



## **Whose rights and who's right: Valuing ecosystem services in Alberta; Land stewardship and economic tradeoffs**

In summary, our renewed Mission Statement reflects the overriding goal:  
"To be a responsible voice within Alberta, for the preservation of agricultural land".

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**A formal request is extended to all the members of Action for Agriculture to participate in each and any of the committees, whether you are a director or not. In addition, an invitation for new board members is open to all interested parties.**

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## Message from the Board

Welcome to the New Year. There will be a number of new challenges in this coming year and the Board of Action for Agriculture will continue to address these challenges in the interests of our membership.

**The first challenge** is addressing our land owner's interests. The Provincial Government has not done a good job of communicating to the public the intent and need for a number of pieces of legislation dealing with land and how these bills impact property rights and land owners interests. Bills 19, 24, 26, 46 and 50 all deal with different aspects of developing, harvesting and mining our natural resources for domestic and export consumption. While Bills 36 (Alberta Land Stewardship Act or ALSA, OC October 2009) and Bill 51 (Water Act) deal with the management and support of conservation of both land and water, their spirit and intent is to preserve the natural Capital we have. Bill 36, in particular is enabling legislation which is entirely different from the previous named Bills. However land owners are confused and do not understand the differences because it has not been explained to them. We believe that the majority of land owners are just asking to be treated fairly.

**The second challenge** is to promote and support the development of a valuation system for the ecological goods and services that the land provides. Land owners must be able to harness this revenue stream, which up to this point they have been providing to the public-at-large for free. It is imperative that this valuation system be established to maintain the stewardship and integrity of the land. The land does support us all. Two hundred years ago there were approximately 1 billion people on

earth. Today there are 6.2 billion and we are projected to be over 9 billion by 2050. The earth is not getting any bigger, it is a finite resource and we must manage our earth resource wisely. According to a recent book, titled "The Long Emergency", written by James Howard Kunstler, the age of fossil fuels is about to end and at the world's present rate of consumption of oil the world only has approximately thirty-seven years of oil left. No politician wants to tell voters that the American Dream has been cancelled for a lack of energy resources. This is why it is so important to get a value on what we have, an evaluation on our ecological goods and services.

**The third challenge** is "the market" or "the free market" or "let the market decide". The whole issue of letting the market decide would be pure chaos. Today, with our complex societies it seems some level of guidance is required even in the market place. We need to look back at our financial institutions. During the last 2 to 3 years there has been close to 500 Bank failures in the U.S. with the accompanying suffering by depositors. The U.S. Banking system could be considered open or free market. In this country 1936, the Government of Canada brought in the Bank Act under which all Banks must be chartered. Which banking system or country is in the stronger financial position today? It is obvious that our banking system has served us well. It seems as our population increases and our societies become more complex, a certain level of guidance and regulation is necessary.

The Board looks forward to addressing these challenges and working with the membership in 2011.



## LAND USE OPPORTUNITIES IN THE 21<sup>ST</sup> CENTURY

### THE LAND SUPPORTS US ALL (*Harvey Buckley*)

The purpose of the following statements is to firstly attempt to clarify the changing role of property rights in today's society and secondly to explore the ramifications of the emerging realization of the new value of our ecosystems as an added dimension to land owner property rights.

This need becomes apparent as Alberta's Land Use Framework (formalized when ALSA was passed) unfolds.

Challenges in land use planning today include a number of factors:

- Property Rights and Ecological Goods and Services
- Limitations of our Natural Resources, land and water
- Sustainable Growth or unsustainable future
- Conservation Tools

Property Rights in the early nineteenth century in North America were accepted/assumed with a simple understanding that a land owner had the right to do as he wished with his property. In the last 200 years there has been a change, mainly due

to increased population and increased economic activity. Instead, land owners today have a new right to manage his resource so long as exercising that right does not impact on the rights of adjacent landowners and cost the ratepayers of municipalities.

Today it is well recognized that for every acre of agricultural land that is redesignated for an alternate use, three to ten acres are impacted around it depending on the intensity of the redesignation. In the United States, 25% of that country's total land base has been impacted by development. In 1997, the internationally respected journal "Nature" published a pioneering and controversial paper by Robert Costanza and others that attempted to place a monetary value on all of the world's ecosystems. These services presently are provided generally without a recognized value. A broad range of ecosystem services were identified and valued across all major global ecosystems. The study found that the monetary value of global ecosystem services is virtually equal to the value of the entire global economy.

A Recent study done in Ontario in the Lake Simcoe Basin's Natural Capital region, placing a value on the Watershed's Ecosystem Services found the highest value was attributed to wetlands and forests at \$11,172/hectare (or \$5078/acre) **annually** and agricultural lands were valued at \$1153/hectare (or \$524/acre annually.) Similar work in Manitoba's Lake Winnipeg watersheds found the value of ecosystem services provided by forests are as much as \$677.54/hectare or \$307.97/acre **annually** and the value of wetlands to be from \$939 to \$1567.47/hectare or \$426.81 to \$712.48/acre **annually**. New York city politicians saved taxpayers \$6 Billion by investing \$1 Billion in 1997 to protect the 32,000 hectare Catskills-Delaware watershed or \$14,204/acre.

Therefore, as the saying goes, I am not the only one camping at the water hole anymore, the perceived

exclusive private property right of the land owner to manage his land as he sees fit must now obviously take into account other considerations. Realizing the long term value of good natural resource management and the potential to trade in services provided by healthy functioning ecosystems has been a turning point on how land and particularly rural land is managed. It has challenged farmers to educate the wider community as to the value of agriculture in providing not only food but also ecosystem services. Defining new property rights in ecosystem services creates a market where by the ecosystem services can be exchanged for reward. A series of new exclusive ecosystem property rights is emerging in the ownership of these services.

### **Limitations of our natural resources, land, and water**

There is well documented evidence to date that our natural resources are not limitless. Therefore we must establish our inventories and thresholds in order to keep our ecosystems operating at an optimum level. Now the nature of property rights over natural resources is being transformed. A feature of the shift towards land stewardship and sustainable agriculture is the use of market-based instruments and trading in ecosystem services. An additional revenue stream can be available here to landowners.

The choice is sustainable growth or unsustainable future.

The Alberta Land Stewardship Act provides for Conservation Easements and Conservation Directives as well as a Transfer of Development Credit Program and Conservation Offsets. However it would appear that Section 25 of the Act gives provision for the Development of Market-based Instruments and Programs to deal with ecological goods and services rewards. It would also appear that we need to develop further abilities to sell and purchase personal tax credits to broaden the ability of the community at large into investing in the conservation of agricultural land and ecologically

sensitive lands. ALSA also enhances or strengthens property rights because currently property rights are outside the constitution and only dealt with under Canadian Common Law.

ALSA's purpose is to protect what we have. ALSA is a move toward ecosystem management. The Land Use Framework that ALSA was designed to implement notes that:

- Cumulative effects denotes the combined impact of past, present and reasonably foreseeable human activities on a region's environmental objectives
- Cumulative effects management recognizes that our watersheds, our air and our landscapes have a finite carrying capacity.

Our future well being will depend on how well we manage our activities so that they do not exceed the carrying capacity of our environment. As our Global Population is growing and the demand on

our natural resources increasing daily, we cannot afford a "business as usual" attitude. We need to manage our resources in a new cumulative effects way if this globe of ours is to survive.

### Summary

- Property Rights. We must identify the new role of Property Rights.
- Limitations of our Natural Resources, Land and Water can be managed more effectively by valuing ecological goods and services.
- Sustainable growth and conservation tools can be effectively implemented through the ALSA Legislation.



## **Strategy Towards Achieving Solutions**

*(Harvey Buckley)*

It is critical that a new management strategy be implemented on private lands for our Natural Resources which initially focuses on our river basins and wetlands that serve as the watersheds for our urban centers. A large portion of the cattle industry uses river basins and riparian areas as the primary forage resource. Ranchers have had to increase production by 3% to 400% in the last 35 years to maintain economic viability. This has been necessary to accomplish on basically the same land base. The carrying capacity of our resources is not limitless. There are thresholds that must not be exceeded to maintain proper stewardship of our lands.

Healthy ecosystems provide a variety of critical goods and services. Historically these services have been provided without compensation. The vast majority of the lands in some river basins may be privately owned. However ranch properties in the Bow River Basin area face the ever increasing pressure of increased operating costs, low returns on investment, encroaching development, wildlife and inheritance issues. These hurdles often force the sale of large land holdings that can have dire environmental consequences.

The question then arises, how do property rights and markets for ecological goods and services improve and maintain environmental quality and at the same time create another revenue stream to help maintain the ecological integrity of the land resources. We need a push for conservation and a redefinition of the value the land represents. Managing these lands is a balancing act between consumptive practices and preserving the land for the important biological and economic value it represents. Also growing herds of wild game such as deer and elk in these areas compete for the forage

resource that land owners graze with livestock to support their agricultural operations. There is no compensation to the land or land owner for this service. The next question is that of predators who prey on the game but also on the cattle in the area. The more the landowner improves his stewardship of his resource the more he attracts wildlife and therefore the predators. These public benefits presently are provided without compensation to the private land owners who provide them.

A program is needed that will encourage landowners to maintain the health of their land that provides healthy riparian areas as well as wildlife habitat on their livestock grazing land. This will then improve a ranch's bottom line. Ranchers can help ensure sufficient water flows from springs and creeks as a source of clean water for both wildlife and the public. Ranchers can increase profit by conserving environmental amenities. Programs are needed to support these types of initiatives by recognizing the environmental value of these amenities and managing for them. However, landowners can no longer contribute these goods and services and maintain the stewardship necessary to maintain healthy landscapes without compensation. The Agricultural Industry today needs to adapt their traditional agricultural activities to provide more environmental amenities and at the same time improve agriculture's bottom line. Therefore an evaluation of ecological goods and services is required. Our society needs to recognize that the vast majority of true farmers and ranchers have developed a bond between themselves and their land. One rancher stated "I don't own any land, the land owns me."

We destroy this bond at our own peril.

**To learn more about what's going on elsewhere in the world to preserve agricultural lands:**

1. Ontario Farmland Trust [www.ontariofarmlandtrust.ca](http://www.ontariofarmlandtrust.ca)
2. American Farmland Trust [www.farmland.org](http://www.farmland.org)
3. National Mitigation and Ecosystem Banking Conference, April 26-29, Baltimore, Maryland  
[www.mitigationbankingconference.com](http://www.mitigationbankingconference.com)
4. Manitoba Cattle Producers Association: "Environmental & Rural Stewardship Remuneration for Agriculture in Manitoba" <http://www.scribd.com/doc/9693748/Mcpa-Egs-Proposal>



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**MEMBERSHIP FORM**

Individual Membership fee - \$25.00      Family Membership fee - \$45.00  
Corporate Membership fee - \$75.00

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**Your membership expired December 31, 2010. Please use form to renew for 2011**



**21<sup>st</sup> Annual General Meeting**  
**Friday, February 25<sup>th</sup>, 1-4 p.m.**  
**Goldenrod Hall, Airdrie**  
**Junction of Highways 772 & 567**

**Guest Speakers:**

**Gord Lehn, Woodlands Manager, Spray Lake Sawmills**  
**“Mitigation (Conservation) Banking”**

**&**

**Paul Fesco, Manager Strategic Resources, City of Calgary**  
**“The Calgary Water Utility & Watershed Protection”**

*for more information or to register phone Harvey Buckley – 403-932-5561 or  
email Sharon Bright @ [sdbright@telus.net](mailto:sdbright@telus.net)*

**Note: Watch for A for A’s annual workshop on**  
**“Valuation of Ecosystem Services” – September 2011**

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**Conferences**

**Living in the Natural Environment 2011**

M.D. of Bighorn

Topics include “Urbanization & Loss of Prime Agricultural Land”

Feb. 4 (4:30 – 9:00 p.m.) – Cochrane Ranche House

Phone 403-673-3611 for more details

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**Pathways to Sustainability**

“Food, fuel, and finance – Pathways to local resilient economies”

February 23-25, 2011

Red Deer College

**<http://www.pathways2sustainability.ca>**

for more information Email: [lisafox@sustainabilitycircle.ca](mailto:lisafox@sustainabilitycircle.ca)