expects from the program. The Auditor General's report also repeated a past concern about need for standards for approval of offset protocols. If protocols do not conform to the same standard then there is no level playing field for assessing offset projects or assurance that offsets are legitimate. Without a process to evaluate the adoption of offset practices, it is possible to allow regulated facilities to claim "commonly adopted activities" as offsets. These concerns speak to the need for additionality.

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17 *Ibid*.
18 *Climate Change and Emissions Management Act*, SA 2003, c C-16.7 [*CCEMA*], which provides the provincial carbon emissions regime.
19 Carbon Advice Model, *supra* note 16.

The Carbon Model Advice (which predates the Auditor General's Report) recognizes issues around verification of offsets in the carbon system that may provide lessons for other offset types.[20] Third party verification is what proves that the activities which led to the offset actually took place. The advice was for third party verifiers trained by government to assess Conservation Offsets according to verification criteria.[21]

The wetlands protocol system is currently facing similar challenges with reliance on environmental practitioners. Recognizing offsets depends on practitioners either attesting to or scrutinizing whether or not the offset projects are meeting a vague test of being on track to a healthy, functioning wetland. This includes reliance on a verifier with sufficient competence and independence from the offset producers, government and the development proponents. Identified concerns include lack of formal certification for wetland science or restoration practitioners, and inadequate training inside government to scrutinize assessments. The current expression of government intentions is to engage and/or rely on existing professional bodies as best positioned to assist. This matter of professional certification is largely beyond the scope of *ALSA*.

Liability for conservation outcomes, timing of credits and securement

Assigning liability is or should be a key function of credit systems. Some general issues are similar for TDCs and Conservation Offsets. Development proponents must be assured to receive credits to apply against their project and they will typically expect to be severed from future liability once they have purchased the credits. Credit producers may be freed of liability once they sell their credits. Liability assignment is typically resolved by transferring liability to a third party such as a land trust that holds the conservation easement.

There are some differences in timing issues between TDC and Conservation Offsets as TDCs usually give credit for land protection whereas Conservation Offsets require quantifiable conservation outcomes not just activities.

There are several imaginable legal and quasi legal liabilities. Examples include:

- Regulatory liability on buyers if the MBI is a compliance tool as with the carbon example to acquire performance credits, purchase offsets or pay fees to a fund under *CCEMA*.
- Possible regulatory liability on buyers that maintain liability for conservation outcomes after credit acquisition.
- Possible private law liability on buyers who maintain liability for conservation outcomes after credit acquisition.

20 *Ibid.*
21 *Ibid.*

- Regulatory system features including "use it or lose it" conditions on leases "all or nothing" conditions on development approvals creating concerns for developers unable to find credits.

- Regulatory liability on sellers and or producers as a result of securement by regulatory protection.

- Regulatory liability on sellers and or producers resulting from the regulatory baseline before and after the credit transfer.

- Property liabilities on sellers and or producers resulting from securement by restrictions on land title or statutory consents.

The best practice from a purely conservation perspective would be permanent securement by title restriction and harmonized regulatory protections in place prior to credit sale and have credit acquisition be a pre-requisite to development approval. This may raise feasibility and voluntariness concerns with the potential MBI.

ALSA regulations on credit timing and securement

Other *ALSA* tools might assist by working together. For example, a Conservation Directive and a Conservation Easement with similar terms would provide a regulatory environment to incent credit creation and a backstop for unexecuted agreements or undelivered outcomes, and options of public and private enforcement options. For the title holder, it could provide compensation for lost market value through one tool, funds for ongoing stewardship through the other, and protect conservation value from minerals activity.

More specific credit timing and securement questions to TDCs and Conservation Offsets (and wetland offsets) are discussed below.

TDCs: As discussed in Volume 2, the main timing issue is timing of legal securement of the sending area relative to the recognition ("production") and transferability of credits. If TDC credits are to be Stewardship Units then the same timing options and considerations exist. However, the timing required for eligibility as Stewardship Units should be clarified by the stewardship unit regulations rather than left to municipal bylaws.

Conservation Offsets: The main timing issue is that ecosystems and development activities usually have different timeframes. The maturation of ecosystem functions may take years; however, development impacts can occur very quickly. As discussed above, Conservation Offsets include "positive management actions" (usually restorations or reclamations) and this may be preferable to "averted loss" (simply protecting what exists).

There is a threshold question of when credits should be recognized relative to the undertaking of conservation activities that should be resolved in favor of requiring outcomes. An identified

issue from other jurisdictions is with "safe harbor provisions" in conservation agreements. These arrangements allow landowners to back out of commitments to undertake the offset implementation without incurring a penalty. If offset projects can be abandoned at the will of a landowner or other offset producer, then the development has been allowed to proceed without an effective offset. Such provisions create system administration challenges in addition to liability issues.[22]

A second issue is that developers will foreseeably want credits available faster than it takes for offset sites to ecologically mature. Some options to address temporary losses while offsets are maturing include:

- Increased mitigation ratios (discussed in Volume 3 under **Equivalency**).
- In lieu fees (discussed in Volume 3).
- Banking (discussed in this Volume).

A third question is when offsets must be in place relative to regulatory approvals. The ACA Proposal is that developers must have offsets in place prior to final regulatory approval. Once the offset is applied against the project then the developer is free of liability. The land trust would be responsible for ongoing management. It is important to recognize this is part of a proposal for terrestrial offsets in the form of averted loss and for which Conservation Easements are mandatory. The offset registration aspects of this proposal are discussed under the section on the Exchange below.

The conservation offset framework states that offsets prior to impact are desired; however, programs may allow a lag time between impacts and offset. However, it does not

- prescribe allowable terms of conservation agreements,
- state how to rectify temporary losses (apart from allowing for mitigation ratios, in-lieu fees and banking),
- dictate timing of offsets relative to development approvals.

ALSA leaves timing matters around Conservation Offsets very open.

Wetlands offsets create a challenge in assigning liability due to overlapping public and private property interests. The issue is that the province owns the beds and shores of all permanent, naturally occurring water bodies under the *Public Lands Act*, and all the water in these bodies under the *Water Act*. Restoring an existing natural wetland could cause a transfer of land ownership to the province. The wetland may have been illegally drained to start with, which resembles theft of public land and resources. If the wetland offset is temporary, then there is potential for future drainage prohibited by regulations but allowed by the private conservation

22 Offset Issues, *supra* note 5.

agreement. As previously discussed, the ALI Wetlands Project found the vast majority of drained wetlands in the southern Alberta private land context were illegally drained.

The wetland system requires record creation and reporting of compensation wetlands to the province. This is followed by a provincial assessment and decision on the ownership aspect of the site which could take some time and for which the process is unclear and challenged by capacity. The province's intention at one time was to not waive liability for failed restorations held by the restoration agent holding the restoration agreement.

Clarity is required around:

- Liability for failed restorations as between the land developer, the landowner, the restoration agent [if this system continues] and the province.
- Transparency and efficiency of the provincial review system for property ownership.
- Regulatory lability of landowners resulting from the restoration wetland.
- Monitoring and enforcement authorities as between the province and the conservation agreement holders.

ALSA Stewardship Units would help most in assigning certainty of liability for failed restorations. The other issues can be resolved outside of *ALSA*; however, should be resolved before any inclusion of wetland offsets in a stewardship unit and Exchange system under *ALSA*.

Credit for early action

Credit for early action means credit for conservation activities that occurred before the system that recognizes credits comes into effect. "Early action" is distinguishable from having a regulated offset system giving credit to voluntary offsets carried out after the system comes in. *ALSA* allows for the definition of "counterbalance" to include voluntary activities; however it does not specify timing of these activities relative to the regulations and presumably anything might be recognized.

Generally, the law is unfavorable to early action without some official commitment. There is a presumption that new regulations do not apply retroactively unless expressly stated and this would include regulations recognizing offset credits. Also, the common law typically only upholds agreements involving consideration (i.e. payment or other formal recognition) and will not recognize compensation claims for past actions that were purely voluntary.

In Alberta, the context for considering early action has historically concerned voluntary Conservation Offsets, industry pilot projects and anticipation of future offset requirements in the boreal/oil sands region as discussed above. Some policy concerns include the merits of

rewarding industry leaders over laggards, and the mandate provided by *ALSA* to support pilot projects (though not all such pilots are mandated by *ALSA* and recognized in regional plans).

Much attention has been directed at the 2010 Confirmation Letter from the Minister of Energy to the Alberta Conservation Association indicating that voluntary offsets will be recognized under new regulations if they meet criteria including:

- Conservation Easements on land title.
- A 1:1 ratio of development to conservation lands.
- Location of conservation and developed lands in the same natural region or sub region.
- Wetlands offsets consistent with Wetlands Policy "when it is released".

The confirmation letter resembles the ACA proposal produced the following year and the voluntary offsets at the time. The offset framework is much broader in allowing offsets on public land, softer securement tools, and a flexible approach to equivalency. Thus credit for early action might be sought for a broader range of activities.

The offset framework provides that early action meeting criteria "may" be accepted. A submission form affirms that there is no guarantee of acceptance and that such credits do not replace "existing statutory requirements". [23] The evidence required of applicants resembles factors to consideration more than hard criteria for decision making. To paraphrase, this evidence includes:

- The securement tool, which may be an easement, caveat, contract, ownership, disposition or notation,
- Threats from land uses of the site or the adjacent area,
- Relevance of the area to provincial policy or plan objectives,
- Additionality to what is required by law,
- Stakeholder consultations,
- Environmental benefits and scientific criteria.

In many ways, the early action submission form is the closest indication of what might be recognized as a stewardship unit.

23 Government of Alberta, Early Action Project Review Submission Form (2016).

Banking

Some benefits of banking include:

- Response to developer demand for credits in advance of conservation outcomes.
- Increases options to manage the supply of credits where the development industries are not set up for conservation activities or credit administration.

Banking can be questioned for incenting uncoordinated, inequivalent or non-proximate conservation actions. However, banks could be tied to specific program objectives, geographic areas and narrow credit types. The Offset Opportunities Paper provides a more broadly applicable comment that "conservation banks are therefore long-term investments, which require a stable and certain legal and policy environment".[24]

TDCs: Banks are not required for TDCs. However, they may have value depending on the specific nature of the TDC program. The Beaver Hills example suggests interest and merits in the interjurisdictional TDC context.[25] There is also some thought that focusing on banking could keep TDC initiatives going when there is less demand for development credits. However, there is also some caution about developers snapping up credits without limits on acquisition or development potential.

ALSA facilitates TDC Banking with multiple options to recognize credits and provide the market infrastructure under provincial regulations:

- The stewardship unit and Exchange regulations could recognize credits and market infrastructure. Regulations would need to cover specific TDC programs and get updated with shifts in participants.
- TDC regulations could affirm municipal authority over TDC development credits that are not Stewardship Units and prescribe credit administration responsibilities.
- *ALSA* is not required for TDC banking.
- Municipalities could act as banks with or without *ALSA*.
- TDC participants could begin self-banking credits recognized under municipal instruments.

Some concerns that *ALSA* has not resolved include:

- Municipal capacity to run banks.
- The durability and dependability of banks as credit sources.

24 Offset Opportunities, *supra* note 6 at 10.
25 See Volume 2 of this report for discussion of this and other TDC schemes.

- The belief that banks are necessary.
- New uncertainty around relationship between Stewardship Units and TDCs.

Many of these uncertainties can be resolved by TDC regulations under *ALSA* that combine clarification of existing provisions with additional direction on development credit systems.

Conservation Offsets: Banks are not required for simple Conservation Offsets. However, there are some assumptions and consensus on inclusion of banking in a regulated conservation offset system. Banking and regulated offsets appeared part and parcel in the Boreal Offsets paper prior to *ALSA*. Even the ACA Proposal which is criticized for aversion to a complex Exchange system would effectively allow proponent self-banking on the provincial registry. Offsets acquired by developers prior to being needed for regulatory approvals would be registered as "inventory". Once a development is identified for which the offset is needed then the offset is "retired" from the registry and the development project it was used for is identified in the registry. Proponents who do not need their inventory could sell it to other proponents.

The conservation offset framework makes self-banking subject to approval. Decisions to accept banking rest with the specific offset program. This guidance if applied should help coordinate conservation activity, identify liability considerations and make ongoing stewardship a more likely result of offset programs.

Credit Stacking

Credit stacking involves recognizing multiple types of credits from the same piece of land or conservation project. The pro is recognition and reward for a greater range of ecosystem value which may incent more comprehensive conservation actions. The con is risk for double counting positive outcomes and thereby permitting development out of proportion to actual offset measures. The ELC is not exploring this issue in depth and notes that it is considered to be a challenging question that might have no one right answer.

The Alberta Conservation Offset Framework and Discussion Paper leading to it suggest that the province will take a liberal approach to credit stacking. *ALSA* regulations could definitely enable credit stacking. Regulations can recognize multiple types and classes of Stewardship Units and to define the conditions for recognition of units.

For example, a TDC for a municipal goal could incent creation of a conservation easement and the land could then be used for wetland restoration that serves provincial objectives. *ALSA* could recognize different credits from both MBIs. It would not be necessary to "integrate" the two MBIs into a common stewardship unit scheme. Conversely, if a landowner creates an easement for a municipal TDC then also gets offset credit for an averted loss that is closer to double counting. Stacking TDC and offset credits could be more appropriate than allowing multiple types of offset credits such as carbon, wetlands and habitat from the same

conservation project. A firm approach to additionality will also help maintain integrity where offset credits can be stacked.

The Exchange

ALSA regulations may provide for establishment of the Exchange, naming the Exchange and the conferment of authority to the Exchange. *ALSA* itself provides more clarity on the Exchange than it does on Stewardship Units.

The largest discretion in "who" is the Exchange. The **Exchange** is the person or government department designated as the Exchange by regulation.[26] The Exchange could be a non-government organization, a private corporation or even an individual. Municipalities, land trusts or other "qualified organizations" for the purpose of holding Conservation Easements could be delegated the Exchange functions; however, *ALSA* does not expressly consider this. Likewise the Alberta Emission Offset Registry, the Alberta Emission Performance Credit Registry or both could be delegated Exchange functions by virtue of their legal status.

ALSA also provides discretion in how the Exchange authority is delegated. Authority may delegate by regulation, by agreement, by a combination of regulation and agreements or by a regional plan. Consequently the Exchange could be tailored to local, regional or provincial scale programs, or even to the programs of the entity becoming the Exchange. However, *ALSA* does not clearly contemplate multiple Exchanges or delegated authorities and this could be warranted if the Exchange is scoped narrowly.

Functions of the Exchange are more narrowly prescribed. Regulations or agreements or both may confer authority to:

- to create, hold, issue, approve, verify, authenticate, distribute, modify, suspend or extinguish all or part of a stewardship unit; and
- to establish, administer or manage one or more programs, schemes or systems to register, record and administer Stewardship Units.

The credit-related functions could be categorized as:

- "Pre-credit" functions such as creation authentication and verification of credits.
- Credit administration or registry functions that track credits throughout their life and extinguish them when they are against developments.
- Directly holding and distributing credits, potentially making the Exchange a credit trading platform, banker, broker or supplier of credits.

26 *ALSA*, *supra* note 7 at s 2(k).

ALSA does not provide for the Exchange to conduct on-the-ground monitoring and enforcement of conservation sites. However, this could be an incidental function of agencies or organizations that are delegated authority to act as the Exchange.

ALSA impliedly contemplates transparency and accountability functions. For market players this would be provided by the registry. For transparency and accountability to the public, regulations may provide for:

- reporting by the Exchange, and
- requiring the Exchange to provide education and information about the services it provides.

The strongest points of consensus regarding Exchanges for TDCs and conservation offset all relate to transparency and accountability needed for a functioning market and for public confidence.

One need is for credit registration, tracking and record keeping responsibilities. Basic record keeping should include:

- the issuance, transfer, use and extinguishments of credits, and
- records of the related conservation activity including the type of securement, who holds the securement tool and how it is monitored or enforced.

The AI Offset Options Paper emphasizes the imperative of registries to a functioning offset market as they create the "paper trail" by tracking credits from creation to extinguishment. Registries can also help prevent double use of credits. The Alberta Emissions Offset Registry is the most often cited precedent for the contemplated registry and some may see a link between the two. As well, the provision of public information services and reporting to government should be included under this branch of transparency and accountability.

For TDCs the strongest concerns as discussed above include potential administrative burden on municipalities and desire for flexibility in the assignment of administrative functions. For Conservation Offsets, there are divergent views on the scope of functions that the Exchange should provide. [27]

The Carbon Model Advice expresses concern with how *ALSA* positions the Exchange to have extensive functions as credit aggregator, verifier, registry and trading platform.[28] The argument is that this would put the responsible agency in a costly and liability-laden position; something that was avoided in the carbon offset market system and is in contradiction to how other commodities are generated in the agricultural sector. The agricultural model is characterized by a chain of grower, processor, aggregation, distribution and retail sales which

27 AI Offset Options, *supra* note 3; Offset Opportunities, *supra* note 6; Carbon Advice Model, *supra* note 16.
28 *Ibid*.

helps spread liability and cost burdens. The argument is that "carbon is no different, nor should Conservation Offsets". [29]

While all registries can help connect buyers and sellers there is divergence on need for an actual "exchange" function. The ACA offsets proposal and the AI Offset Options diverge on need for a trading platform, despite both these sources having an oil sands context.

The ACA proposes that offsets be identified by development proponents and created by direct negotiations with land trusts. This model would still use a registry to track offset inventory and extinguishment for specific developments as discussed in the section on "credit banking".

The AI Offset Options favors a "centralized exchange and clearinghouse" with electronic trading platforms. It proposes that the Exchange could act as the counter-party to buyers and sellers so as to facilitate multiparty transactions. It argues that offset markets different from ordinary commodity markets in the numerous costs to participating and that an Exchange provides a range of services to address these needs. [30] It also notes that development proponents face an "all or nothing" context of conditions on regulatory approvals, may need multiple types of offsets equivalent to a range of project impacts, and risk not finding suitable offsets or increases in offset prices over time. Overall, the complexity related to an increased level of offset activity in Alberta would favor the efficiency provided by a trading platform as opposed to bilateral negotiations between individual buyers and sellers. However, it also recognizes resistance of NGOs to a centralized Exchange as a barrier in Alberta.

Offset opportunities makes a brief recommendation for a centralized conservation exchange that would act as a banking system and clearinghouse so as to incent offsets in advance of development.[31]

The conservation offset framework suggests or anticipates future design elements of market infrastructure such as:

- Common infrastructure for registering and tracking offsets.
- Link to the emissions offset registry.
- A clearinghouse to coordinate multiple buyers and sellers.

However, it does not positively state that these features should be established; the means by which authority should be delegated as between regulations, agreements or regional plans; or the entity to become the Exchange.

29 *Ibid*.
30 AI Offset Options, *supra* note 3.
31 Offset Opportunities, *supra* note 6.

Synthesis of Findings and Conclusions

Using our three criteria for assessment, this section of the report synthesizes findings on *ALSA*'s general scheme, TDCs, Conservation Offsets, Stewardship Units and the Exchange. It considers:

- How *ALSA* has enabled or disabled MBIs.
- The extent to which *ALSA* is necessary or unnecessary for MBIs.
- The similarity or difference in issues between the types of MBIs provided by *ALSA.*
- Similarity or difference between multiple examples of the same type of MBI.

General scheme of *ALSA*

ALSA offers high potential to subordinate markets to desired policy outcomes, and thus offers a key hallmark of MBIs as a form of regulation. The suite of Conservation and Stewardship Tools-- including the MBIs and the securement tools—are well aligned with the LUF and can foreseeably work together. The specific MBIs – TDCs, Conservation Offsets, Stewardship Units and the Exchange – are fairly sound choices to pursue from a market perspective or a conservation perspective. TDCs and Conservation Offsets foreseeably involve buying and selling rather than mere provision of incentives, while Stewardship Units and the Exchange could facilitate these markets. *ALSA* is especially important for mandating MBIs aimed at the conservation of land and biodiversity. *EPEA* and *CCEMA* enable MBIs in the context of pollution and emissions management. However, the land and natural resource statutes lack MBI provisions, and mere authority to limit impacts and impose conditions is not driving MBIs without policy guidance.

On the other hand, *ALSA* is an unconventional and less ideal platform for MBIs than might be assumed. Looking at the broader legislative framework in which MBIs must exist, *ALSA* is not the most accessible legislation for decision makers nor can it implement MBIs by itself. *ALSA* is separate from the subject-specific statutes that impose regulatory limits on activities and which remain necessary for use as approvals platforms. Despite mandating pilot projects, *ALSA* does not favor the organic development of MBIs so much as the imposition of constructed MBIs.

Further, *ALSA* did not fully implement the *LUF*. *ALSA* does not expressly include all proposed strategies, most notably efficient use of land and footprint reduction. Nor does *ALSA* directly fill the policy gaps identified by the *LUF* around matters including coordination of surface and minerals activity, agricultural land fragmentation, and the under-representation of ecological regions in the protected area system. *ALSA*'s legal impact depends heavily on future regulations and regional plans for which there is broad discretion, few substantive criteria, and little accountability for outcomes. The *ALSA* model further depends on strong political

leadership, a Land Use Commissioner and Secretariat with notable independence, and widespread capacity for implementation.

Guiding environmental principles

The principles adopted by *ALSA* – sustainable development and cumulative effects – fill an important gap in provincial land and resource legislation. If developed according to best practices, the *ALSA* MBIs could reflect most of the more specific sub-principles such as pollution prevention, polluter pay and the precautionary principle. The principles articulated by the LUF and *ALSA* are already reflected in the plans of multiple municipalities with interest in TDCs and could be considered a driver of Conservation Offsets in Alberta.

However, sustainable development and cumulative effects management are both notably hard principles to operationalize. *ALSA* leaves need for the adoption of more specific sub-principles and grants of authority in regulations, regional plans or other legislation. There is acute need to recognize the precautionary principle and to resolve systemic issues of public participation in Alberta.

Issues of principle differ between TDCS and Conservation Offsets. The principles of TDCs are fairly settled and well aligned with established environmental principles. Municipal plans can further fill some gaps in principle in the provincial regime. Principles of Conservation Offsets are highly specialized, less established in the legal regime, and their workability in Alberta remains unsettled despite the recent development of conservation offset policy. There is a need to adopt principles into provincial regulations yet caution against encoding the current policy direction in regulations.

Sufficient Resolution of Property Law Issues

Property law issues are not the leading concern with MBIs under *ALSA*, although they exist. Conservation Easements are especially valuable as they answer need for voluntary conservation tools that provide a hybrid of a statutorily-enabled designation and a private land interest. Stewardship Units and municipally created development credits answer the need for transferable personal property separate from the land itself. The *ALSA* MBIs should not require creating new private property rights in ecosystem services except for perhaps the specific situation of using public lands as the site of Conservation Offsets. Concerning restrictions on property rights and compensation for restrictions, *ALSA* is at least neutral and probably generous towards property rights as compared to the general legal regime.

However, *ALSA* has not resolved systemic property law issues that create barriers to MBIs. Risk of damage to conservation value by minerals activity is a widespread concern. This concern applies wherever private conservation occurs with or without MBIs, although it is potentially strongest with Conservation Offsets. The options are basically to strengthen private property rights on private and public lands, or to provide regulatory protections. A

government response is needed in any event where private conservation supports public policy objectives.

ALSA leaves multiple debates over need for more conservation tools. One is demands for alternatives to Conservation Easements on private lands. Concerning MBIs, this demand is mostly relevant to Conservation Offsets with limited goals or duration. Alternative agreements are already in use which suggests that legislative enablement of new tools may not be necessary, and there is disagreement on the merits of such tools.

Another demand is for tools to implement Conservation Offsets on public lands. This issue is widely recognized and should be resolved prior to any regulatory enablement or recognition of credit for offsets on public lands. The options canvased above include those under *ALSA* and other legislation. The *ALSA* options are less efficient; however, among the strongest and most flexible.

ALSA leaves multiple questions around compensation that merit further exploration. Again these issues mostly concerns Conservation Offsets rather than TDCs. One issue is remedies for harm to conservation sites. Neither the current proposals nor the current policy direction would deal with irreparable harm. The other issue is compensation for restrictions on resource rights resulting from regulatory protection of Conservation Offsets. *ALSA* may not change the baseline however the terms of dispositions and agreements can.

Strong regulatory framework

The regulatory framework for MBIs is where *ALSA* offers the most potential and creates the most issues. A combination of regional plans and regulations under *ALSA* can do possibly everything needed from the regulatory framework: clarify rules and applicability, set goals, set limits on impacts of activities, affirm authority to use the tools, provide guidance for regulatory approvals, require securement of conservation sites, align conflicting policies, and provide administrative structures.

Concerning administration, *ALSA* implies MBI-related functions for the Land Use Secretariat, the Exchange, qualified organizations, and further delegated authorities to pursue objectives of regional plans. *ALSA* creates no barriers to administrative responsibilities falling by default to municipalities in the case of TDCs or regulators in the case of offsets. While how to divide responsibilities remains an issue, *ALSA* definitely contemplates options as compared to other legislation. The larger issues around division of functions concern Conservation Offsets rather than TDCs.

TDCs and Conservation Offsets under *ALSA* share several high level challenges:

- *ALSA* was unnecessary for legal authority to use these MBIs. Municipalities likely had implied authority to establish simple TDCs under the *MGA*. Provincial regulators definitely have authority to impose offset conditions on activities and this already

occurs with wetlands. The main need for MBI legislation was, and still is, to provide guidance for use of existing authority.

- Anticipation of *ALSA* regulations or regional plans has had some cooling effect on the ground-up pursuit of MBIs. This is clearest with TDCs as *ALSA* has legally occupied the field and creates compliance concerns. Similar concerns exist with Conservation Offsets in the demand for "credit for early action", and legitimate reticence by government to offer certain credit before establishing what qualifies.

- Further regulations or regional plans under *ALSA* may not be necessary. *ALSA* allows TDCs to be established without any further provincial regulations, even though lack of regulations is a practical barrier to use of the tool by municipalities. Likewise, a regulated Conservation Offsets system under which offsets are required as a routine matter can be established with guidance from other policies.

- There is need to require securement for all TDCs and Conservation Offsets. *ALSA* provides more clarity around the appropriate securement tools for TDCs; however it does not clearly require their use. Potential non-securement or inadequate securement of Conservation Offsets should be considered a serious issue unless dealt with by regulations.

The main need for *ALSA* regulations is to provide for Stewardship Units and the Exchange. Even these tools speak mostly to market efficiency in a narrow range of contexts. The recognition of Stewardship Units and the functions of the Exchange are some of the more unsettled issues in this report.

No limits on the impact of land use activities in Alberta should be considered a pervasive barrier to the use of TDCs, Conservation Offsets, and other MBIs possible under *ALSA*. There is inadequate regulatory pressure on the development industries to purchase conservation. There are inadequate incentives for private parties to pursue conservation for profit because there are few buyers and because development opportunities of their own are foreseeable.

There is uncertainty regarding the link between the MBIs and regional planning. Regional plans and regulations could do many of the exact same things needed to enable these tools due to the regulatory status of regional plans. Neither TDCs nor Conservation Offsets need to be used to implement regional plans; however, either of them could and there is good argument for regional plans to guide use of these tools. Furthermore, only regional plans under *ALSA* can clearly respond to cumulative effects. If MBIs are to be used to respond to cumulative effects, then there is a tie to regional planning.

TDCs and Conservation Offsets also display different issues that warrant very different regulatory responses:

- TDCs show fair adherence to environmental principles and few issues of property law. The main issue with the regulatory framework for TDCs under *ALSA* is that it *ALSA* is

already highly prescriptive of substantive and procedural requirements. The need for regulations is to affirm municipal authority, clarify the substantive and procedural requirements of *ALSA*, and provide for local administration of credit systems outside of Stewardship Units and the Exchange. This is best done through regulations of general application rather than regional plans.

- Conservation Offsets show multiple unsettled questions of principle and property law concerning public land and resources. The main issue with the regulatory framework for Conservation Offsets under *ALSA* is that it could allow practically anything. The need for regulations is to restrict or settle the range of possibilities contemplated by *ALSA* and the non-legislated conservation offset framework. The pending instruments should provide program goals, geographic scope, and guidance for the application of offset principles that are not amenable to general prescriptions. This may best be done through regional plans that provide for specific conservation offset programs rather than through regulations of general application.

Pursuit of TDCs and Conservation Offsets has been mostly separate to date, with Stewardship Units and the Exchange being linked more closely to Conservation Offsets. This accurately reflects the general scheme of *ALSA* and should continue in the early rounds of regulation making.

Recommendations

Regional plans, regulations and further action under *ALSA* are definitely needed to advance the MBIs contemplated by *ALSA*. While not all of these actions are a technical legal necessity, they are all contemplated by the provisions of *ALSA* and several have already been anticipated or recommended.

General Recommendations

1. Adopt the precautionary principle in any new plans, policies or regulations concerning use of MBIs in Alberta. The biodiversity frameworks are an ideal candidate for this inclusion.

2. Formalize a public and stakeholder participation in the development and oversight of all MBIs.

3. Protect private conservation activities from minerals activity. Begin by protecting Conservation Easements that fit the objectives of provincial plans or policies.

4. Regulations should require securement of all conservation activities related to MBIs. Securement should include an instrument registered on land titles or Crown land records wherever possible.

5. Explore the direct use of regional plans and Conservation Directives to designate and protect conservation areas associated with the MBIs under *ALSA.*

Stewardship Units and the Exchange

1. Recognition of Stewardship Units should begin with units for specific types of Conservation Offsets for use only in the same offset program.

2. If offset protocols are used to recognize Stewardship Units then these protocols should be adopted into regulations. This may be preferable to having regulations prescribe the technical requirements for Stewardship Units.

3. The primary function of the Exchange should be a simple registry focused on cradle to grave tracking of credits. Allow use of the Exchange for self-banking and third party banking of credits tied to specific offset programs or regional objectives. Make any additional functions subject to future review and regulatory reforms.