

GREEN MATTERS

A newsletter from the Alberta Environmentally Sustainable Agriculture Council



Rick Tailleu / Reduced Tillages LINKAGES

Preserving our Natural Capital

From AESA Council's Past Chair

by Bruce Beattie,
Alberta Milk

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'Sustainable' – a word used to describe many activities in today's world, but often creating the most debate when combined with 'development.'

For many years, leaders have been searching for policies that they hope will accommodate 'sustainable development.' Trying to find that delicate balance between sustainability and development can generate heated controversies and intense emotions between people with different views of humanity's place and impact on the environment. But it's clear that continued, rapid economic growth can potentially tip the balance too far toward development and too far away from sustainability.

A 1987 report from the United Nations defined sustainability as:

"Meeting the needs of the present generation without compromising the ability of future generations to meet their needs."

In meeting our present needs, we rely to a large extent on natural capital. Natural capital may be defined as the Earth's plant, animal and mineral resources and the functions performed by natural ecosystems (like providing clean water and air), as well as the beauty of nature and the quality of life we draw from being in natural areas.

Alberta is blessed with an abundance of natural capital. Economists can put a monetary value on some types, like our oil and gas resources. Others are priceless. The protection of water, air, soil,

biodiversity and the quality of life for our children and their children will depend on the foresight and dedication of the people who live here now and our commitment to future generations.

As Alberta's population and economy grow, the pressures on ecosystems – and on those who live in and use them – will continue to mount. Forests that once protected steep slopes from erosion are cleared to make way for subdivisions that are prone to mudslides. Wetlands that once slowed the speed of spring runoff are filled in to make way for paved streets and parking lots that move water rapidly to rising rivers. These are small examples, but around the world, we see instances of serious and sometimes devastating social, economic and environmental consequences that occur when development overrides ecosystem health.

It is in response to increasing development pressures that landowners with common interests – like the health of their watershed – come together to ensure the sustainability of their farms. The Alberta Environmentally Sustainable Agriculture (AESA) Program is built on that concept of sustainability.

In this issue of *Green Matters* are stories of people working together to strike a balance between economic activity and preservation of the biosphere. They focus on the need for a coordinated effort linking all aspects of the biosphere into a common strategy. They emphasize planning on a broad landscape scale, as degradation of one part of a biosystem may have widespread consequences well beyond the immediate vicinity of the development. They recognize that, although government has key roles and responsibilities in managing our natural capital, it is also just one of the players at the table. Everyone has a part to play and a stake in the outcome.

In the years ahead, land use will doubtless be at the centre of debate between divergent and competing interests. We must do our best to protect what is truly essential, for the sake of those future generations who will pay the price if we fail.

Quality of Life in a Changing Landscape

“...the recognition that lived-in landscapes can make a contribution to the protection of biodiversity is new to much of Canada...”

Michael Barr / Ducks Unlimited Canada

About 30 km east of Edmonton lies a hummocky, wooded landscape liberally sprinkled with wetlands and supporting a rich variety of plants and animals. Called the Beaver Hills, this area is facing increasing pressure from urban, country-residential, industrial and other types of development. Now the Beaver Hills Initiative (BHI), a multi-agency partnership, is using an innovative approach to simultaneously sustain the area’s natural qualities and its social and economic well-being.



The Beaver Hills area:
Rich in natural beauty

The 1570-km² Beaver Hills area includes portions of the counties of Beaver, Lamont, Leduc and Strathcona as well as many parks and other protected areas, such as Elk Island National Park, the Cooking Lake-Blackfoot Grazing, Wildlife and Provincial Recreation Area, the Ministik Bird Sanctuary, and Miquelon Lake Provincial Park. The BHI, established in 2002, is taking what is defined as a ‘Protected Landscapes’ approach to this multi-jurisdictional landscape.

In this approach, the protected areas are complemented and supported by a conservation-oriented approach to the surrounding lived-in and working landscapes. By assessing aspects like wildlife linkages, water bodies and critical habitat for the entire area, the BHI partners hope to guide change in their own jurisdictions.

“The Protected Landscapes approach provides a process to protect biodiversity and the natural capital of an area in conjunction with enhancing an area’s social and economic viability and the quality of life of the community. It is this balance that is the central theme to the BHI and one which will help to sustain the essential character and sense of place of the Beaver Hills,” explains Dr. Guy Swinnerton, a member of the BHI Co-ordinating Committee and a professor emeritus at the University of Alberta.

Swinnerton has studied protection of natural areas in lived-in and working landscapes around the world for many years. He notes, “To have a Protected Landscapes approach, you have to have

around the table, the complete mosaic of interests involved who have either direct or indirect effects on the use, planning and management of that area.” In the case of the BHI committee, representatives from 18 agencies are at the table (see box), working by consensus.

“You can’t do this alone; it’s got to be a group effort,” says Ray Lopushinsky, the chair of the BHI committee. “We’ve had tremendous support from the whole group. The partners all have something at stake – the results from the initiative help them do their daily work.”

Rather than creating a formal land use plan, the BHI has developed a strategy based on a common vision, mission and guiding principles. Its vision is that “the Beaver Hills Initiative values the region for its natural beauty and quality of life, and supports co-operative efforts to sustain the quality of water, land, air and natural resources, and community development,” says Lopushinsky, who represents Lamont County on the committee.

The BHI’s vision provides a reference point for decision-making. As well, the initiative provides another key to making effective decisions – consultants and many of the partners collect data on the area’s physical, biological and socio-economic characteristics to provide a comprehensive, shared database.

“We want to give the partners the information they need to make the best decisions they can. That’s the key to the whole thing. When you are looking at any type of development, you have to have that basic information,” notes Lopushinsky.

The initiative is also looking at opportunities to co-ordinate services among the partners, like fire protection and controlling invasive weed species, insect pests and diseases. Lopushinsky says, “We want to use a collaborative effort for co-ordinated, cost-effective services.”

Although the Protected Landscapes approach is used in other countries, “the recognition that lived-in landscapes can make a contribution to the protection of biodiversity is new to much of Canada and North America,” Swinnerton says. “We have the opportunity [with the BHI] to provide a useful template or case study that could be applicable elsewhere. At the end of the day, there will be difficult decisions, and hopefully those will be made within that spirit of consensus and acknowledging the unique resource that we have in the Beaver Hills.”

BHI partners

Beaver County, Lamont County,
Leduc County, Strathcona County

Elk Island National Park, Prairie Farm
Rehabilitation Administration (PFRA)/
Agriculture and Agri-Food Canada

Ducks Unlimited Canada,
Nature Conservancy of Canada,
North Saskatchewan Watershed Alliance,
Alberta Fish and Game Association

Alberta Community Development,
Alberta Municipal Affairs, Alberta
Environment, Alberta Sustainable Resource
Development, Alberta Agriculture,
Food and Rural Development

Northeast Capital Industrial Association,
Alberta Industrial Heartland

Integrating Local and Regional Needs

Local action on the ground is key to achieving regional land use goals. In the case of the Strawberry Plains Grazing Association, a shared commitment to watershed health has helped the association integrate its own activities with various broad land use objectives in the region. And these activities have been so successful that the association was nominated for a prestigious Emerald Award for environmental excellence.

“They ensured that the new grazing locations wouldn’t affect any of those sensitive areas.”

The association is currently composed of 15 livestock producers who graze their cattle along the Battle River on the lands of the Canadian Forces’ Western Area Training Centre near Wainwright. The producers are using the placement of stock watering systems on these lands as a way to help maintain riparian health, protect water quality and improve range management.

Placing watering systems away from the river helps to keep cattle out of the water and away from sensitive riparian zones. Riparian zones are the areas of water-loving plants on the edges of rivers and other water bodies. Healthy riparian zones perform such functions as filtering out contaminants, providing flood protection, recharging groundwater and providing habitat.

Judy Fenton, a member of the association, says using fences to control cattle access to the river is not an option at the training centre because fences could interfere with the military exercises there. So the locations

of the watering systems are the main tool for managing cattle distribution.

New watering sites are strategically located to mesh the requirements of the producers and other stakeholders in the region. These requirements include:

- protecting water quality in the Battle River, which is the source of drinking water for the training centre and the Town of Wainwright,
- maintaining other riparian functions,
- minimizing impacts on environmentally sensitive areas of the training centre,
- improving cattle health and weight gain, and
- improving pasture health and rejuvenation.

“The producers felt that if they could place the watering systems away from the river in areas that had been underutilized for grazing, that would balance the system. So they scouted the area and identified sites where the forage resources were overused and underused,” explains Somerlee Bennett. She is Assistant Agricultural Fieldman with the Municipal District of Wainwright as well as a Conservation Technologist funded under the AESA program.

“Then the producers worked with one of the biologists at the training centre. He has various overlay maps like sharp-tailed grouse breeding grounds, leopard frog habitat, and habitat for some larger animal species. And they ensured that the new grazing locations wouldn’t affect any of those sensitive areas,” says Bennett. She adds, “The producers also worked with [Alberta] Public Lands to ensure that cattle would come to those new grazing areas and that the plant species would be palatable.”

The association’s watershed management activities were also a good fit with the landscape objectives of the M.D. of Wainwright Sustainable Land Initiative. This initiative, which

ended in 2004, was a partnership of the M.D., the training centre, Alliance Pipeline, Ducks Unlimited Canada, Reduced Tillage LINKAGES and PFRA/Agriculture and Agri-Food Canada.

Bennett says the initiative’s goal was to enhance “the long-term sustainability of the M.D. as well as the producers who live in it. ...We wanted to offer programs and services to producers without recreating the wheel, so we looked for gaps [that needed to be filled].”

The initiative began by mapping such features as ecologically sensitive areas, riparian zones and manure sources in the M.D. Then it targeted specific areas for action and provided technical and financial help to producer groups, like the Strawberry Plains Grazing Association, who wanted to adopt practices that fit with the initiative’s objectives.

The grazing association is still going strong after its Emerald Award nomination in 2004. So far, the producers have developed nine off-site watering systems. They are currently working with another grazing association on five more projects.

And now another regional plan is in the works that will need local action: the Battle River Watershed Management Plan (see “From Managing Water to Managing Watersheds”). While waiting for development of the draft plan, the M.D. is holding meetings to let producers know about this latest plan and how to provide input to it, and also to help producers better understand how practices on their farm and in their watershed are reflected in the river’s health.



One of the watering systems along the Battle River installed by the Strawberry Plains Grazing Association.



Battle River watershed

From Managing Water to Managing Watersheds

Water and land resources are interlinked, with each strongly influencing the other. Yet water management and land use planning have historically been dealt with separately. Now, under Alberta's Water for Life strategy, stakeholders in all of Alberta's major river basins are taking a more integrated approach, called watershed management, to maintaining healthy landscapes.

A watershed management approach considers the whole landscape in a watershed – land, water, plants, animals and people – and how all these components interact to affect the watershed's health. "With watershed management, we're seeing an evolution of resource management within the province," says Rhonda King of Alberta Environment.

King sees two key catalysts in the shift to watershed management. One is Alberta's Water Act, which came into effect in 1999. "The Water Act really started to identify in legislation what was being recognized globally – that managing water is about more than just how much water we take out or return to a river, that water influences and is influenced by the watershed."

The other catalyst is the public input during development of the Water for Life strategy, a comprehensive strategy to address Alberta's water issues. "Albertans said that we need to take a watershed approach. Just having a government department that is responsible for water management isn't the best for water management or for watersheds. Everyone is involved [in watershed management]. And everyone brings in different sets of knowledge and ways of looking at issues," explains King.

King is the project coordinator for the watershed management planning process in the Battle River basin (see map). She says, "When the Water for

Life planning process started, the Battle River basin was in the midst of a drought and facing significant concerns about water supplies for current and future users. So Alberta Environment began discussing a water management plan for the river. Yet we also realized that we needed to be shifting to watershed planning. Our process is melding water management and watershed management."

**"It's the synergy
of open discussion
that produces
creative solutions."**

As a result, the process includes both traditional water management planning and the more complex, multi-jurisdictional considerations of watershed management planning. The process is currently in Phase 1, which involves three groups. The Working Group has several roles including collecting and analyzing water management data. The Battle River Watershed Advisory Group is composed of about 20 people from across the watershed and from diverse sectors, such as municipal government, agriculture, industry, wildlife, and others. This stakeholder group will work with the interdepartmental Steering Committee to make recommendations on water objectives and priorities based on the data from the Working Group. These recommendations will be the basis for developing a draft water management

plan and provide direction for development of a watershed management plan.

In Phase 2, which will start in 2006, a Watershed Planning and Advisory Council will be formed for the basin. This multi-stakeholder council will have various responsibilities including developing and implementing the basin's watershed management plan in consultation and cooperation with agencies, groups and individuals in the basin.

Stakeholder and public education is an essential part of the whole process. For example, to gain the knowledge needed to make informed recommendations, the members of the advisory group have been attending monthly information forums. These intense, day-long sessions include presentations and discussions on water and watershed management issues. Members of the Working Group and Steering Committee also take part in these forums, sharing information and learning from the discussions.

Watershed management is a complex undertaking that presents many challenges. But King believes the collective, integrated approach will get positive results. She says, "There's no one person or one agency with jurisdiction over the whole watershed. So you have to bring everyone to the table to have buy-in for a watershed management plan. Everybody looks at the situation differently and sees different paths to the improvement. It's the synergy of open discussion that produces creative solutions."

More information about the Battle River Watershed Management Plan is available at: www3.gov.ab.ca/env/water/regions/battle/. For information about the Water for Life strategy, see the Winter 2005 issue of *Green Matters* or visit www.waterforlife.gov.ab.ca/.

COUNCIL PROFILES



**Carol
Bettac**

“The most valuable and strongest thing about AESA Council is the sharing,

coordinating and collaborating – the knowledge network on environmental programs, issues and concerns. Council brings people together for a better understanding of what’s going on and what’s important in environmental issues in agriculture,” says Carol Bettac.

Bettac grew up on a mixed farm near Fort Saskatchewan. She has a BSc in Animal Science and an MBA from the University of Alberta. After working as an agricultural fieldman, she joined Alberta Agriculture, Food and Rural Development as a conservation coordinator. Then she served as Program Manager for the AESA Program for six years.

Last year, she became Technical Director of the Prairies West Region for Agriculture and Agri-Food Canada’s Prairie Farm Rehabilitation Administration (PFRA). She is also PFRA’s representative on AESA Council.

PFRA has been working with rural people for more than 60 years, focusing on the sustainable use of soil and water resources. “PFRA’s role is completely complementary to AESA’s,” Bettac explains. “PFRA’s mandate is really about environmental stewardship, and it has a huge role to play in this area, with its many programs, initiatives and technical skills. Membership

“PFRA’s mandate is really about environmental stewardship.”

on AESA Council helps in aligning and synchronizing efforts with other agencies to provide better service to the industry.”

A strong proponent of partnering, Bettac is involved in various collaborative initiatives. For instance, she is a member of an AESA committee that aims to strengthen interagency cooperation for improved agro-environmental

programming. She also sits on the multi-stakeholder board of the Alberta Environmental Farm Plan Company, and she co-chairs the Environmental Working Group for Alberta, as part of the nation-wide Agricultural Policy Framework (APF).

Bettac says PFRA is currently moving in a new direction to better address current and emerging challenges facing the agriculture industry. Through partnerships to share research information, technical expertise and tools, the agency is helping to achieve the APF goal of making Canada’s agriculture and agri-food industry a world leader in food safety, innovation and environmentally responsible agriculture.

“A key aspect of PFRA’s new direction is to improve agriculture’s ability to enhance natural capital through environmental stewardship,” says Bettac. Natural capital refers to the value of the functions of a healthy environment – like water quality protection and habitat conservation – to our society.

She adds, “PFRA will be partnering with other agencies to find ways to transform agri-environmental challenges into economic opportunities, so producers and other landowners can make a living while doing things that have a public benefit.”



**Erik
Butters**

Stewardship is at the heart of the ranch west of Cochrane owned by Erik Butters’

family. “The previous generations ran the place with the long-term viability in mind, both economically and environmentally, although they might not have thought of it in those terms,” says Butters. “It certainly is important to us now. It’s one of the reasons why I enjoy being on AESA Council and why I’m also involved with Cows and Fish.”

He adds, “We need to be environmentally sensitive in order that we continue because we don’t want to foul our own nest. And we need to be seen to be environmentally in tune in order that our customers will feel good about consuming our product.”

The ranch and love of the ranching life have been in the Butters family for several generations. He says, “My daughter and her husband are on

the ranch with me now, and they’d be fourth generation. I guess my granddaughter would be fifth, but I can’t exactly say she’s working the ranch – she’s two!” His younger daughter is at veterinary college and helps out on the ranch when she can.

Butters left his ranch for only four years, to obtain a business degree at the University of Calgary in the 1970s. He says, “I enjoy the entrepreneurship of [ranching] – trying to grow a product and sell it in the marketplace and trying to make a dollar doing it. I enjoy the lifestyle, and I enjoy where I am, in the foothills.”

In addition to serving on the AESA Council, Butters is an active member of the Alberta Beef Producers (ABP), a producer organization with over 35,000 members. He has held various positions in ABP over the years and is currently the vice-chair.

ABP uses a wide range of initiatives to achieve its mission to strengthen the sustainability and competitiveness of the Alberta beef industry. Although dealing with the BSE situation has taken most of its energy in the last two years, the organization is involved in diverse

“I enjoy the entrepreneurship of ranching... I enjoy the lifestyle, and I enjoy where I am, in the foothills.”

activities related to policy and regulatory development, the environment, animal care, feedlots, research and beef promotion.

A key component of ABP’s environmental activities is to provide funding for Cows and Fish. This program works with producers and communities across Alberta to enhance the health of riparian areas.

Butters’ own involvement with Cows and Fish shows his commitment to stewardship. He says, “Cows and Fish have used the riparian area on our ranch as a learning tool. We’ve had riparian management workshops and riparian condition assessment workshops here, as a way of helping people understand how riparian zones work and what it takes to protect them.”

Roger Bryan/AAFRD

Roger Bryan/AAFRD

“We are moving towards a situation where increasingly difficult trade-off decisions will have to be made.”

A Framework for Making Tough Decisions

In the coming months, the Alberta Government will be looking for your input in developing a provincial land use framework. This framework is intended to create a new approach to land management in Alberta. It will guide decision makers at all levels as they face tough choices related to the ever-increasing pressures on land use arising from our rapidly growing economy and population. It will also foster a greater awareness and understanding by Albertans as stewards of our valuable land base.

“The demands on Alberta’s land base are increasing. We are moving towards a situation where increasingly difficult trade-off decisions will have to be made,” says Morris Seiferling, Alberta’s Assistant Deputy Minister of Sustainable Resource and Environmental Management. “A thriving economy requires a system in which the competition for finite resources is decided in favour of Albertans as a whole. The challenge is achieving balance among economic, environmental and social priorities.”

Seiferling’s office has been tasked with leading a Government-wide effort to improve integration and information sharing on sustainable resource and environmental management in Alberta. This initiative came out of a 1999 policy document that reconfirmed the Alberta Government’s commitment to sustainable development that protects the environment while encouraging economic growth.

To move forward on that commitment, the Government is emphasizing: clear provincial direction on resource and environmental management, effective decision-making, and an up-to-date legislative/regulatory regime. One of the major roles of Seiferling’s office is to work on development of a provincial land use framework. This framework will apply to all private and public lands in Alberta (except federal lands, like the national parks). It is expected to be initiated in the near future and completed in two or three years.

Valerie Sowiak / AAFRD



The framework will provide high-level guidance to help private and public sector agencies make balanced, informed and timely decisions on land use in their own jurisdictions. Seiferling says, “We want an integrated decision-making system that will deliver a better service to clients and that will have the confidence of Albertans.” Beyond those general aims, the framework’s details will be established through public consultations.

“Our intent is that Albertans will build this framework and support it in the long term,” explains Seiferling. “The development of the framework will build on the successful consultation process used to develop the Water for Life strategy.” He adds, “We could also say ‘Land for Life’. Land creates wealth and jobs, it’s where we live, it’s where we go for recreation and enjoyment, it supports plant and animal life. We have to wisely manage it so our children and grandchildren have the same opportunities.”

The Government will be seeking public input on many topics, such as what principles should guide future decisions, and how to link regional and local planning efforts with an overall provincial strategy.

Seiferling adds, “The provincial framework will set the goal posts under which local land use decisions can be made in a provincial context. There’s no intent to take over local decision-making authority. The intent is to help those people who make decisions every day. A lot of them are concerned about how their decisions affect the broader provincial picture and what are the provincial principles they need to look at in making local decisions.”

Information on how you can provide input to creating a provincial land use framework will be coming in the near future.

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Green Matters is the newsletter of the Alberta Environmentally Sustainable Agriculture (AES) Council. AESA Council consists of representatives from Alberta’s agriculture and food processing industry, environmental organizations and municipal, provincial and federal governments.

AESA Council’s vision is that Alberta has a thriving agriculture and food industry that is operating in an environmentally responsible manner. Its mission is to lead the agriculture and food industry in addressing environmental challenges. And its goal is to develop and deliver collaborative environmental stewardship initiatives that result in sustainable growth of Alberta’s farm, ranch and agri-food processing industry.

The purpose of *Green Matters* is to provide a forum for discussion of environmental issues in Alberta’s agriculture and food processing industry.

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Editorial Board: John Kolk, Bruce Beattie, Murray Klutz, Terry Rachuk
Editor: Roger Bryan
Contributors: Carolyn King, Bruce Beattie
Design and Typesetting: P40 Visual Communications

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Alberta Environmentally Sustainable
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The Agricultural Policy Framework (APF) – A Federal-Provincial-Territorial Initiative