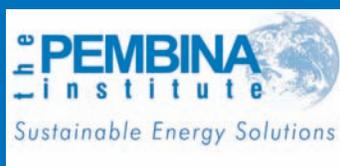
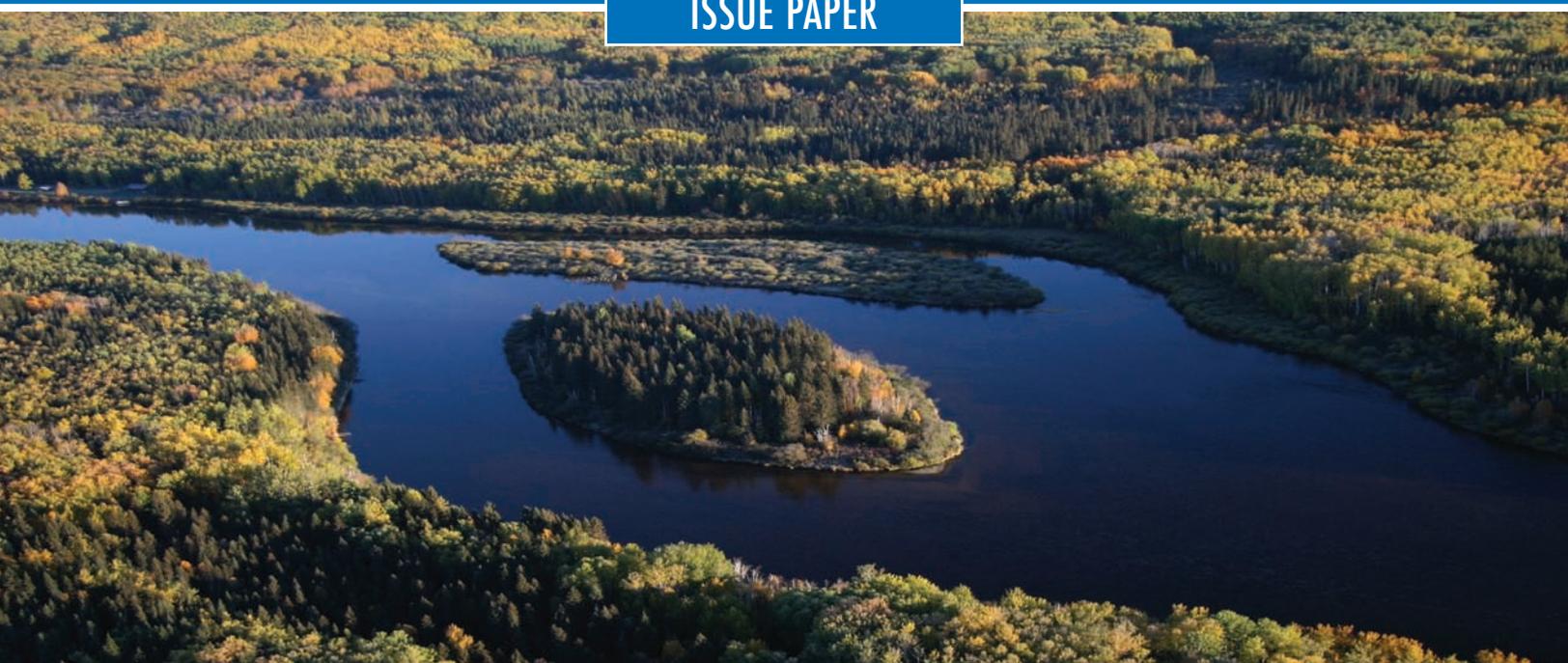


Alberta by Design

Blueprint for an Effective Land-Use Framework

January 2008

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Steven A. Kennett • Richard R. Schneider

Alberta by Design

A Blueprint for an Effective Land-Use Framework

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The Pembina Institute creates sustainable energy solutions through research, education, consulting and advocacy. It promotes environmental, social and economic sustainability in the public interest by developing practical solutions for communities, individuals, governments and businesses. The Pembina Institute provides policy research leadership and education on climate change, energy issues, green economics, energy efficiency and conservation, renewable energy and environmental governance. More information about the Pembina Institute is available at <http://www.pembina.org> or by contacting info@pembina.org.

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The Canadian Parks and Wilderness Society (CPAWS) is Canada's grassroots voice for wilderness. The Northern Alberta chapter works to maintain biodiversity and wilderness in Alberta through the establishment of industrial practices that are sustainable for nature, communities, and the economy. We have approximately 3,000 members led by a volunteer board of directors. More information about CPAWS Northern Alberta is available at <http://www.cpawsnab.org> or by contacting info@cpawsnab.org.

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Executive Summary

Alberta is at a turning point with respect to land and resource management. There is a broad consensus among Albertans familiar with land-use issues in the province that the current system of planning and decision-making urgently needs an overhaul. This report, by the Pembina Institute and the Canadian Parks and Wilderness Society, presents a practical and solutions-oriented blueprint for a new Land-Use Framework. The intent is to inform and support the Government of Alberta's development of a Land-Use Framework for the province and to provide a template for evaluating the framework once it is released.

Alberta's current system is broken

There are two fundamental reasons why Alberta is on a path to declining quality of life and unsustainable development. Both reasons highlight the need to re-think our land use objectives and how we achieve them. The first is an inappropriate focus on short-term economic growth, as measured by indicators such as gross domestic product (GDP), in place of broader measures of success related to quality of life and long-term sustainability. The second is a management philosophy and decision-making infrastructure incapable of managing expanding land uses on a finite land base. We lack the tools needed for integrated planning, managing cumulative impacts and dealing with trade-off decisions.

These two problems run through all levels of policy, planning and decision-making. Alberta's overarching policy framework for land and resource use is characterized by a growth obsession and a vacuum around cumulative impacts. The Alberta government has also demonstrated an aversion to planning since the 1990s. As a result, the future of Alberta's landscapes, watershed and airsheds is largely determined by incremental decisions on individual projects and activities that are made within departmental silos. Decision makers within these silos tend to pursue narrow mandates and focus on specific environmental media (e.g., air, water, land) or specific resources and activities (e.g., oil and gas, forestry, wildlife, recreation). This incrementalism and fragmentation preclude the holistic management of cumulative impacts that is needed when multiple activities affect land use and resource values on a shared land base.

Principles for the new Land-Use Framework

The design of the new Land-Use Framework should be guided by a redefinition of success and an integrated approach to land and resource management. Guiding principles should focus on ensuring genuine progress, defined in terms of clear and measurable outcomes that reflect the full range of values and interests of Albertans. The process used to determine desired outcomes should be open and transparent, with procedural guarantees for effective public participation. Another key principle should be the recognition of limitations that come with a finite land base. The policy and planning framework must include mechanisms for setting priorities and making decisions about trade-offs among competing values within environmental limits. This new approach to decision-making implies a shift to integrated management to set and achieve landscape-scale objectives. The reliance on market forces must also be tempered by the recognition that public policy is needed to correct market failures — notably the failure to account for externalized environmental and social costs of development and the ignoring or under-valuing of non-market values, including the value of Alberta's natural capital.

Filling the planning vacuum is the most important legal and institutional change that is needed to implement these principles. Effective and integrated regional planning should be at the heart of

Alberta's new Land-Use Framework. Our blueprint for this planning system is divided into three sections.

(1) Policy Foundation and Legal Structure

The new Land-Use Framework requires a clear commitment to significant policy changes by the premier and Cabinet, reflecting the principles outlined above. It should establish an integrated regional planning process, define the roles and responsibilities of Cabinet and regional planning bodies, and ensure that plans are legally binding. The relationship between regional and municipal planning must be clarified and opportunities to streamline existing decision-making processes should be identified. Implementation should occur through a new law that includes a statement of principles and objectives and that establishes the legal basis for integrated planning, including both the legal effect of planning decisions and the rules of the game for the planning process.

(2) Planning Process

The success of the new Land-Use Framework will depend on the quality of the planning process. That process should meet the highest standards of fairness, transparency, predictability, accountability, participatory decision-making and equal access to information. Planning should be based on sound science and good information and the planning system should include mechanisms for effective monitoring and enforcement. A new planning agency should be created to champion and support the planning process. Significant financial and human resources will be needed to implement regional planning in Alberta.

(3) Cumulative Impacts Management

Managing cumulative impacts is the major challenge for land and resource management in Alberta. Significant changes in policy and decision-making are needed to meet this challenge. Given the extent to which Alberta's land and resources have already been allocated to various uses, the new Land-Use Framework should include mechanisms that allow for both flexibility and fairness regarding existing dispositions. Thresholds and limits will be needed to define objectives for managing cumulative impacts. The Land-Use Framework should also establish interim measures to allow for effective planning in areas where development pressures are particularly intense and where important land-use values may be compromised by continuing development during the planning process. Finally, a set of innovative management tools should be deployed to enable decision makers to achieve landscape-scale objectives by ensuring activity and impact levels remain within specified limits.

Alberta by Design

A Blueprint for an Effective Land-Use Framework

Table of Contents

1. Introduction	1
2. Alberta's Path to Unsustainable Development	3
2.1 The Oil Sands: Sacrificing Environmental and Social Sustainability on the Altar of Economic Growth	3
2.1.1 Economic Indicators	3
2.1.2 Environmental Indicators	4
2.1.3 Social Indicators	5
2.1.4 Externalized Costs and Unmanaged Cumulative Impacts	6
2.2 The Eastern Slopes: Death by a Thousand Cuts for Alberta's Iconic Natural and Cultural Landscape	6
2.2.1 Fragmented Decision-Making and Unmanaged Cumulative Impacts	7
2.2.2 Declining Environmental Quality and Increasing Land-Use Conflicts	7
2.2.3 Failed Attempts at Integrated Planning	8
3. Driving Decision-Making in the Wrong Direction	9
3.1 Policy Context: The Growth Obsession and the Vacuum Around Cumulative Impacts	9
3.2 Aversion to Planning	10
3.3 Fragmented and Incremental Decision-Making	11
3.4 An illustration: Mineral Rights Leasing and Project Approval for Oil and Gas Development	13
4. A New Policy and Planning Framework	15
4.1 Guiding Principles	15
4.2 Filling the Planning Vacuum	16
5. Key Elements of the Blueprint	19
5.1 Policy Foundation and Legal Structure	19
5.1.1 Clear Commitment to Major Policy Change by the Premier and Cabinet	19
5.1.2 Establish Integrated Regional Planning	19
5.1.3 Define Roles and Responsibilities for Cabinet and Regional Planning Bodies	20
5.1.4 Make Plans Legally Binding	20
5.1.5 Define the Relationship Between Regional and Municipal Planning	21
5.1.6 Streamline Existing Decision-Making	21
5.1.7 Enact a New Planning Law	22
5.2 Planning Process	22
5.2.1 Ensure that Planning Meets the Highest Standards of Good Process	22

Table of Contents

5.2.2	Base Planning on Sound Science and Good Information.....	23
5.2.3	Ensure Effective Monitoring and Enforcement.....	23
5.2.4	Establish a New Planning Agency	23
5.2.5	Provide Financial and Human Resources to Implement Regional Planning	24
5.3	Cumulative Impact Management.....	24
5.3.1	Ensure Flexibility and Fairness for Existing Land and Resource Dispositions.....	24
5.3.2	Use Thresholds and Limits to Define Objectives for Managing Cumulative Impacts	25
5.3.3	Establish Interim Measures to Allow Effective Planning in Priority Areas.....	25
5.3.4	Provide a Management Toolbox to Ensure that Activity and Impact Levels Remain Within Specified Limits	25
5.4	Summary	26
6.	Conclusion	27

1. Introduction

Alberta is booming, but quality of life is declining.

Our GDP is hitting all time highs, we have the lowest unemployment in the country, and opportunities for the future appear limitless. It would seem that the good life has arrived. Or has it? The answer to that question is not as obvious as it may seem. If success is defined strictly in terms of economic growth, then yes, life is great in Alberta. But by many other measures, the actual quality of many Albertans' lives is in decline.¹

It is rare for a week to go by without a news story on some aspect of what is being called the “dark side” of the boom. For example, in our urban centres there is a critical shortage of affordable housing, traffic congestion has become unbearable, and social service organizations caring for children, the elderly, and people with special needs are in crisis because they cannot retain staff. Outside of the cities, the cumulative impacts of industrial development and other land uses are degrading Alberta's agricultural base and seriously harming our environment (e.g., deteriorating air and water quality, the prospect of water shortages in certain regions, and the loss and fragmentation of wildlife habitat).



Despite the boom, there is a growing sense among many Albertans that they are losing ground in terms of true prosperity. Conventional indicators of economic growth are moving in the opposite direction of indicators that matter most in their daily lives. There is also mounting concern that the province's focus on short-term economic growth, at the expense of other values, is threatening our long-term sustainability. In response, rural landowners, farmers, ranchers, recreational land users and individuals concerned about the environment are mobilizing and uniting — forcefully voicing their concerns about the wave of industrial development sweeping across Alberta.

Rethinking our land-use objectives.

There are two fundamental reasons why Alberta is on a path to declining quality of life and unsustainable development. Both reasons highlight the need to re-think our land-use objectives and how we achieve them.

First, success is defined too narrowly. The Government of Alberta and the private sector have fixated on maximizing economic growth, as defined by financial indicators such as GDP, under the false assumption that economic growth is all that is required to ensure a prosperous and secure future. Important non-market benefits and costs — both social and environmental — are ignored or under-valued in this economically derived definition of success.

Second, the system for managing the use of Alberta's land and resources — the essential basis of the economic, social and environmental health of Alberta — is failing us badly. That system was

¹ Anielski, 2007. *The economics of happiness* (Gabriola Island, B.C., New Society Publishers); Taylor, 2005. *The Alberta GPI summary report* (Pembina Institute) available at

<http://www.fiscallygreen.ca/gpi/doc.php?id=193>; The Calgary Foundation, *Vital Signs Report 2007* available at http://www.thecalgaryfoundation.org/pdf/Final_Calgarys_VitalSigns_fullreport.pdf.

designed for an Alberta with limitless frontiers and a small population — an Alberta that now exists only in mythology. It has put us on a path of unsustainable development by facilitating rapid industrial development over the past thirty years. It has failed to provide decision makers with tools for managing a finite land base once limits are reached, as they now are in many parts of the province. In particular, it lacks mechanisms for managing trade-offs among competing land-use values and the capacity to manage the cumulative impacts of development. We are left with a legacy of unplanned, unintended, and undesirable outcomes, including steady degradation of the environment.



The pressures of the current economic boom have made these deficiencies easier to identify. However, their negative impacts were felt by many Albertans before the current boom and they will persist beyond it if the underlying problems are not addressed. Regardless of economic fluctuations, maintaining quality of life and managing cumulative impacts are important long-term challenges for Albertans.

In response to growing concerns that our current system is broken, the Alberta government launched the Land-Use Framework (LUF) initiative in 2006.² The LUF could establish a new policy and planning framework that would help put Alberta on a path towards true prosperity and environmental sustainability. However, it will fail if it doesn't result in major changes to the status quo. If the Alberta government refuses to recognize that the province is changing rapidly and that its approach to policy and planning must be adapted accordingly, present and future generations of Albertans will pay dearly in terms of declining quality of life and continuing deterioration of our environment.

This report presents a practical and solutions-oriented blueprint for a new LUF. The intent is to inform and support the Government of Alberta's development of a LUF for the province and to provide a template for evaluating the framework once it is released. The initial section of the report, supported by two case studies, describes in detail two fundamental problems with the current system. The remainder of the report describes the principles and components of a new policy and planning framework designed to address the deficiencies of the current system and achieve land-use outcomes important to Albertans.

² See: www.landuse.gov.ab.ca/

2. Alberta's Path to Unsustainable Development

The following case studies illustrate the kinds of unintended outcomes that arise from the current system of land-use planning and decision-making. The oil sands provide a prime example of what happens when decisions about the scale, pace and intensity of land and resource use are directed to maximizing economic growth instead of achieving a broader suite of outcomes related to overall quality of life. The oil sands case study also demonstrates the limitations of market forces in achieving social and environmental objectives. The Eastern Slopes case study illustrates how a lack of integrated planning and the inability to make trade-off decisions on a finite land base are leading to unsustainable cumulative impacts, resulting in the “death by a thousand cuts” of one of Alberta’s most valued landscapes.

These case studies are not isolated occurrences. The same fundamental problems underlie land-use conflicts and degradation of the environment across the province. Recent conflicts over seismic exploration under Marie Lake, sour oil and gas development in Drayton Valley, and a proposal for sour gas wells on the outskirts of Calgary are additional examples.

2.1 The Oil Sands: Sacrificing Environmental and Social Sustainability on the Altar of Economic Growth

The oil sands have been a powerful engine of economic growth in Alberta in recent years and are expected to play an even greater role in our economy as conventional oil and gas reserves decline. On the positive side of the ledger, Alberta’s GDP has been steeply increasing, we have the lowest rate of unemployment in the country, and homeowners have seen substantial increases in their home equity.³ But these gains are being offset by declines in many other indicators, as detailed below.

2.1.1 Economic Indicators

One might expect that an emphasis on economic growth would produce positive trends in the full suite of economic indicators relevant to Albertans. However, this is not the case. The rapid rate of growth has caused a spike in inflation which has offset most gains in income. In real terms, the average family income in Alberta is only slightly higher now than it was a decade ago, and most of this gain comes from working longer hours, not from higher wages.⁴ Only the richest 10% of Albertan families have seen their average income rise significantly over the past decade. Lower income families are actually worse off now than they were before the boom.

Inflationary pressure due to rapid growth in oil sands development has also had negative effects for other sectors and for public infrastructure. The tight labour market has made it difficult for some small businesses, the service industry, and the not-for-profit sectors to attract and retain employees. Costs of construction projects, from home improvements to major public infrastructure, have increased due to shortages of labour and materials. While government

³ Canada West Foundation, 2007. *A little breathing room: Alberta economic profile and forecast.*

⁴ Parkland Institute, 2007. *The spoils of the boom: incomes, profits, and poverty in Alberta.*

revenues have risen, so has the cost of building schools, hospitals, roads, overpasses, transit projects and recreational facilities. Even within the oil sands industry, significant cost over-runs experienced by companies are attributable to the shortages of labour and materials created by the industry's rapid growth.

Another important economic indicator is the value of the royalties Albertans receive from their oil resources. Recent reports by the provincial auditor general and by an expert panel reviewing the provincial royalty regime show that Albertans have been shortchanged billions of dollars in royalties.⁵ There is probably no better example of how a narrow focus on maximizing growth is inconsistent with the greater public good.

Economic diversification and sustainability are other dimensions of the economy that merit attention. The lessons learned from the bust that followed the last oil boom appear to have been forgotten. For example, the forest industry, already reeling from low commodity prices and high energy prices, is seeing the forest land base it relies upon dug up or carved up while its workers leave for higher paying jobs in the oil patch. High paying oil patch jobs are also luring an entire generation of youth away from the diverse mix of careers that will be required to keep Alberta running after this boom has passed.

2.1.2 Environmental Indicators

The oil sands cover 21% of Alberta, a land area the size of Florida. If the entire area is developed with an industrial footprint similar to that of current projects, then approximately 80% of the region will be within 250 metres of an industrial feature, or in the case of surface mining operations (which could cover almost 3,000 square kilometres), completely obliterated.⁶ Over 30,000 km of roads will have to be built to access wells and other facilities. Such intensity of development, in the absence of landscape planning, is radically transforming the region's forests and many wildlife species are in decline. Some will become locally extinct if current trends continue. For example, local caribou herds have already declined by 50% over the past decade⁷ and their eventual demise is virtually certain without landscape planning and habitat protection.⁸

There will also be serious impacts on water resources, given the heavy dependence of oil sands extraction on water. Water demands on the Athabasca River are already approaching the river's capacity during low-flow periods, and many additional projects are waiting in the wings. First Nations' bands living downstream of the oil sands are understandably upset about this



⁵ Alberta Royalty Review Panel, 2007. *Our fair share*.

⁶ Schneider and Dyer, 2006. *Death by a thousand cuts: impacts of in situ oil sands development on Alberta's boreal forest* (Canadian Parks and Wilderness Society and Pembina Institute) available at <http://pubs.pembina.org/reports/1000-cuts.pdf>.

⁷ Alberta Woodland Caribou Recovery Team, 2004. Unpublished data.

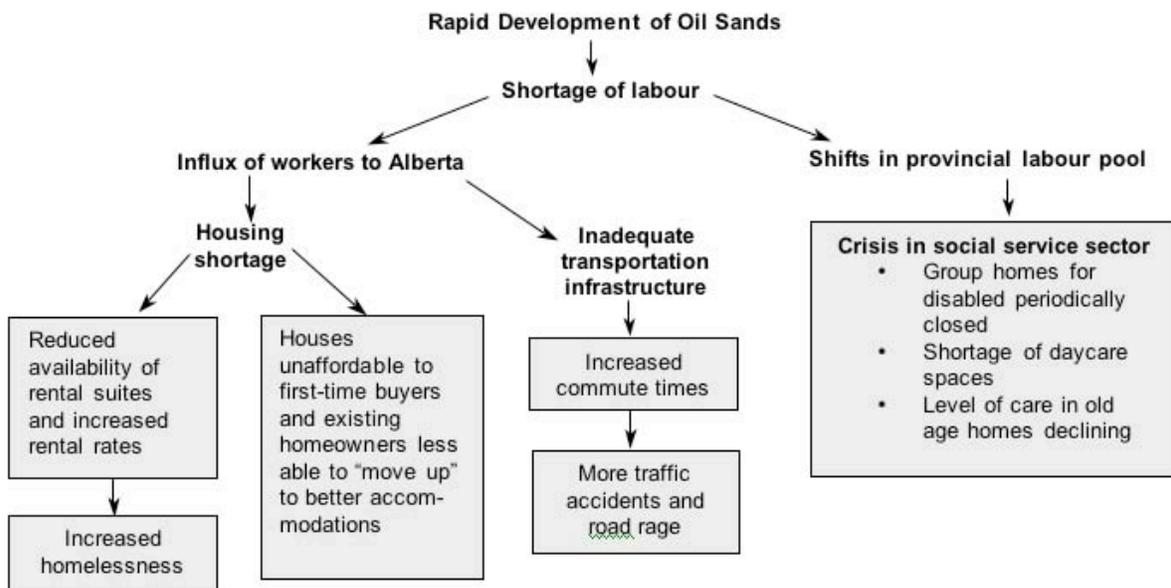
⁸ Weclaw. and Hudson. , 2005. *Simulation of conservation and management of woodland caribou*.

incremental drawdown of their main waterway, as well as the increased rates of disease they attribute to water pollution.

The oil sands also have environmental impacts that reach far beyond the boundaries of the development zone. For example, seven new oil upgraders have been proposed for the industrial heartland region surrounding Edmonton.⁹ Residents of this region are becoming increasingly concerned about the impacts these upgraders will have on local air quality and the general health of the environment. The extraction and refinement of oil sands is also the fastest growing source of carbon dioxide emissions in Canada, and the greatest obstacle to meeting our country's international commitments to reduce greenhouse gas pollution.¹⁰

2.1.3 Social Indicators

The overheated economy, driven by the rapid development of the oil sands, is causing declines in many social indicators. The following diagram illustrates the causal linkages for a number of well-known examples.



The inflationary pressures noted above compound the effects of the worker influx and shifts in the labour pool. New hospitals, schools and transportation infrastructure projects may be delayed or scaled back due to rising building costs, despite the increasing demand for these public facilities. Money that might otherwise have gone to expanding capacity may be needed to meet the high cost of simply maintaining and replacing existing infrastructure.

Not surprisingly, those most directly affected by the oil sands boom are beginning to question the fixation with market-driven economic growth. The Regional Municipality of Wood Buffalo and other interveners argued in hearings before the Alberta Energy Resources Conservation Board

⁹ See: www.fortsask.ca

¹⁰ McCulloch, Reynolds and Wong, 2006. *Carbon neutral 2020: A leadership opportunity in Canada's Oil Sands* (Pembina Institute) available at http://pubs.pembina.org/reports/CarbonNeutral2020_Final.pdf; Woynillowicz, Severson-Baker and Reynolds, 2005. *Oil sands fever: The environmental implications of Canada's oil sands rush* (Pembina Institute) available at <http://pubs.pembina.org/reports/OilSands72.pdf>.

(ERCB) in 2006 that applications for three new oil sands projects should be refused because of the cumulative social and environmental costs of run-away development.¹¹ The ERCB admitted that the existing system for cumulative impacts management was inadequate, but concluded that responsibility for addressing these impacts lay with other agencies. It approved all three projects.

2.1.4 Externalized Costs and Unmanaged Cumulative Impacts

The economic, environmental and social costs of rapid oil sands development are “externalized” from the perspective of the markets that are driving the pace and extent of development. Likewise, the depletion of natural capital and the decline in quality of life associated with the boom are not captured in the national and provincial income statements used to measure economic growth. The result is that the Alberta government’s development policies are being guided by a skewed balance sheet. Their policies reflect narrowly defined financial benefits but fail to account for significant economic, social and environmental costs.

Even when negative impacts are recognized, they cannot be adequately addressed because the government continues to issue mineral leases and approve projects without regard to cumulative environmental and social impacts.¹² The cumulative environmental impacts of oil sands development have been recognized as a major problem since 1999, when the Government of Alberta established the Regional Sustainable Development Strategy for the Athabasca Oil Sands (RSDS) and delegated primary responsibility for developing a management framework for cumulative impacts to the multi-stakeholder Cumulative Environmental Management Association (CEMA). Almost ten years later, the government continues to approve projects despite the failure of RSDS and CEMA to deliver the promised framework for managing cumulative impacts.¹³

2.2 The Eastern Slopes: Death by a Thousand Cuts for Alberta’s Iconic Natural and Cultural Landscape

Unintended and undesirable consequences are also being produced by structural deficiencies in our system of land and resource management. We cannot achieve desired outcomes, even when they are well articulated and supported, because we lack the tools to do so. The Eastern Slopes provide an illustrative example.



The Eastern Slopes have long been recognized as one of Alberta’s crown jewels, valued for many attributes that enhance the quality of life of Albertans. For example, the water supply for most Albertans comes from the Eastern Slopes. The Eastern Slopes are also one of Canada’s premier wilderness areas, valued for its beauty, wildlife habitat, and opportunities for recreation and tourism. The region also has many valuable resources, supporting forestry, cattle ranching, and the extraction of petroleum, natural gas and coal.

¹¹ EUB decisions 2006-112, 2006-128 and 2007-013.

¹² Holroyd et al., 2007. *Haste Makes Waste: The Need for a New Oil Sands Tenure Regime* (Drayton Valley: Pembina Institute, April 2007) available at http://pubs.pembina.org/reports/OS_Haste_Final.pdf.

¹³ Kennett, 2007. *Closing the Performance Gap: The Challenge for Cumulative Effects Management in Alberta’s Athabasca Oil Sands Region* CIRL Occasional Paper #18 (Calgary, Canadian Institute of Resources Law).

2.2.1 Fragmented Decision-Making and Unmanaged Cumulative Impacts

Despite the recognized importance of Eastern Slopes to Albertans, the region has become a poster child for poor planning. Attempts at integration have been made over the years, but fragmented sector-based decision-making has prevailed. Moreover, a mechanism for handling cumulative impacts has been lacking and the guiding philosophy of multiple use has, in practice, come to mean “everything, everywhere, all the time.”

One of the major outcomes of the sector-based approach to land management in the Eastern Slopes is an insidious fragmentation and deterioration of the landscape resulting from small but cumulative changes.¹⁴ Industrial features, such as access roads, well pads, forestry landing areas, and coal mines have been the dominant sources of change. These disturbances have been additive because there have been no regional limits on cumulative impacts for companies to respect, nor any requirements for harmonized planning among companies operating in the same area. The overall industrial footprint is far greater than it would have been with integrated planning and impact thresholds in place.

The cumulative impacts of industrial development have been magnified in recent years by off-highway vehicle use and random camping, following in the wake of new access routes developed by industry. Although most off-highway vehicle users are respectful of the land, the high volume of unregulated traffic and the destructive practices of some users are degrading the landscape, as anyone who recently visited the Eastern Slopes can attest.¹⁵

2.2.2 Declining Environmental Quality and Increasing Land-Use Conflicts

As a result of these uncontrolled cumulative impacts, there has been a steady deterioration in the ecological health of the Eastern Slopes, placing watersheds at risk, threatening the viability of wildlife populations, and steadily despoiling the beauty of the region. Grizzly bears and caribou serve as indicators of ecological health, our canaries in a coal mine. Both of these species are in decline in the Eastern Slopes and face regional extinction if current trends in habitat deterioration continue.^{16,17}

The second major outcome of fragmented decision-making in the Eastern Slopes, which is becoming increasingly apparent as limits are reached, is conflict among land users. In the absence of regional planning, proponents of competing values are left to battle it out “valley by valley” over specific activities and issues.¹⁸ Some of the prominent flash points are:

- forestry versus the oil and gas sector over shortfalls in timber supply resulting from forest clearing for petroleum exploration and development¹⁹
- ranchers versus land developers over the loss of agricultural land and declining quality of rural life related to the development of rural-residential subdivisions²⁰

¹⁴ *The Changing Landscape of the Southern Alberta Foothills*, Report of the Southern Foothills Study Business as Usual Scenario and Public Survey (1997), available at http://www.salts-landtrust.org/sfs/sfs_reporting.html.

¹⁵ Alberta Hansard, June 12, 2007.

¹⁶ Weclaw and Hudson, 2005. Simulation of conservation and management of woodland caribou.

¹⁷ Stenhouse et al., 2005. *Amended Report on Alberta Grizzly Bear Assessment of Allocation*

¹⁸ Read, 2004. The new war, in *The Alberta Express*.

¹⁹ Alberta Forest Products Association, 2007. *Integrated Land Management: A Win-Win Solution*.

²⁰ Andrews, 2002. *Under siege*.

- land owners versus the oil and gas industry over property rights issues related to the impacts of oil and gas development on local air and water quality and noise
- ranchers versus oil and gas development and off-highway vehicle users over ecological damage to fescue grasslands²¹
- environmentalists versus the forest industry and petroleum industry over destruction of critical wildlife habitat
- residents and both recreational and industrial land users versus the growing number of irresponsible and destructive off-highway vehicle users

2.2.3 Failed Attempts at Integrated Planning

The lack of integrated planning in the Eastern Slopes is not the result of a lack of interest or effort. Several attempts at integration have been made over the years and it is instructive to examine why none of them succeeded.²² What the initiatives had in common were good intentions and a commitment to the general principles of integrated planning. What caused them to eventually fail was a combination of:

- The absence of a suitable government decision-making infrastructure. Integration initiatives were forced to fit their square peg into a round hole. In particular, the proponents of regional integration had to work with provincial government departments that were pursuing narrowly defined and conflicting mandates in the absence of linkages needed for hierarchical decision-making.
- The absence of a statutory framework to define and support the process of land-use planning. Without clearly defined procedures, back-stopped by mechanisms to ensure compliance and accountability, Eastern Slopes planning initiatives were allowed to quietly fade into obscurity once difficulties were encountered.
- The absence of legislation and political will necessary to withstand challenges from the trade-offs inherent in integrated planning. Simply put, the strategies and plans that were developed for the Eastern Slopes had no teeth; they could be and eventually were circumvented or simply ignored.

The result of these failures is a continuation of incremental development along the Eastern Slopes and the inexorable decline of key indicators of environmental quality and quality of life for those who live in or use this area. This “death by a thousand cuts” is degrading one of Alberta’s premier ecological and cultural landscapes.

²¹ See: www.pekisko.ca

²² Kennett, 2002. *Integrated Resource Management in Alberta: Past, Present and Benchmarks for the Future* CIRL Occasional Paper #11 (Calgary: Canadian Institute of Resources Law), available at: www.cirl.ca/pdf/OP11Benchmarks.pdf.

3. Driving Decision-Making in the Wrong Direction

Why Alberta's Flawed Policy and Planning Framework is Failing Albertans

Alberta's framework for land and resource management provides the policy and planning context within which the government allocates land and resources (e.g., issuance of mineral rights) and conducts the review and regulation of projects and activities. Getting this framework right is critically important if we want the government's on the ground decisions to yield satisfactory results.

Unfortunately, as illustrated by the case studies, Alberta's current approach to land and resource management is designed to achieve the narrow objective of maximizing economic growth through resource development to the exclusion of other values. It also promotes incremental development while ignoring cumulative impacts. These characteristics are built into the policy and planning framework that currently guides decision-making on land and resource use.

3.1 Policy Context: The Growth Obsession and the Vacuum Around Cumulative Impacts

The Alberta government's overriding focus is on maximizing economic growth, under the assumption that if it gets this right, everything else will fall into place. As illustrated by the oil sands case study, this assumption is fundamentally flawed. Not all indicators of quality of life improve as a result of economic growth. Some, including many environmental indicators, have actually declined with increasing growth. In addition, for indicators that do respond positively, it is wrong to assume that if some is good, more is better. Like taking medicine, there is an optimal amount and too much can actually be toxic.

The government's fixation with a narrow definition of success goes hand-in-hand with a naive faith in the ability of market forces to produce socially optimum outcomes. While markets perform some roles extremely well, they fail to produce good results when significant costs are not taken into account. These costs may include the impacts of pollution and environmental degradation on common property resources (such as the global atmosphere or shared watersheds) and on individuals who are affected by pollution, land disturbance and other environmental impacts.



important land-use decisions.

The flip side of this coin is the failure of markets to account fully for environmental benefits, such as the environmental “goods and services” provided by natural capital. For example, the forests, grasslands and wetlands in the headwaters of Alberta's rivers play an important role in maintaining water quality, regulating runoff and recharging groundwater. These benefits, however, may not be reflected in the markets for timber and energy resources that drive

The negative effects of these substantive policy failures are amplified because Alberta's framework for policy development is fragmented along administrative lines, reflecting the narrow mandates of individual government departments and agencies. Government departments pursue growth mandates for their sectors in policy silos (e.g., energy, forestry, wildlife, recreation) that fail to recognize the implications for other sectors, land uses and environmental values on a shared land base.

Policy initiatives that are intended to look at the bigger picture and promote more integrated decision-making – such as the Alberta Forest Conservation Strategy and Alberta's Commitment to Sustainable Resource and Environmental Management – provide only general direction and have yielded disappointing results. The result has been a policy vacuum around cumulative environmental impacts, a problem that the Alberta government acknowledged in the general proposals for a new regulatory framework for managing cumulative impacts released in early October.²³

Moreover, despite the fact that the capacity of the land is finite, the basic philosophy continues to be that Albertans can have it all, reflecting the underlying growth mandate and the multiple use approach that continues to guide land and resource management. Key steps necessary for managing for multiple values, such as setting regional outcomes and limits and tackling associated trade-off decisions, are not specified in policy and, for reasons described below, are all but impossible to implement under the current system.

3.2 Aversion to Planning

The government's preoccupation with market-driven growth and its reluctance to recognize limits and trade-offs have produced an aversion to planning. The lack of integrated planning, particularly at a regional scale, is perhaps the most significant gap in Alberta's current framework for decision-making.

The Integrated Resource Planning process for Alberta's public lands was initiated in the 1970s with the Eastern Slopes Policy. In the 1990s, however, a combination of budget cuts and an anti-planning ideology led the government to dismantle this program and gut its planning capacity. This capacity has never been restored. Existing integrated resource plans cover only part of the public land base and are generally out of date. Furthermore, they rely on land-use zoning and multiple-use wish lists of activities that do not recognize ecological limits and the need to control the intensity of land and resource use.

The legal basis for integrated planning on Alberta's public lands has been a single section of the Public Lands Act that simply allows the minister to plan. The objectives and rules of the game



for planning are not set out in law and the plans themselves have no legal force. Alberta's disappointing experience with Integrated Resource Planning on public land shows the risks of procedural slippage and lack of accountability that come with an ad hoc and policy-based approach to planning.

On private land, municipal planning occurs under the Municipal Government Act (MGA) but the abolition of Regional Planning

²³ Alberta Environment, *Towards Environmental Sustainability: Proposed Regulatory Framework for Managing Environmental Cumulative Effects* (October 2007), available at http://www.environment.alberta.ca/documents/CEM_Framework.pdf.

Commissions in the 1990s has left a vacuum at the regional scale. While there are mechanisms for inter-municipal cooperation, the ability to plan at the landscape scale is limited by a lack of policy direction from the provincial government, the absence of regional planning institutions, and the lack of planning capacity in some municipal governments. The energy sector can also operate largely outside of municipal planning by virtue of a provision in the MGA that reverses the normal decision-making hierarchy and gives project approvals by the ERCB priority over municipal planning decisions.

The planning vacuum means that decision makers and Albertans in general have no way of setting objectives at the landscape scale or taking an integrated approach to managing land and resource uses. Mechanisms for identifying and managing the cumulative impacts of all users active in a given region simply do not exist.

A series of recent initiatives by the Alberta government suggest a growing recognition that this planning vacuum must be filled. Public and stakeholder input to the Land-Use Framework initiative has repeatedly identified this problem. The Alberta Water Council and other bodies established under the Water for Life strategy are considering how to implement watershed planning. The Alberta government's proposed regulatory framework for cumulative impacts management, which will be enabled through a new Environmental Sustainability



Act, appears to depend on a regional planning process to set objectives and develop strategies. Regional planning may also be an important issue in the multi-stakeholder process recently initiated by the Clean Air Strategic Alliance (CASA) to revise the Clean Air Strategy for Alberta and in other sectoral strategies that may be forthcoming, such as a Comprehensive Energy Strategy.

These current government initiatives, though well intended, may result in the proliferation of poorly integrated and ineffective planning processes.²⁴ The connection between the planning components of these initiatives and the Land-Use Framework has yet to be determined.

Convergence of these initiatives on a single, integrated planning process is essential, however, since it clearly makes no sense to develop parallel planning processes (e.g., under Water for Life and the Land-Use Framework) that treat impacts on land, air and water in isolation from each other when planning land and resource uses.

3.3 Fragmented and Incremental Decision-Making

The growth obsession, reliance on market forces without correcting for market failures, and an aversion to integrated planning translate directly into fragmentation and blind incrementalism at key decision points in land and resource management. On the ground decisions about land and resource management are necessarily incremental, looking at the allocation of land and resource rights and the approval of projects one at a time. Decision makers face inevitable pressures

²⁴ Droitsch, Kennett and Woynillowicz, 2008. *Curing environmental dis-integration: A prescription for integrating the Government of Alberta's Strategic Initiatives* (Pembina Institute).

within their departments and agencies to adopt a silo mentality that focuses on specific environmental media (air, land, water) and pursues narrow mandates without seeing the bigger picture. Alberta's current policy and planning framework cannot counter these tendencies because it lacks the capacity to define landscape-scale objectives and promote integrated decision-making.

Fragmented decision-making among departmental silos at each stage of decision-making is compounded by fragmentation among the stages. Instead of a logical progression from broad policy direction to decisions on specific land and resource uses, decision-making among stages often operates independently and sometimes at cross purposes. Linkages are often tenuous between policy, planning, the issuance of land and resource rights (such as mineral rights), and the review and regulation of individual projects.

Fragmentation among departmental silos and between stages of decision-making has serious consequences. Instead of making conscious choices designed to improve quality of life, decision makers proceed incrementally by focusing on individual sectors, activities and projects, hoping everything will somehow work out for the best in the end. The result, however, is a "tyranny of small decisions" where social and environmental outcomes are simply what happens, not what individuals or society as a whole want to happen. This problem is most acute when the impacts of our activities approach or exceed environmental thresholds or limits of acceptable cumulative impacts. The cumulative impacts of rapidly increasing activity overwhelm any efficiency gains or reduced impacts achieved at the project level.

This problem is pervasive in environmental management within Alberta and in other jurisdictions, with the oil sands again providing the best example. As overall production from oil sands increases, the intensity of greenhouse gas emissions or the amount of water consumed per unit of output can be reduced through incremental improvements to individual projects, but it does not guarantee reductions in total greenhouse gas emissions or the maintenance of water withdrawals to preserve instream flow. These measures cannot guarantee acceptable environmental results. Resource development may still contribute to the acceleration of climate change and the reduction of instream flow in rivers to below the threshold required to sustain aquatic ecosystems. Focusing on improving individual projects is not sufficient by itself because it ignores the need to set and achieve broader environmental objectives.



Alberta's sector-by-sector and project-by-project approach to decision-making may have been adequate in an era where land and resources appeared abundant and growth pressures were limited. But the premises underlying this approach are now evidently false. We cannot do everything, everywhere, all the time — choices and trade-offs are inevitable. We will not achieve satisfactory environmental and social outcomes by continuing to manage sectors and projects in isolation.

3.4 An illustration: Mineral Rights Leasing and Project Approval for Oil and Gas Development

The results of the narrow focus on economic growth and the structural inability to manage cumulative impacts are illustrated by the leasing of mineral rights and the approval of oil and gas projects in Alberta. There is no better or more significant example of how our current policy and planning framework yields blind incrementalism and the pursuit of a specific departmental mandate in decision-making about land and resource use.

The Department of Energy's decision to lease mineral rights is a critically important first step in oil and gas development. Leasing decisions grant private companies the right to explore for and develop publicly owned resources — often in exchange for significant sums of money.

However, oil and gas leases are offered through a competitive bidding process in response to requests by industry, without consideration of the cumulative environmental impacts of development and without public notification or consultation with affected landowners or Albertans in general.



When companies are ready to build the wells, mines, processing plants and other facilities needed to develop their mineral leases, they apply to an arm of the Department of Energy, the Alberta Energy and Resources Conservation Board (ERCB). The ERCB views its mandate as deciding how to develop the resource, not whether or when it should be developed. The ERCB is reluctant to second guess its own department's decision to issue the mineral lease when making its regulatory decisions, even

though the decision to lease mineral rights is made without considering cumulative impacts and without public input.

When the ERCB is called upon to decide if an individual well or facility should be allowed, it finds itself without guidance regarding overall land-use objectives, priorities for different land uses, and trade-offs among them. Without this guidance, the ERCB cannot determine if proposed projects will contribute to unacceptable cumulative impacts and it cannot address concerns raised by landowners, environmentalists and other interveners who argue that oil and gas development is inappropriate in their region or that the pace and intensity of that development is unacceptable.²⁵

Ironically, even Alberta's ability to deliver on the prevailing narrow definition of economic success may be at risk without attention to deficiencies at the rights issuance and project review stages — and to their root causes in a policy and planning framework that promotes short-term economic gain over sustainability and cannot manage cumulative impacts. At risk are efficiency and predictability at the resource allocation and regulatory stages — seen by industry as central to the so-called “Alberta Advantage.”

If the government does not evaluate economic, social and environmental values before making land and resource allocations, and if it does not take into account the resulting landscape-scale

²⁵ See, for example, EUB Decision 2000-17, p.10.

objectives when mineral rights are issued and projects reviewed, companies may increasingly find themselves holding oil and gas leases that they cannot develop due to local resistance. This occurred in September, 2007, for example, when public pressure led to the cancellation of permits for seismic testing under Marie Lake in Northern Alberta. If the credibility of agencies such as the ERCB continues to be widely questioned and industry begins to lose its “social licence” to operate, more frequent, controversial and litigious regulatory hearings can be expected.

4. A New Policy and Planning Framework

Fixing Alberta's system for land and resource management will be a major undertaking. Simply tweaking existing decision-making processes will not be sufficient. To get the fundamentals right for a new policy and planning framework, there is an urgent need to identify guiding principles and to fill the planning vacuum.

4.1 Guiding Principles

The new framework for land and resource management should allow Albertans to define collectively their desired outcomes and make decisions about priorities and trade-offs, recognizing the full range of economic, social and environmental values and respecting environmental limits. It must accept that we can't do everything, everywhere, all the time. It should also set in place mechanisms for guiding activities to ensure that our agreed upon outcomes are achieved. The end result should be a shift from reactive and fragmented decision-making on individual resource dispositions and projects towards proactive and integrated landscape management. These concepts are captured in the following five guiding principles for the policy and planning framework:

1. **Ensure Genuine Progress.** Improving overall quality of life and ensuring long-term environmental, social and economic sustainability (the triple bottom line) should be the primary policy objectives for land and resource management, replacing the current focus on maximizing economic growth as defined by narrow indicators such as gross domestic product.
2. **Public Engagement to Define Genuine Progress Indicators.** Quality of life should be defined in terms of clear and measurable desired outcomes that reflect the full range of values and interests of Albertans. The processes used to determine these desired outcomes should be open and transparent with procedural guarantees for effective public participation and mechanisms for accountability.
3. **Our Land Base is Finite.** It is not possible to achieve all desired outcomes in all places all the time. Therefore, the policy and planning framework should include mechanisms for setting priorities, defining limits of acceptable impacts, and making decisions about trade-offs.
4. **Landscape Scale Management Across Sectors.** The policy and planning framework should enable Albertans to achieve landscape-scale objectives and manage cumulative impacts when multiple activities occur on the same landscape. Promoting integrated decision-making across different types of land uses by breaking down sectoral and departmental silos is paramount. The policy and planning framework should also include the legal and institutional linkages needed to guide specific decisions on land and resource allocation and to review and regulate individual projects and activities.
5. **Market Failures Corrected.** Reliance on market forces should be tempered by the recognition of market failures and the need for public policy to correct these failures —



notably the failure to account for the externalized environmental and social costs of development and ignoring or under-valuing non-market values, including the value of Alberta's natural capital.

4.2 Filling the Planning Vacuum

The most important change needed to Alberta's current system for land and resource management is the addition of effective planning that accounts for all types of land uses and land-use values when setting landscape or regional scale objectives. A planning model, such as that used for municipal planning in Alberta and for regional planning in many other jurisdictions, should be established by statute in Alberta. The Alberta government should commit to using these regional plans to guide all land and resource allocation decisions, including the issuance of mineral rights, timber quotas and other resource rights, and the approval of individual projects and activities such as energy facilities and infrastructure. To achieve this planning-based system of decision-making, plans must be legally binding. Only then will land-use planning occupy a central role in a decision-making hierarchy and actually influence specific decisions on land and resource use.



Integrated and effective regional planning of this type would put Alberta back on a path that it abandoned in the 1990s. It would represent a significant change from the status quo, but planning is not a foreign concept to most Albertans. The municipal planning model is well established in Alberta and elsewhere and its basic principles and processes are readily adaptable to land use across the province (see text box).

Making plans legally binding would not impose undue rigidity on the system. The plans themselves would not be included in statutes passed by the provincial legislature. The planning process should have mechanisms for updating plans on a regular basis and in response to significant new information or major changes in public values. Additional flexibility mechanisms can also be included to deal with minor non-conforming activities. This process of adaptive planning and management will therefore not depend on new legislation to amend existing plans. Rather, the planning legislation should specify that approved plans are binding and set out the legally-defined process for revising those plans and dealing with minor variance issues.

Placing planning at the heart of a new framework for land and resource management would align Alberta with other jurisdictions that have faced similar growth pressures and have experienced landscape transformation that jeopardizes important values and long-term sustainability (see text box). Alberta currently lags far behind many of these other jurisdictions.²⁶

²⁶ UMA / AECOM, Alberta Land Use Framework, Jurisdictional Review of Land Use and Land Management Policy, Planning and Decision Making Focus Area, August 2007.

“There is a clear correlation between population and level of jurisdictional control over land use. The larger jurisdictions have enacted strong legislation for land use management. If the pattern is followed, Alberta is poised to move into the category of jurisdictions that have seen fit to take a stronger and more active role in land use management. The need may accelerate given the province’s strong growth dynamic and resulting land use conflicts.”

UMA / AECOM, Alberta Land Use Framework, Jurisdictional Review of Land Use and Land Management Policy, Planning and Decision Making Focus Area, August 2007, p. 9.

Planning should be central to the new framework because it provides the key integrative mechanism that is missing in our current system of fragmented decision-making. Filling this gap will improve the capacity of decision makers to translate broad policy direction into on the ground decisions. Integrated regional planning will also help break down sectoral silos by bringing together all significant sectors and interests to consider the full range of land-use values and to confront the inevitable trade-offs directly.

Planning requires, by definition, a forward-looking orientation that can focus decision-making on the long-term sustainability of land and resource uses, ecological processes and communities. It can therefore counter both the “tyranny of small decisions” that results from project-by-project incrementalism and the tendency to define objectives narrowly in terms of short-term economic gain while ignoring other values that are central to quality of life and environmental protection over the long term.

A well-designed and well-funded planning process will drive systematic data collection and scenario modeling so that decision makers and individual Albertans can better understand current environmental, social and economic conditions, existing patterns of land use, and the likely effects of future development. A properly structured planning process provides an opportunity for direct input from stakeholder groups and the public at a stage in decision-making where there is significant scope to establish objectives and priorities regarding land and resource use.

Integrated regional planning can increase predictability for land and resource managers and for those affected by their decisions. It should also increase efficiency at subsequent stages of decision-making, providing guidance for lower level plans (e.g., municipal, sub-regional and sectoral plans) and for resource allocation and project review decisions. Addressing big picture priorities and trade-offs at the policy and planning levels should eliminate, or at least reduce, the likelihood that these issues will become a focus during environmental assessment and regulatory processes that are ill-equipped to deal with them.

Alberta is larger than many countries in the world, and given different regional values and priorities, it is impractical to plan everything at the provincial scale. The framework must have both provincial and regional components. The need to integrate decision-making at the appropriate scale implies a shift in planning with the landscape as the unit of concern, in place of planning by specific environmental medium (e.g., water) or sector (e.g., oil and gas).

The Model of Urban Planning

Despite the Alberta government's aversion in recent decades to integrated land-use planning outside urban areas, urban planning is accepted without question in Alberta's cities. Of course, the results of urban planning are far from perfect, especially when the pace of economic and population growth exceeds society's ability to manage change and when the pressures for incremental development seem irresistible. Urban sprawl, traffic congestion and declining air quality in our cities can all be traced back to deficiencies in planning. Nonetheless, it is important to remember that the solution to those problems is better planning, not the abandonment of planning.



Albertans use urban planning to anticipate and address the cumulative impacts of incremental development (e.g., population growth and the spread of residential development put pressure on a city's roads and other transportation infrastructure, water supply, sewage treatment system etc.). Albertans also plan because intense human activity leads to spill-over effects among neighbouring land uses that cannot be efficiently or fairly addressed through reactive and ad hoc responses to individual problems as they arise.

As a result, most Albertans take it for granted that municipal governments and planners, in consultation with citizens and stakeholder groups, will think ahead about infrastructure needs, green space, transportation, population density, community character, zoning restrictions on incompatible land uses, and a host of other issues that are dealt with in an integrated way through municipal planning. Few Albertans would argue that urban plans should be abandoned and the future of our cities determined by a series of ad hoc and uncoordinated decisions made primarily in response to market forces and opportunities for economic gain. However, this is precisely the situation that prevails across much of Alberta's non-urban landscapes.

The same problems that drive urban planning — cumulative impacts and land-use conflicts — are now pervasive across Alberta. Without an efficient and inclusive process for integrated land-use planning, however, we are incapable of addressing them.

5. Key Elements of the Blueprint

The Alberta government's Land-Use Framework (LUF) initiative, along with elements of the Water for Life Strategy and the proposed cumulative effects regulatory framework (Environmental Sustainability Act), provide an opportunity to design the policy and planning framework that Albertans need to achieve improved quality of life and long-term sustainability. The LUF will not, of course, cover the full range of issues that are relevant to these broad objectives. Nonetheless, it has a key role to play given the importance of decisions on resource development and land use for our economic, social and environmental wellbeing.

The remaining sections of this paper present a blueprint for Alberta's new Land-Use Framework. This blueprint consists of 15 elements, organized under the following three themes: (1) policy foundation and legal structure; (2) planning process; and (3) cumulative impacts management.



5.1 Policy Foundation and Legal Structure

5.1.1 Clear Commitment to Major Policy Change by the Premier and Cabinet

Alberta's new Land-Use Framework must start with clear commitments from the premier and Cabinet to a new outcome-based approach to land and resource management directed toward:

1. Maintaining and improving quality of life and ensuring long-term sustainability, rather than focusing on maximizing economic growth as the guiding principle of land and resource management.
2. Establishing the capacity to achieve landscape-scale objectives and manage cumulative environmental impacts through an integrated system of policy, planning and decision-making.

These commitments must come from the highest levels of government because the Land-Use Framework requires major changes to the departmental mandates and decision-making processes that govern land and resource use in Alberta. Past experience has shown clearly that efforts to promote integrated resource management, regional land-use strategies or policy frameworks that are led by one or more individual departments run a high risk of being vetoed later on by the Minister of Energy, Cabinet or the premier if the initiatives appear likely to change the government's business as usual approach to land use and resource development.

5.1.2 Establish Integrated Regional Planning

The centrepiece of the new Land-Use Framework should be an umbrella regional planning process that is implemented across Alberta. Regional planning must be designed to account for the full range of land-use values and interests and to integrate all major sectors and land uses when setting landscape-scale objectives. The Land-Use Framework should provide a roadmap for combining the regional planning elements that are emerging from the Water for Life Strategy and the proposed cumulative effects regulatory framework (Environmental Sustainability Act)

into a single planning process that provides the key integrative mechanism to translate the broader strategic objectives of these initiatives into specific land-use priorities, limits and trade-offs on regional landscapes.

Impacts of human activities on land, water and air cannot be treated within separate planning silos. For example, managing watersheds for water quality and quantity inevitably requires attention to land uses that often have important impacts on land, air quality and the carbon balance (through either carbon emissions or sequestration). The integrated regional planning system established by the Land-Use Framework will also have to include clear direction on the establishment of regional planning areas and the internal governance structure for planning bodies.

5.1.3 Define Roles and Responsibilities for Cabinet and Regional Planning Bodies

The new Land-Use Framework should clearly define the roles and responsibilities of the provincial government in setting the overall direction for regional planning and for the planning bodies that will engage stakeholders and individual Albertans in setting regional objectives and priorities. A balance between “top down” and “bottom up” planning models is essential.

Cabinet is ultimately responsible for providing political leadership and accountability at the highest level and for setting broad policy on land and resource use. Cabinet must also be able to infuse provincial priorities into the planning process when regional planning affects important provincial (or national) values and interests or has spill-over effects on a common resource, such as water, air or wildlife, that crosses regional boundaries. For example, the establishment of major transportation corridors and the protection of endangered species and provincially significant natural areas raise some issues that should not be left to the exclusive discretion of regional planners and local decision makers, although details about on the ground implementation are certainly appropriate matters for regional planning.

It is also essential, however, that regional planning reflects the particular values, priorities and interests of residents, land-users and stakeholders within each region. Regional planning bodies should be responsible for drafting regional plans on the basis of input from individual Albertans and stakeholder groups, subject to the policy direction and terms of reference issued by Cabinet. Regional planning bodies should be tasked with ensuring effective public and stakeholder participation, including participation from provincial and national stakeholder groups, when setting place-based objectives for land and resource use.

5.1.4 Make Plans Legally Binding

The new Land-Use Framework should state clearly that approved regional land-use plans will be legally binding on lower level plans, such as sub-regional, sectoral or municipal plans, and on decisions about land and resource allocations and individual projects. Planning requires teeth in order to be effective.

Legally binding planning would be a particularly significant change for the energy sector, which currently operates with virtual immunity from planning constraints. The government’s commitment in this respect should therefore be unequivocal. The place of regional planning in the decision-making hierarchy will require modifications to the Department of Energy’s process for issuing mineral rights and the mandate of the Alberta Energy Resources Conservation Board

(ERCB). Decisions to lease subsurface resources and approve energy projects must be consistent with the objectives, priorities and limits established by the regional plan.

Giving statutory force to regional land-use plans does not mean that they are written in stone for all time. Any sophisticated planning system is iterative, adaptive and responsive to changing circumstances. Flexibility mechanisms should be included, such as procedures for minor variance and for plan modification when circumstances change significantly. However, these mechanisms should ensure transparency, due process and public deliberation. They should not allow planning decisions to be undermined through highly discretionary processes that permit — and thereby encourage — ad hoc changes in response to short-term economic and political pressures.

5.1.5 Define the Relationship Between Regional and Municipal Planning

The new Land-Use Framework must define the relationship of the new regional planning bodies with existing municipal governments and planning processes established under the Municipal Government Act. The Land-Use Framework should not either down-load planning responsibilities to municipal governments without adequate policy direction and resources or arbitrarily impose a new planning bureaucracy above municipal governments.

Integrated regional planning should not supplant municipal planning on issues within municipal jurisdiction and competence. However, as noted above, there is a need for overarching policy and planning direction from the provincial government on issues that affect important provincial or national interests or give rise to inter-regional spillover effects. Furthermore, municipal governments would benefit from provincial policy direction to make it easier to resist pressure for incremental decisions that, collectively, undermine the broader public interest. For example, the protection of agricultural lands and wetlands from fragmentation and development through subdivision and conversion to other uses may require a provincial backstop to municipal decision-making.

5.1.6 Streamline Existing Decision-Making

The new Land-Use Framework should identify opportunities for streamlining existing decision-making processes and for eliminating or consolidating statutes and regulations. Integrated regional planning should not simply be another layer in an already complex system. Getting the fundamentals of land-use policy and planning in place provides opportunities for increasing both efficiency and predictability for all parties involved in land-use decisions. It also allows for intelligent decisions about which issues are most appropriately addressed at provincial and regional scales and which ones are best resolved through lower-level decisions (e.g., sub-regional or sectoral planning, project-specific review and regulation, etc.)

An important precedent is New Zealand's Resource Management Act, enacted in 1991 to establish an integrated, planning-based framework for land and resource management explicitly guided by the principle of sustainable management.²⁷ It replaced 75 other statutes that had accumulated over time to address specific issues and sectors. In fact, improving the efficiency of decision-making and rationalizing an overly complex legislative framework were two key objectives of New Zealand's Resource Management Act.

²⁷ The Right Honourable Sir Geoffrey Palmer, "Sustainability – New Zealand's Resource Management Legislation" in Ross and Saunders, eds., *Growing Demands on a Shrinking Heritage: Managing Resource-Use Conflicts*, (Calgary, Canadian Institute of Resources Law, 1992), pp. 408-428.

Improved efficiency is also achievable in Alberta. For example, the Alberta government's initial discussion paper on its proposed regulatory framework for managing cumulative impacts indicates that improved regional planning may lead to streamlined environmental impact assessments.²⁸

5.1.7 Enact a New Planning Law

The new Land-Use Framework should be implemented through a law that includes a clear statement of principles and objectives and establishes the legal basis for regional land-use planning. Planning must have legal force in order to be binding on subsequent decision makers. Amendments to other laws will also be required to achieve this objective. The new planning law should also establish the rules of the game for planning, including the process and governance structure for regional planning bodies and guarantees of effective public participation.

The enactment of flagship legislation for the Land-Use Framework would also provide formal opportunities for individual Albertans, stakeholder groups, independent experts and other levels of government (e.g., municipal, First Nation and federal) to engage directly in designing the new system. The significant changes that are needed to fix Alberta's current system for land and resource management warrant the public debate and political profile that can only be achieved through new legislation. Since the enactment of new planning legislation and the development of integrated regional plans may take some time, urgent land-use issues in Alberta could be addressed through expedited planning in regional "hot spots" and other interim measures using existing legal and policy instruments.

5.2 Planning Process

5.2.1 Ensure that Planning Meets the Highest Standards of Good Process

The new Land-Use Framework should describe very clearly the rules of the game for the planning process. This process will only be effective and credible if it meets the highest standards of fairness, transparency, predictability, accountability, participatory decision-making, and equal access to information. Legislation establishing the planning process should include clear objectives and timelines to ensure the timely completion and periodic review of plans. Planning should be "evergreen" — monitoring and information gathering in support of planning should be ongoing.

The planning process should be participatory and inclusive, incorporating public and stakeholder input that reflects the full range of values and interests affected by land-use decisions. All key stakeholder groups should participate on an equal footing and funding should be provided to enable public interest and citizen organizations to contribute effectively. While Aboriginal involvement should be included within multi-stakeholder forums to the extent that Aboriginal people wish to participate, separate consultation processes and government to government mechanisms may be required as part of the Land-Use Framework.

The Land-Use Framework should also include a rapid and transparent review and approval process for draft plans and recommendations from regional planning processes, with an

²⁸ Alberta Environment, *Towards Environmental Sustainability: Proposed Regulatory Framework for Managing Environmental Cumulative Effects* (October 2007) p. 18, available at http://www.environment.alberta.ca/documents/CEM_Framework.pdf.

undertaking by government to approve consensus plans. The results of planning processes cannot be left in limbo or arbitrarily ignored by government.

5.2.2 Base Planning on Sound Science and Good Information

The new Land-Use Framework should provide regional planning bodies with the funding, information and autonomy to ensure that integrated regional planning is informed by the best available independent science and by cutting-edge planning tools (e.g., ALCES® cumulative impacts modeling, spatial GIS tools, etc.). Access to the data required for effective land-use planning should not be controlled by government or industrial users and this information should not be subject to political vetting. All participants should have equal access to relevant information and to the independent expertise needed to interpret that information.

Sound and independent science should assist proper conversations around land-use scenarios and the analysis of trade-offs. A commitment to providing the best available independent science would help avoid “planning by opinion” that relies on a limited information base and is vulnerable to manipulation by stakeholder groups with privileged access to information and resources.

5.2.3 Ensure Effective Monitoring and Enforcement

The new Land-Use Framework should include effective mechanisms to monitor compliance with plans and take enforcement action to address non-conforming land uses and decisions. Some of these mechanisms may already be in place through existing regulatory processes. Responsibility for determining and enforcing compliance with plans could rest with regional planning bodies or it could be given to a separate administrative tribunal or auditor. A key role in monitoring and enforcement will be played by the regulatory bodies charged with ensuring compliance with approvals, since these approvals will presumably be contingent on the project or activity in question being compliant with the applicable plan.

Accountability should be strengthened by providing legal and administrative means for stakeholder groups and individual citizens to challenge lower level planning and land-use decisions on the grounds that they do not comply with the regional plan. As with any appeal process, this mechanism can be designed to limit the potential for abuse of process, while providing an essential public check on decision-making.

Pressure on political and administrative decision makers to compromise the broader public interest in favour of short-term political and economic expediency is sometimes intense. Unless planning in Alberta has effective oversight and teeth, pressures to discount and ignore it will be difficult to resist.

5.2.4 Establish a New Planning Agency

The integrated regional planning at the heart of Alberta’s new Land-Use Framework should be led by a new and separately resourced agency or commission. One option is an arm’s length and high profile provincial planning commission that is created by statute, reports directly to the premier or to Cabinet, and is led by a well respected individual who has credibility with a broad spectrum of stakeholder groups. Another option is an administrative agency, perhaps linked to the Executive Council Office (the secretariat to Cabinet) or reporting directly to the premier.

Whatever approach is taken, the planning agency should have the mandate, the clout within government and the independence from existing line departments that will be needed to drive

and support regional planning processes. The new planning agency should also provide the nexus for two-way communication between the Cabinet and the regional planning bodies. Its specific functions should include:

- Serving as a repository for planning expertise in areas such as information management, planning tools and methodology, multi-stakeholder processes and public consultation;
- Facilitating efficient and effective regional processes by consolidating and applying the lessons learned from individual planning processes;
- Acting as a champion for planning within government, notably by promoting significant changes in organizational culture and decision-making processes as line departments and agencies adjust to a new way of doing business;
- Ensuring the transmission of policy direction from Cabinet to the regional planning bodies through the preparation of planning guidelines and terms of reference (on instructions from Cabinet);
- Reviewing proposed regional plans and working with planning bodies to ensure that they meet the substantive and procedural requirements for consideration by Cabinet;
- Providing a vehicle for input from regional planning bodies into Cabinet decision-making; and
- Securing funding for regional planning.

It is important to be clear that the function of this new planning agency would be to support regional planning and provide a conduit for the higher-level policy direction and the specific terms of reference that will guide regional planning. This agency would not, however, be an all-powerful land-use Czar that would centralize planning authority, dictate planning outcomes to regional bodies or usurp political accountability.

5.2.5 Provide Financial and Human Resources to Implement Regional Planning

The new Land-Use Framework should include clear direction and substantial additional funding to enhance planning capacity within the Alberta government and to secure access to leading independent planning experts in Alberta, Canada and internationally. The funding cuts of the 1990s gutted government planning departments and the Alberta government is far behind other jurisdictions in planning capacity and expertise.

5.3 Cumulative Impact Management

5.3.1 Ensure Flexibility and Fairness for Existing Land and Resource Dispositions

The new Land-Use Framework should include mechanisms that allow for both flexibility and fairness regarding existing land and resource dispositions in regions where a business as usual approach to these dispositions would unduly restrict planning options. These mechanisms could include land swaps, compensation, market mechanisms for trading rights, and adjustments to the terms and conditions governing dispositions such as mineral rights.

The Land-Use Framework will have to address the legacy of incremental land and resource allocations that have been issued without considering cumulative impacts. Past experience with

land-use planning in Alberta — notably protected areas designations though Special Places 2000 — shows clearly that planning processes can be hamstrung by an inflexible commitment to honouring all existing dispositions. From the oil sands in the north to the southern East Slopes, mineral rights, forestry rights, water rights and other resource dispositions may have to be adjusted in order to achieve the objectives set through regional plans.

5.3.2 Use Thresholds and Limits to Define Objectives for Managing Cumulative Impacts

The principle of outcome-based management in the new Land-Use Framework should be implemented by using quantitative thresholds and regulatory limits that define the acceptable amount and intensity of development that is consistent with meeting the environmental, economic and social objectives specified in the plans. Learning to live within environmental limits is perhaps the greatest challenge facing Albertans, Canadians and the human race as a whole. This commitment to establishing an environmental bottom line in the form of limits on total impact is a significant change from previous planning in Alberta and is essential given the intense development pressures. In the past, regional planning for Alberta's public lands has largely consisted of limited zoning according to acceptable uses. This approach is inadequate where the extent and intensity of activity are major concerns.

5.3.3 Establish Interim Measures to Allow Effective Planning in Priority Areas

The new Land-Use Framework should specify interim measures to address intense land-use conflicts and maintain planning options in areas of the province where important values are under immediate threat. These measures should include recognition of planning regions at imminent risk and implementation of temporary moratoria on new land and resource dispositions and, in some instances, new project or subdivision approvals until regional planning has been completed. This approach is needed in regions where:

- development pressures are particularly intense;
- important land-use values may be compromised and options foreclosed by development; or
- a development rush may be triggered by parties seeking to secure land and resource rights and project approvals before the finalization of a plan.

Interim measures would help planning bodies with the problem of shooting at a moving target in areas where patterns of land use are rapidly changing. They can also avoid the trap of creating incentives for parties interested in the status quo to drag out the planning process while proceeding full speed with development approvals. Temporary moratoria are essential in some circumstances because the planning process can be severely undermined when the government leases mineral rights or approves projects in areas that are actively being considered by regional planning bodies as priority areas for special management or protection.

5.3.4 Provide a Management Toolbox to Ensure that Activity and Impact Levels Remain Within Specified Limits

Implementation of Alberta's new Land-Use Framework will require tools to ensure that the thresholds and limits identified through planning are respected by the multitude of individual decisions regarding land and resource use. Options include regulatory and market-based instruments and improved decision-making processes for allocating land and resources and for

reviewing proposed projects and activities. Available tools include tradable emissions or disturbance rights, environmental offsets, pricing (or taxing) mechanisms, regulatory standards, codes of practice, and improved operational planning and coordination among land and resource users. Alberta can draw on experience in other jurisdictions with many of these tools.

New and improved tools are essential because simply setting landscape-scale objectives through planning will not be enough to manage cumulative impacts. Alberta's land-use framework should provide clear direction on how the government will fill the toolbox with the tools that are needed to translate broad landscape-scale objectives into specific management thresholds and limits on activity and then to ensure that the cumulative impacts of multiple activities are consistent with these limits.

5.4 Summary

This blueprint describes the key elements of a new policy and planning framework for land and resource management in Alberta. It provides a basis for evaluating the Government of Alberta's proposal for a new Land-Use Framework that is expected in 2008.

The starting point is the policy foundation and legal structure. A clear commitment by the Premier and Cabinet to major policy change is essential. Significant changes to the structure of decision-making are also necessary. In particular, integrated regional planning should be at the heart of the new Land-Use Framework. This planning process will require well defined roles for Cabinet and regional planning bodies and plans should be legally binding on subsequent decision makers. Determining the relationship between regional and municipal planning is important when establishing this decision-making hierarchy. Opportunities for streamlining existing decision making should also be explored. Implementing these significant changes will require the enactment of a new planning law, along with amendments to other legislation.

The Land-Use Framework should also include details on the planning process. That process should meet the highest standards of fairness, transparency, predictability, accountability, participatory decision-making and equal access to information. Planning should be based on sound science and good information and should be supported by effective monitoring and enforcement. A new planning agency and the provision of significant financial and human resources will be needed to make this process work.



Finally, the Land-Use Framework must be designed to manage cumulative impacts. It should include mechanisms to ensure both flexibility and fairness for existing land and resource dispositions. Thresholds and limits should be used to define objectives for managing cumulative impacts. Interim measures will also be needed to address land-use conflicts and maintain planning options in areas of the province where important land-use values are under immediate threat. A management toolbox will also be needed to manage the multitude of decisions

about land and resource use in line with objectives and limits defined at the policy and planning levels.

6. Conclusion

Stakeholder and public consultations conducted by the Government of Alberta have identified a broad consensus that major changes are needed in Alberta's current system for land and resource management. The status quo is clearly no longer acceptable. A common theme is the need to address the systemic problems identified earlier in this paper: the narrow definition of success and the entrenched fragmentation of decision-making processes that result in our structural inability to manage cumulative impacts by setting and achieving landscape-scale objectives.

“There is a clear and emphatic expectation of GoA leadership on the land-use policy file.”

Summary Report on the Provincial Land-Use Framework Initiative Cross-sector Forum, Red Deer –
December 4 to 6, 2006, p. 15.

As Albert Einstein remarked, “The significant problems we face cannot be solved at the same level of thinking we were at when we created them.” This blueprint for Alberta's Land-Use Framework describes key attributes of the planning-based system that is needed to take us to a new level of thinking about the management of land and resources – and to achieve the quantum leap of putting that new thinking into practice.

