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Kristensen, John

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BEYOND BANFF: CHANGING PERSPECTIVES ON THE CONSERVATION MANDATE ON ALBERTA'S EAST SLOPES

John Kristensen

Retired Assistant Deputy Minister
Alberta Parks

23324 Township Road 515 Sherwood Park, Alberta T8B 1L1

Phone: 780-467-1432

e-mail: johnsharon.kristensen@gmail.com

Abstract:

Since the late 1700s and early 1880s, people have marveled at the breathtaking landscapes and the amazing array of flora and fauna in the Rocky Mountains and foothills of the Eastern Slopes. These natural values have put the Eastern Slopes on the world map as a place to visit and experience the wilderness. Since the early 1900s, government documents have been clear that watershed protection is the highest priority for this area. The Eastern Slopes include an abundance of natural resources: water, fish, wildlife, forests, other vegetation, rangeland, natural gas, oil, coal and other minerals. These natural resources are all in demand to various extents by the public, the private sector and governments. Pressures associated with the gas, oil and forestry industries within the Eastern Slopes have caused significant land use conflicts among the many stakeholders, as they have attempted to balance industrial development with public recreation, a growing tourism sector and conservation of the area's rich natural resources through multiple land use strategies. Some of the successes and failures are discussed, and recommendations are presented to enhance the ecosystem-based Integrated Resource Management of the area, where conservation principles are respected.

BEYOND BANFF: CHANGING PERSPECTIVES ON THE CONSERVATION MANDATE ON ALBERTA'S EAST SLOPES

John Kristensen

Introduction:

When I was invited to present a paper on this topic, I accepted because my family and I have camped, hiked, fished and photographed many parts of Alberta's Eastern Slopes since 1960; and, I had the profound pleasure and honour to work in the Alberta Parks and Protected Areas Division and see first hand the successes and challenges in conserving the Eastern Slopes.

The Eastern Slopes, consisting of the Rocky Mountains and associated foothills, are Canada's and Alberta's icons of wilderness, stunning landscapes, and amazing flora and fauna representative of the Rocky Mountain Natural Region and a major portion of the Foothills Natural Region. These natural values have resulted in the Eastern Slopes also becoming iconic within the Alberta, Canadian and international tourism industries.

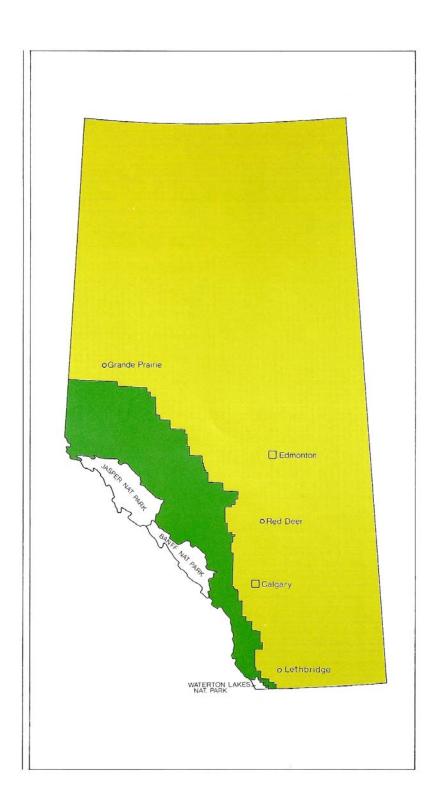
Much has been written about the national parks within Alberta's Rocky Mountains: Banff, Jasper and Waterton Lakes. Significantly less has been written about the Rocky Mountains and foothills adjacent to these national parks, not because they are less significant, but because places like "Banff", "Jasper" and "Lake Louise" have become more common elements of the tourism lexicon.

The Eastern Slopes, for purposes of this paper, lie within Alberta east of the Continental Divide, from the Montana border in the south to the British Columbia border west-southwest of the City of Grande Prairie in the north. They include those parts of the Rocky Mountains and associated foothills within Alberta that lie outside Banff, Jasper and Waterton Lakes National Parks (Map 1), and comprise an area of about 90,000 km².

The Eastern Slopes include an abundance of renewable and non-renewable natural resources: world-class landscapes, water, fish, wildlife, forests, other vegetation, rangeland, natural gas, oil, coal and other minerals. These natural resources are all in demand to various extents by the different publics and the private sector, and as a result are of critical importance to the primary manager of the resources, the Government of Alberta.

Pressures associated with the forestry, oil and gas industries along the Eastern Slopes between 1968 and the present have brought the public, industry and governments together in an attempt to balance industrial development with public recreation, a growing tourism sector and conservation of the area's rich natural resources through multiple land use strategies. There have been some successes. There have also been some failures and, as with any attempts to balance a variety of uses on the landscape, there is most certainly room for improvement.

Map 1
The Alberta
Eastern Slopes



This paper will focus on the conservation-related elements of land use primarily on Alberta public lands within the Eastern Slopes since 1968, the year of *The Canadian National Parks: Today and Tomorrow Conference*. Since this is a parks conference, the paper will highlight conservation primarily from a parks perspective.

The 1968 Conference:

The conference organizers asked that I use J. G. Nelson's 1968 paper, *Man and Landscape Change in Banff National Park: A National Park Problem in Perspective*, as a bit of a touchstone, and to compare conservation challenges that he pointed out in his paper with those in the Eastern Slopes outside Banff and the other Rocky Mountain national parks. Subsequent to the 1968 *The Canadian National Parks: Today and Tomorrow Conference*, J. G. Nelson edited *Canadian Parks in Perspective*, and in his introduction expanded his perspective somewhat to reflect the following conservation challenges and recommendations expressed in many other papers presented at the 1968 conference:

- An uneasy relationship exists between protection, scientific research and recreation within national parks.
- Canada's national parks are not "unspoiled" as many people would like to believe.
- Significant land use conflicts exist between those types of recreation that require little or no facility development and those that require major facility development.
- Through land use zoning, a variety of land uses could be permitted within national parks. The danger is that zones can be changed under pressure from the commercial sector.
- When making land use decisions, greater weight should be placed on providing the truly wilderness experiences because these are often life-altering and often transcend the value of many other activities that can be undertaken more frequently.
- Do not establish any more towns, service centres or major facility developments within national parks; these should be provided outside parks.
- Economic benefit studies of national parks would be helpful, but must be balanced with due attention to aesthetics and other "intangibles".
- Ecological and historical aspects of landscape should be taken into account more often when making land use decisions.
- Develop an inventory of public lands of outstanding scenic, biological, geological, archaeological and comparable significance, with the intention of expanding the national park system.
- New types of public and private land are desirable to address the growing need for land for recreation, conservation, research and related purposes.
- Improve interpretive programs and educational potential in and about national parks.
- Borrow, from other countries, good ideas about developing and managing national and provincial parks.
- Parks communication and joint management need to improve between the federal and provincial governments.
- A more integrated system of parks and public reserves needs to be developed across Canada.
- Procedures for acquiring additional lands for national, provincial and urban parks need to improve.

- There is a need for a more vigorous and comprehensive research program relating to national parks and other public lands.
- Provide greater opportunities for citizen involvement in land use planning and decision making.
- Problems that exist with our national parks system are interconnected with the many other concerns about compromises to our natural environment.

Land Use Planning in the Eastern Slopes:

History:

Although the temporal focus of this paper is from 1968 to the present, it is necessary to consider the history of land use in the Eastern Slopes before 1968 in order to understand the more recent land use context. Following establishment of Banff National Park in 1885, Waterton Lakes National Park in 1895 and Jasper National Park in 1907 by the federal government, primary ownership and management responsibilities for the remainder of the Eastern Slopes were transferred from the federal government to the Alberta government in 1930, along with most other Crown lands in Alberta, pursuant to the *Alberta Natural Resources Act*, also known as the Natural Resources Transfer Agreement.

Between 1948 and 1973, the joint federal-provincial Eastern Rockies Forest Conservation Board oversaw watershed management and planning in the Eastern Slopes which were clearly recognized as containing important headwaters for the three Prairie Provinces. Guidelines and priorities for the management of renewable and non-renewable resources in the Eastern Slopes were based on the agreed-upon goal and need to optimize water quality, yield and flow regime.

Establishment of the so-called Green Area in 1948 by the Alberta Government provided further policy direction for management which prohibited intensive agriculture and disperse settlement on Crown lands within the Eastern Slopes. By the late 1960s, the Green Area was managed for multiple purposes including watershed protection; recreation; fish and wildlife protection; domestic grazing; timber production; and gas, oil and coal development. The Rocky Mountain Forest Reserve was established in 1964 to conserve forests and other vegetation and maintain conditions favourable to optimum water supply and quality.

It is thus important to note that, by the mid-1900s, the primary importance of the Eastern Slopes was deemed by both the federal and provincial governments to be conservation of headwaters, and rightfully so considering that headwaters originating in the Eastern Slopes determine both quantity and quality of water in major rivers that flow through Alberta, Saskatchewan, Manitoba and the Northwest Territories. In fact, even earlier in the 1920s, federal government brochures indicated that, within the Rocky Mountain National Forest, watershed protection, by necessity, may be far more important than timber production. Considering that forests are critical to controlling run off and supplying downstream water needs, this certainly made sense. As well, it is worthy to note that the words "conserve", "protect", "maintain" and their derivatives appear throughout these earlier documents, agreements and policies.

Natural resource extraction through timber harvesting and the development of oil, natural gas, coal and other minerals began to intensify in the 1940s, and by the late 1960s the Alberta public was expressing serious concerns about the rapidly escalating and relatively unchecked industrial development of the Eastern Slopes. Pressures for land and resource use, conflicts in land allocation and a rising concern for the protection of environmental quality and condition of this extremely important region for a number of major watersheds highlighted the need for an integrated land use policy and a comprehensive plan for management of the Eastern Slopes.

1968 to the Present:

In 1973, a moratorium was placed on further industrial development of the Eastern Slopes while the Environment Conservation Authority conducted hearings into land use and resource development in the area. The public was invited to present its views and concerns. Written briefs presented at the hearings and public polling strongly emphasized the need to protect the Eastern Slopes for watershed and public recreation priorities. With respect to providing opportunities for citizen involvement in land use planning, as recommended by Nelson (1970), the Environment Conservation Authority certainly did solicit public input. The over 200 recommendations submitted by the Environment Conservation Authority to the Alberta Government in 1974 stressed the need for an integrated resource policy and land use planning for the area. Based on these recommendations, A Policy for Resource Management of the Eastern Slopes was subsequently released by the Alberta Government in 1977.

The Eastern Slopes Policy recognized that the primary role of the entire Eastern Slopes is as a water-producing area. The policy also highlighted the need to prevent unacceptable damage to land, vegetation and water. The following general priorities and guidelines, based on conservation principles for the future management of the Eastern Slopes, were outlined in the policy:

- The highest priority is watershed management to ensure a reliable supply of clean water for aquatic habitat and downstream users.
- Critical wildlife habitat will be protected to maintain those species presently found in the Eastern Slopes.
- Selected areas of natural significance will be protected.
- The principles of conservation and environmental protection will be applied to resource use and development.
- The recreation potential and aesthetic quality of the mountains and foothills will be maintained.
- Renewable resource management is a long term priority. Development of non-renewable resources (oil, gas, coal, other minerals) will be permitted only where it is not in conflict with the long term goal of renewable resource management.

One of the most helpful elements of the 1977 policy was the establishment of land use zones. Eight land use zones were identified in this policy (Table 1). It is important to note that, regardless of the more detailed intent for a specific land use zone, watershed protection was the paramount overall goal. The primary intent for two of the land use

zones, the Prime Protection and Critical Wildlife Zones, was protection; while resource management or development were the primary intents for the other six zones.

TABLE 1. Alberta Eastern Slopes Zoning Intents

Land Use Zone	Primary Intent	More Detailed Intent		
Prime Protection	Protection	To preserve environmentally		
		sensitive terrain and valuable		
		ecological and aesthetic resources.		
Critical Wildlife	Protection	To protect ranges or terrestrial and		
		aquatic habitats that are crucial to the		
		maintenance of specific fish and		
		wildlife populations.		
Special Use	Resource Management	To recognize historic resources, lands		
		set aside for scientific research and		
		any lands required to meet unique		
		management requirements or		
		legislative status which cannot be		
		accommodated within any of the		
		other zones.		
General Recreation	Resource Management	To retain a variety of natural		
		environments within which a wide		
		range of outdoor recreation		
		opportunities may be provided.		
Multiple Use	Resource Management	To provide for the management and		
		development of the full range of		
		available resources while meeting the		
		objectives for watershed management		
		and environmental protection in the		
		long term. Comprises 65% of Eastern		
		Slopes.		
Agriculture	Resource Management	To recognize those lands within the		
		Eastern Slopes which are presently		
		utilized or are considered suitable for		
		cultivation and/or improved grazing.		
Industrial	Development	To recognize existing or approved		
		industrial operations such as coal		
		mines, gas processing plants, cement		
		plants and large permanent forest		
		product mills.		
Facility	Development	To recognize existing or potential		
		settlement and commercial		
		development areas.		

The Prime Protection Zone, with a lower elevation boundary of between 1,675 m and 1,980 m depending on the location, consists of the high-elevation forests and the rocky slopes of the mountains. The Critical Wildlife Zone consists of habitats that are crucial to

the survival of specific wildlife populations. Such areas include calving grounds, migration routes and key winter range.

Consistent with the protection and conservation intents for the Prime Protection Zone, land use activities not permitted in this zone included: all oil, natural gas, coal and other mineral exploration and development; commercial logging; domestic grazing; cultivation; industrial, residential and commercial development; motorized off-highway vehicle use; and, serviced camping. Within the Critical Wildlife Zone, the following activities were not permitted: motorized off-highway vehicle use; serviced camping; intensive recreation; cultivation; and, commercial, industrial and residential development. Restricted commercial logging and oil, natural gas and coal exploration and development were among those activities permitted in the Critical Wildlife Zone, but required stricter than normal controls.

Thus, from a conservation perspective, designation of the Prime Protection and Critical Wildlife Zones certainly was laudable and somewhat responsive to the public polling results and submissions to the 1973 public hearings conducted by the Environment Conservation Authority. Many Albertans argued that the 1977 Eastern Slopes Policy did not go far enough, especially considering that the maps accompanying the policy designated a significant majority of the public lands within the Eastern Slopes as Multiple Use Zone, particularly north of the TransCanada Highway. When one reads the 1977 policy, significant flexibility is reflected throughout the document with respect to allowing commercial logging and oil, natural gas, coal and other mineral exploration and development within areas that are critical to watersheds, forests, fish and wildlife. Also, many Albertans expressed concern that the 1977 policy was just that--policy--not legislation, and policy is all well and good but is not enforceable. Success of the policy would thereby be dependent on the private sector, the public and the Alberta government voluntarily following the guidelines including the list of permitted and not permitted land use activities within specific zones.

Nevertheless, considering the economic pressures from the forestry and energy industries, and the desire of the provincial and local governments for enhanced economic development and employment opportunities, the 1977 policy did move the yardstick significantly further toward more appropriate and popular conservation of Eastern Slopes natural resources. It is important to emphasize and reiterate that Albertans had expressed strong views and recommendations to the Environment Conservation Authority about the very serious need for enhanced conservation of natural resources that belong to all Albertans and are managed on their behalf by the Alberta government.

In summary, it can be argued that the 1977 Eastern Slopes Policy was good news for environmental protection and conservation of natural resources. Many Albertans, although not totally satisfied with the policy, saw it as an optimistic beginning and an indication of the Alberta government's intentions to embark on meaningful conservation initiatives and to set the conservation-directed tone for the development of future Integrated Resource Plans (IRPs) for the Eastern Slopes.

Following release of this relatively positive policy, a revised Eastern Slopes Policy was released by the Alberta government in 1984. A quote at the very beginning of the policy document reads, "The 1984 revision is intended to reflect the realities of the economic situation in Alberta, and to provide for the maximum delivery of the full range of values and opportunities in this important region." Overall, the language and tone of this document was very different from the original 1977 policy. The original policy stressed conservation and protection while providing opportunities for economic development, and pointed out that any natural resource development proposals should meet the test of complying with core principles regarding conservation of water, forests, fish and wildlife. The revised policy focused much more on the development and extraction of natural resources, and backed away significantly from the more conservation-based principles outlined in the 1977 policy. The permitted uses within the Prime Protection and Critical Wildlife Zones changed within the revised policy, particularly with respect to permitting oil and natural gas exploration and development, and use of motorized recreational off-highway vehicles.

The 1977 policy was already sufficiently flexible regarding different types of development being considered in certain land use zones within the Eastern Slopes; the 1984 revision was so flexible that some have characterized it as being a policy that permits almost anything, anywhere. If the revised document is read closely, most people would agree.

A Regional Plan for the Eastern Slopes was included within the revised policy document and was described as an intermediate step between the Eastern Slopes Policy and the IRPs subsequently developed by the late 1980s for most of the nine sub-regional planning areas within the Eastern Slopes. The Regional Plan described the same land use zones as the original 1977 policy, but the language and the tone of the language had changed, again backing away from the most protection and conservation-directed statements within the 1977 policy. In many cases, the regional objectives listed within the Regional Plan for watershed management, fisheries, wildlife, recreation, cultural and ecological resources, tourism, timber, mineral resources and agriculture were in direct conflict with land use principles outlined in the same Regional Plan. In almost all of these cases, objectives for natural resource use and extraction violated many principles of conservation outlined in the same document, and significantly violated many natural resource conservation and protection principles so strongly stated in the 1977 policy.

It can be argued that, had the original 1977 policy prevailed, Environment, Fish and Wildlife, Parks, Recreation, and Tourism staff within the Alberta government would have played a greater role within any land use planning exercises and subsequent recommendations to the Alberta Cabinet. With the 1984 revisions to the policy, and its emphasis on natural resource development and extraction rather than on a more balanced ecosystem-based approach, it has been Alberta Energy, Forestry and Public Lands staff who have played significantly greater roles in these important processes.

By the 1990s, it was clear that the IRP processes in Alberta such as those contemplated by the Eastern Slopes Policy had failed to achieve desired integration in environmental and resource management. There are many examples of regulatory bodies, panels and others that have expressed concern about lacking or unsuccessful Integrated Resource Management (IRM) (Kennett 2000). Land and resource use conflicts were not resolved; rather they increased, and the cumulative impacts on the environment escalated. IRM up to this point was more of a coordinating, rather than integrating, exercise. Among the more important reasons for its failure, was the fact that the Eastern Slopes Policy, the Eastern Slopes Regional Plan and the subsequent IRPs were simply policy and not legal instruments. This rendered the conservation principles and objectives within these documents "nice to follow but not necessary". As well, the conflicting mandates of Alberta government departments made it difficult, if not impossible sometimes, for IRM through IRPs to work effectively. This conflict in mandates has been recognized for many years within and outside government (Environment Council of Alberta 1979).

Another IRM process was proposed again by the Alberta government in 1999 (Alberta Government 1999). Under this process, a draft regional strategy was developed for the Northern East Slopes (NES) as well as for the Athabasca Oil Sands. In 2000, a multistakeholder regional steering group was established to prepare recommendations to the Alberta government on land use in the NES. The report of the regional steering group, submitted in 2003, contained strategic directions for key land uses, broad environmental conservation and specific species management; and recommendations for action to address each direction. The recommendations were discussed within government and have essentially been left to be addressed in a province-wide Land Use Framework (LUF) to be released in the future. Development of a province-wide LUF was recommended by the NES regional steering group.

Over 780 Albertans attended public information and input sessions in 2007 and over 3000 Albertans provided input by completing LUF workbooks. Drafts of a framework have been discussed internally by cross-ministry committees in the Alberta government, and it is anticipated that a new LUF will be released sometime soon. Many Albertans are considering this our last chance to "get it right", in the face of our rapidly changing natural landscapes due to gas, oil and timber development.

Who is Responsible for What?

Without going into great detail, the primary legislative responsibilities for delivering conservation programs for natural and cultural resources in the province of Alberta including the Eastern Slopes are as shown in Table 2. If one includes municipal governments, other departments not listed in Table 2 that make land use decisions, numerous agencies and industry, there are so many players making land use decisions in the Eastern Slopes that it is no wonder Albertans are confused about "who is responsible for what". Many land use decisions are made that challenge or in some cases violate conservation-specific sections of existing legislation. In many cases, certain sections of existing legislation are simply not enforced due to manpower shortages or priorities that are not ecosystem-based.

TABLE 2. Legislative Responsibilities for Conservation in Alberta's Eastern Slopes

Department Subject		Legislation	
Alberta Environment	Water	Water Act	
	Water	Clean Water Act	
	Air	Clean Air Act	
	General	Environmental Protection and	
		Enhancement Act	
Alberta Sustainable	Land	Public Lands Act	
Resource Development			
	Wildlife	Wildlife Act	
	Fish	Fisheries (Alberta) Act	
	Forest	Forests Act	
	Forest and Prairie	Forest and Prairie Protection Act	
Alberta Tourism, Parks	Protected Areas	Provincial Parks Act	
and Recreation			
	Protected Areas	Wilderness Areas, Ecological	
		Reserves, Natural Areas and	
		Heritage Rangelands Act	
	Protected Areas	Willmore Wilderness Park Act	
Alberta Culture and	Historical Resources	Historical Resources Act	
Community Spirit			
Environment Canada	Birds	Migratory Birds Convention Act,	
		1994	
	Fish	Fisheries Act	
	Species at Risk	Species at Risk Act	

Alberta Parks and Protected Areas System:

Alberta Parks Program:

Many people measure the success of natural resource conservation by the priority that governments place on their respective Parks programs. This can be measured in terms of amount of land legislatively protected, financial support and how the Parks program is administered. Following, is a brief discussion of the Parks program, province-wide in Alberta, much of which has been focused in the Eastern Slopes.

There was a gradual increase of financial support for the Alberta Parks program from 1968 to the early 1990s, with various more dramatic increases to fund specific initiatives such as the development of Kananaskis Country in the late 1970s and early 1980s. During these earlier years, much of the Parks program focused on providing recreational opportunities for Albertans, while addressing conservation and protection matters to some extent and providing a modest boost to the tourism industry. Financial support for the Alberta Parks program peaked in the 1990-91 budget year at a total of \$45 million (\$35 million operating) with 731 full-time equivalent positions (FTEs), and decreased dramatically over the next 10 years to a total of \$32 million (\$29 million operating) with 333 FTEs for the 2001-02 budget year.

Significant budget reductions between 1993 and 2001 to the Parks program were similar to those in most other programs as the Alberta government sought to first curtail and then eliminate annual budget deficits and the cumulative debt. At the same time, and as part of the government's privatization of the delivery of many of its programs, operation of provincial park campgrounds was transferred to the private sector which meant that many government staff were laid off. As a result, it became very difficult for the government to properly manage parks and recreation areas, including addressing the conservation requirements of the natural resources within these areas. Infrastructure within parks also deteriorated significantly during this period because many private campground operators were not willing to invest in required maintenance.

At the same time that the Parks program budget and staff were being reduced, the program was amalgamated with Fish and Wildlife and Water Resources programs within the departments of Environment or Environmental Protection. The conservation and protection priorities within parks often became secondary to other priorities, including the need to address shrinking budgets. This was particularly ironic considering that the Special Places program was in full swing during this period and more, not less, financial and manpower resources were required to manage the increasing parks and protected areas land base.

Following the 2001 provincial election, the floundering Parks program was rescued by separating it from the Water Resources and Fish and Wildlife programs within Alberta Environment and moving it to the department of Community Development which had been in the business of protecting cultural and historical resources for many years. It was a good fit, and a breath of fresh air for the Parks staff. The Parks program was elevated to a full stand-alone Division within Community Development and given an Assistant Deputy Minister who reported directly to the department's Deputy Minister.

The conservation and protection priorities within parks became much more important, as they had been before the budget reductions and amalgamation with other programs. New financial resources immediately started to flow to the Parks program, first for deteriorating infrastructure and then for manpower. Significant funds have been committed to repair deteriorating infrastructure over the long term, and even to build new facilities in some cases. With the new profiling of the Parks program within a department that included museums, historic resources, recreation and the arts, it became easier to provide the rationale for increased funding to address conservation initiatives including increased staffing for planning and completion of parks management plans, heritage appreciation, environmental education, enforcement and scientific research. The total 2007-08 Parks budget was \$99 million (\$44 million operating) with 447 FTEs. By 2007-08, the Parks budget had increased by 213% over a seven-year period, and FTE positions increased by 34%.

The Alberta Parks program is developing a new Plan for Parks that will provide a framework for future decisions on protection, improvement and funding of Alberta parks. Research, consultations and discussions with Albertans have played a major role in

developing this plan. To date, the public and key stakeholders have responded positively to key components of the plan.

There are many lessons to be learned from this changing level of support for the Parks program over the years, some of which will be described in the "Conclusions and Recommendations" section of this paper.

Special Places Program:

Prior to 1995, 144 parks, other protected areas and recreation areas were designated by the Alberta government within the Eastern Slopes, comprising a total area of 6,494 km² (Table 3), or only 7.2% of the total area of the Eastern Slopes. The majority of this area (6,108 km²) consisted of five sites, Willmore Wilderness Park (4,597 km²), Peter Lougheed Provincial Park (501 km²), White Goat Wilderness Area (445 km²), Siffleur Wilderness Area (412 km²) and Ghost River Wilderness Area (153 km²).

During the period between release of the Eastern Slopes Policy and the early 1990s, Albertans and other Canadians continued to express concerns about the impacts of rapidly escalating natural gas, oil, coal and timber extraction in Alberta's Eastern Slopes, and saw the establishment of more parks as one of the most promising solutions. By the early 1990s, many Albertans, tourism operators and environmental non-government organizations (NGOs) had become disillusioned with what they characterized as the failure of the Eastern Slopes Policy and subsequent multiple-use IRPs to adequately conserve those parts of the Eastern Slopes that were prime areas for recreation, tourism, protection of critical fish and wildlife habitat, and appreciation of the natural environment.

About the same time, in the Fall of 1991, a gentleman by the name of Monte Hummel, President of the World Wildlife Fund of Canada, gave a speech to the Empire Club of Canada issuing a challenge to Canadians and specifically our federal, provincial and territorial governments. His challenge was to establish a network of protected areas representing all of the natural regions in Canada, adding up to at least 12% of our lands and waters by the year 2000. In 1992, the Alberta government made a commitment to prepare a made-in-Alberta strategy for completing Alberta's part of Canada's Endangered Spaces program. The Special Places 2000 Policy and implementation plan were announced in 1995, and the Special Places program was concluded in 2001.

Under the program, 81 new and 13 expanded protected areas added about 20,000 km² to Alberta's protected areas network, more than a three-fold increase in the amount of land in the province's protected areas network since the start of the program. With this addition, 12.5% of Alberta's land base is now protected in national parks and provincial parks and other protected areas. This was certainly a significant improvement, but to place it into perhaps a more realistic context, the five national parks in Alberta already comprised over 8% of Alberta's land base. The total contribution by provincial parks and protected areas since the beginning of Alberta's Parks program in 1930, including the Special Places program additions, is just over 4% of Alberta's land base. There still exist significant shortfalls of protected areas representative of the Foothills Natural Region of

TABLE 3. Legislatively Designated Provincial Parks, Other Protected Areas and

Recreation Areas in Alberta's Eastern Slopes

	Recreation Areas in Alberta's Eastern Slopes					
Class ¹	General Intent	No. Pre-1995 ²	No. Added 1995-2001 ³			
Wilderness	Large areas that retain their	3 (1,010 sq km)	0			
Areas	wilderness character, unaffected by	_				
	human influences. Travel by foot					
	only.					
Ecological	Representative samples of special	4 (87 sq km)	1 (1 sq km)			
Reserves	functioning ecosystems protected					
	for research, education, heritage					
	appreciation and to preserve					
	genetic stocks.					
Willmore	Rugged backcountry mountain park	1 (4,597 sq km)	0			
Wilderness	protected by separate legislation.					
Wildland	Large areas of natural landscape	0	8 (2,639 sq km)			
Parks	that cater to ecotourism and					
	adventure travel. Human					
	developments and interference with					
	natural processes are minimized.					
Provincial	Areas contain provincially	6 (579 sq km)	5 (462 sq km)			
Parks	significant natural and historical					
	landscapes and features. A range of					
	facilities along with interpretive					
	and educational programs provide					
	opportunities to explore,					
	understand, appreciate and respect					
	the natural environment.					
Heritage	Protect natural features that are	0	1 (74 sq km)			
Rangelands	representative of Alberta's prairies.					
	Grazing is used to maintain the					
	grassland ecology.					
Natural	Protect special and sensitive natural	7 (83 sq km)	7 (74 sq km)			
Areas	landscapes of local and regional					
	significance while providing					
	opportunities for education, nature					
	appreciation and low-intensity					
	recreation. Facilities very limited.					
Provincial	Usually small areas that provide a	123 (138 sq km)	2 (61 sq km)			
Recreation	broad range of more intensive					
Areas	recreational experiences, including					
	camping.					

¹ Level of protection for classes generally increases from top to bottom of table, with highest protection for wilderness areas and lowest for provincial recreation areas.

²Total area of designated sites in each class shown in ().

³Total area of sites added under the Special Places program in each class shown in (). During the program, 5 existing sites were expanded and several existing sites were incorporated into other sites.

the Eastern Slopes. Although the Special Places program did add significantly to the provincial parks and protected areas system, many special areas were not protected from development because such a large proportion of Alberta had already been predisposed to timber quotas; Forest Management Agreements; gas, oil and coal leases; and, mining permits and licenses.

Specific to the Eastern Slopes, the Special Places program added 24 new sites and expanded five sites, adding a total of 3,311 km² of new legislatively protected land to the Eastern Slopes (Table 3). With the additions under the Special Places program, the total number of designated parks, other protected areas and recreation areas is 163, comprising a total area of 9,754 km² within the Eastern Slopes. This represents a 50% increase in legislatively designated area in the Eastern Slopes over that prior to the Special Places program.

Following minor additions to existing sites within the Eastern Slopes since 2001, the total area of legislatively designated lands today comprises only 10.8% of the total area of the Eastern Slopes. Only 1.2% of the Foothills Natural Region in Alberta, most of which lies within the Eastern Slopes, has been legislatively protected. More importantly, of the 173 natural history theme targets that have been identified for Alberta's 21 subregions, 10 targets exist for the Foothills Natural Region, of which only two have been fully met. Gaps remain in eight natural history theme targets for the Foothills. More should be done.

Alberta and National Park Comparisons:

Although the national parks program is one that has been able to focus on protection, conservation and maintaining ecological integrity within national parks to a much greater extent than has been possible in most provincial park programs, there are many similarities between the national and provincial park programs. Following is a brief comparison between challenges and recommendations for national parks, as listed by Nelson (1970), and those for Alberta parks and protected areas within the Eastern Slopes:

- As within national parks, an uneasy relationship exists between protection, scientific research and recreation within Alberta parks. This is particularly so within the Eastern Slopes where there are so many competing pressures for development of nature-friendly recreation opportunities (e.g., hiking, trail riding) and those that are not as nature-friendly (e.g., motorized off-highway vehicle use). Often, scientific research has clearly indicated that larger areas need to be legislatively protected within the Eastern Slopes for purposes of protecting several larger mammal species, but pressures from the off-highway vehicle and hunting communities, as well as the energy and forestry industries, have stifled those attempts.
- Neither Canada's national parks nor Alberta's parks and protected areas in the Eastern Slopes are "unspoiled" as many people would like to believe. Within the provincial Eastern Slopes, it is only Willmore Wilderness Park and White Goat, Siffleur and Ghost River Wilderness Areas where most of the respective areas are truly "unspoiled" landscapes.
- Land use conflicts exist between those types of recreation that require little or no facility development and those that require major facility development within parks.

- The public pointed this out to us in spades when the management plan for the Evan-Thomas Provincial Recreation Area within Kananaskis Country was being developed.
- Through land use zoning, a variety of land uses could be permitted within parks. The danger is that zones can be changed under pressure from the commercial sector. Land use zoning has been particularly helpful when preparing management plans for Alberta parks and recreation areas where visitation is high.
- When making land use decisions within parks or when considering new parks, greater weight should be placed on providing the truly wilderness experiences because these are often life-altering and often transcend the value of many other activities that can be undertaken more frequently. As an example, the most often used criteria for selecting new parks and protected areas in Alberta, and likely throughout Canada, are science-based. Although this makes sense, what about considering to a greater extent those areas where either the scenery is so spectacular or so wilderness in nature that it takes a person's breath away? There are literally thousands of such places in Alberta's Eastern Slopes.
- Nelson recommended that no more towns, service centres or major facility
 developments should be established within national parks; these should be provided
 outside parks. Alberta staff could not agree more for provincial parks in the Eastern
 Slopes. There are already ample towns located close to provincial parks along the
 Eastern Slopes where major facility development should be encouraged. Minor
 facility development that is rustic and environmentally friendly could be considered
 within appropriate locations inside parks.
- Develop an inventory of public lands of outstanding scenic, biological, geological
 archaeological and comparable significance, with the intention of expanding the park
 system. Leading up to, and during, Alberta's Special Places program, such an
 inventory was developed for consideration by local committees.
- New types of public and private land are desirable to address the growing need for land for recreation, conservation, research and related purposes. Under the Special Places program, two new classes of protected areas were created within the Alberta parks and protected areas system, wildland parks and heritage rangelands, adding to the existing six classes of protected areas (Table 3). Together, the eight classes of protected areas provide a variety of opportunities for protection, research, recreation and nature-friendly tourism.
- Procedures for acquiring additional lands for national, provincial and urban parks need to improve. The approach developed for Alberta's Special Places program was unique, and resulted in the addition of a significant land base over a relatively short time.
- Provide greater opportunities for citizen involvement in land use planning and decision making. Candidate sites being considered for protected area designation under the Special Places program were discussed and reviewed by 49 local committees throughout Alberta. They recommended boundaries and management guidelines for sites to be designated within their region. A Provincial Coordinating Committee, comprised of 20 stakeholder groups plus members at large reviewed Special Places nominations from local committees and made recommendations to the Minister responsible for parks and protected areas. Although the Alberta government attempted to ensure that the local committees were representative of the various

stakeholder interests, such did not always occur, particularly for local committees that were dominated by interests that did not support the establishment of new protected areas.

Tourism:

Tourism is the fourth largest industry in Alberta. Total tourism revenue in the province is about \$6 billion annually and the tourist industry employs over 100,000 people. There are many countries in the world and several provinces in Canada that have developed tourism opportunities and industries that surpass the importance of natural resource extraction and manufacturing to their respective economies. To reiterate, Alberta is already on the Canadian and international maps as a tourism destination, primarily as a result of Banff and Jasper National Parks and to a lesser extent, other national and provincial parks. The tourism potential of the entire Eastern Slopes outside the national parks is significant.

Kananaskis Country, established in 1977 by the Alberta government, is already recognized internationally as a premier tourist destination, particularly following wide-spread exposure during the 1988 Winter Olympics and the 2002 G8 Summit. The many provincial parks, other protected areas and recreation areas within Kananaskis Country offer a wide variety of opportunities for hiking, mountain biking, cross-country skiing, rock climbing, camping, dog-sledding, canoeing, kayaking, swimming, horseback riding, photography and wildlife viewing. The 1988 Winter Olympics cross-country ski and downhill ski facilities continue to attract international competitions and training for Olympic athletes from Canada and around the world.

Nature-friendly tourism opportunities are also being recognized and developed to a greater extent in the Eastern Slopes between Hinton and Grande Prairie, west of Rocky Mountain House and in the Crowsnest Pass area. Some of these opportunities lie within existing provincial parks and others on non-park public lands. Expenditures by visitors to Alberta's provincial parks generate a province-wide economic impact of \$1.2 billion annually and sustain 23,500 person-years of employment. The provincial parks within the Eastern Slopes are major contributors to this positive economic impact.

We have found in Alberta that the Alberta Parks program and the nature-friendly tourism industry have become close allies, as both strive for an increasing role within an energy-dependent economy. The conservation of watersheds, forests, fish, wildlife, cultural resources and magnificent landscapes within the Eastern Slopes is critical to a successful and sustainable tourism industry. The 1984 revised Eastern Slopes Policy stressed the need for development of a strong tourist industry within the Eastern Slopes. This has occurred within some areas, however, extensive forestry, gas, oil and coal operations have limited tourism opportunities within many parts of the Eastern Slopes.

Alberta Parks, Alberta Tourism and Travel Alberta will undoubtedly continue to work together to build a stronger tourism industry in the Eastern Slopes; overall, this can be argued to be positive for conservation of natural resources in the area.

Partnerships:

For conservation initiatives to be as successful as possible, there must be support and involvement by the public, private sector and a variety of stakeholder interests and NGOs. As well, government agencies that are legally responsible for implementation of conservation initiatives should work collaboratively. There are excellent examples of partnerships within the Eastern Slopes.

Among the most dedicated and effective partners for conservation initiatives and lobbying within the Eastern Slopes are a number of not-for-profit environmental NGOs. The Alberta Wilderness Association (AWA), Canadian Parks and Wilderness Society (CPAWS) and Federation of Alberta Naturalists (FAN) are among these. The AWA is "dedicated to the completion of a protected areas network and the conservation of wilderness throughout the province" (AWA 2008). The Calgary/Banff Chapter of CPAWS' primary goal is to "secure the components necessary to maintain or restore ecological integrity on the Eastern Slopes of the Canadian Rocky Mountains" (CPAWS 2008). One of the FAN's objectives is "to be a strong voice for the greater appreciation and conservation of Alberta's natural environment" (FAN 2008). Our current provincial parks and protected areas network within the Eastern Slopes would not be nearly the size it is without the dedication and hard work of these and other organizations for many years.

Nelson (1970) recommended that private lands be considered for conservation. The Nature Conservancy of Canada (NCC 2008) has helped to conserve thousands of hectares of land in the Eastern Slopes through conservation easements that will greatly enhance the overall conservation efforts in this area. The value of private land conservancy is two-fold: it adds important land bases to the overall protected areas network, and it shows governments that the private sector and individual land owners are willing to work together to establish conservation lands to complement those established by governments and/or in areas where there might not be support for legislatively protected areas.

The Alberta Conservation Association (ACA), whose mission is to "work to conserve, protect and enhance our natural biological resources" (ACA 2008), has sponsored or conducted many conservation projects, programs and services in the Eastern Slopes. As an administrative organization under the Alberta *Wildlife Act*, the ACA receives a portion of funds raised from hunting and fishing license sales. The ACA works closely with the Alberta Fish and Wildlife Division.

Part of Alberta's Eastern Slopes lie within a much larger area of Canada and the United States where the Yellowstone to Yukon Conservation Initiative serves "as a guide and connector for groups and individuals working on conservation issues in the region" (Yellowstone to Yukon Conservation Initiative 2008). The initiative works as a connector of strategies, research, funding and awareness to support one of the world's last intact mountain landscapes.

Many conservation, management and safety issues and initiatives are discussed between Parks Canada staff in the three Alberta Rocky Mountain national parks and Alberta Parks

staff responsible for protected areas in the adjacent Eastern Slopes. This interagency communication has become more important as the issues confronted by both agencies become more complex. Land managers with Parks Canada and the Alberta and British Columbia governments have formed the Central Rockies Ecosystem Interagency Liaison Group (CREILG) to "cooperate to ensure biodiversity is maximized in the Central Rockies ecosystem and the area is managed as a sustainable regional landscape" (CREILG 2008). Similarly, national parks staff from Montana, Alberta and British Columbia; and land managers and tourism staff from Montana state, Alberta provincial and British Columbia provincial governments meet as the Crown of the Continent Ecosystem Managers Forum to share best practices and challenges in managing lands and issues in southwest Alberta, southeast British Columbia and northern Montana. The above are all excellent examples of Nelson's (1970) stated need to improve communication and joint management between the federal and provincial governments.

The Canadian Parks Council (CPC) has played an important role in facilitating conservation initiatives in the Eastern Slopes. Generally, among its activities, the CPC: promotes excellence in park planning and management, advances park and protected areas values, facilitates cooperation among member agencies and provides support to member agencies. The CPC has played a major role in addressing Nelson's (1970) recommendation to borrow from other countries good ideas about developing and managing national and provincial parks. Not only does the CPC have a very close working relationship with the National Association of State Park Directors in the United States, but it has linked the Council with many parks agencies around the world and brought many international parks practitioners to Canada to share their challenges and best practices. The CPC also works hard to assist member agencies establish a more integrated system of parks and public reserves across Canada, another recommendation of Nelson (1970). One of the most recent direct contributions of the CPC to conservation in the Eastern Slopes was the facilitation of the joint Alberta-British Columbia declaration of Kakwa-Willmore Interprovincial Park.

In 2006, the Alberta and British Columbia governments signed a memorandum of understanding to declare Kakwa Wildland Provincial Park and Willmore Wilderness Park in the Alberta Eastern Slopes and Kakwa Provincial Park in British Columbia as the Kakwa-Willmore Interprovincial Park. The two governments committed to work together to perpetuate the unique and significant resources of the interprovincial park and to work with local municipalities and other adjacent land administrators to encourage use of lands adjacent to the park in a manner consistent with the protection of the natural and cultural values in the park.

The Alberta government's Water for Life Strategy, developed in 2003 following extensive public input, is committed to the conservation of water in Alberta for healthy aquatic ecosystems, safe and secure drinking water and reliable quality water supplies. Subsequently, four public Watershed Planning Advisory Councils have been established for watersheds within the Eastern Slopes: North Saskatchewan Watershed Alliance, Bow River Basin Council, Oldman Watershed Council and Red Deer River Watershed Alliance. Considering the most important role of the Eastern Slopes has consistently been

clearly stated as the production of a clean reliable water supply, it is anticipated that these and other Eastern Slopes watershed planning and advisory councils established in the future will play a major role in conserving the lands within the Eastern Slopes that provide the run off for creeks, streams and rivers.

The Canadian Heritage River System (CHRS), Canada's national river conservation program, "promotes, protects and enhances Canada's river heritage and ensures that Canada's leading rivers are managed in a sustainable way" (CHRS 2008). The headwaters of the Athabasca River in Jasper National Park and the North Saskatchewan River in Banff National Park were designated as Canadian Heritage Rivers in 1989. The North Saskatchewan Watershed Alliance is currently seeking nomination of the entire length of the North Saskatchewan River from the Banff National Park boundary, through the provincial Eastern Slopes and all the way to the Saskatchewan border.

Research:

Sound research is absolutely necessary to promote and advance conservation of natural resources. This is especially the case in the Eastern Slopes where the land use conflicts are so intense that an abundance of science and social-based research is necessary in order to make the case to practice conservation principles which are challenged by wide-spread extraction of natural resources and recreational motorized off-highway vehicle use.

Research provides the basis for recommendations to government regulators on natural resource conservation and management subjects. Within the Eastern Slopes, this research has been international, national and provincial in scope and has been conducted at the ecosystem, community and species levels. Significant research has been conducted on more charismatic species including grizzly bear, caribou, grey wolf, bighorn sheep, mountain goat, and several species of raptors and trout; and on several other animal and plant species at risk. Studies have considered the biology, life cycles, population dynamics and management of species; human-animal interactions; and, the impacts of natural resource extraction on species. Other research has focused on changes in human visitation and recreation, and how these might impact the natural environment. Conference delegates will hear about a number of these research projects on the Eastern Slopes at this conference.

The Alberta government has historically conducted much of the research directed at conservation of lands, waters, and particular species of animals and plants. The Fish and Wildlife Society and Federation of Alberta Naturalists (2005) have done an excellent job of describing the many examples of conservation research conducted during the past 100 years by Alberta government staff. As a result of budget reductions and changing priorities by the Alberta government, much of this research is today conducted elsewhere, including by universities, NGOs and agencies funded by the government and industry. An exception to this trend is the continuing biophysical research conducted in protected areas by Alberta Natural Heritage Information Centre (ANHIC) staff within the Alberta Parks program. During annual field data collection projects, researchers from other institutions and disciplines are invited to participate. ANHIC, one of 80 centres in an

international Natural Heritage Network, provides accurate and accessible biodiversity information used extensively by researchers and industry for making informed decisions about conservation, natural resource management and development planning.

As described earlier, the Alberta Conservation Association, by agreement with the Alberta government, today conducts much of the conservation-directed research once conducted by the Fish and Wildlife Division.

Alberta's universities appear poised for the challenge, and have in fact been at the forefront of science- and social-based research in the Eastern Slopes for many decades. The benefits of collaboration between universities and natural resource managers has been recognized for many years. Landmark research was conducted by the University of Alberta as early as the 1940s to assist resource managers in the Eastern Slopes. The University of Calgary has conducted significant research in the central Rocky Mountains and has a research and educational facility located in Kananaskis Country. A number of unique research initiatives exist at our universities, including an Industrial Research Chair in Integrated Landscape Management at the University of Alberta, supported by industry and government. As part of the Kananaskis Country Summit Environmental Legacy following the 2002 G8 Summit in Kananaskis Country, the federal government is funding a Wildlife Ecology Chair at the University of Calgary who is focusing research on wildlife conservation in the Eastern Slopes.

In 2002, the Alberta Cooperative Conservation Research Unit (ACCRU) was formed. The ACCRU, housed at the University of Alberta, is a multi-institutional research and learning centre providing "a collaborative environment that allows scholars from a number of disciplines and institutions, government agencies and industry to build a basis of reliable knowledge and competence to ensure our preparedness to cope with the complex challenges associated with resource development" (ACCRU 2008). The Universities of Calgary and Lethbridge are also active members. This institution will undoubtedly benefit future management and conservation of natural resources in the Eastern Slopes.

The Foothills Model Forest (FMF), a member of the Canadian Model Forest Network, has conducted and sponsored some helpful conservation-directed research in that portion of the Eastern Slopes that includes the Hinton Wood Products Forest Management Agreement north and south of Hinton. Although the primary objectives of the FMF focus on ensuring a continuing supply of commercial timber, some of its research has involved conservation and management of several mammal and fish species.

Environmental NGOs such as the Alberta Wilderness Association, Canadian Parks and Wilderness Society, Federation of Alberta Naturalists and Yellowstone to Yukon Conservation Initiative have conducted or sponsored an abundance of helpful research on conservation and protection issues in the Eastern Slopes.

Although this paper does not refer to specific research projects, there is one exception -- a project that deserves mention because of its findings and far-reaching implications. A

Landscape Cumulative Effects Simulator (ALCES) has been developed by Brad Stelfox (2008) to assist the public, government and industry understanding of land use sustainability issues and to propose solutions that balance ecological, social and economic indicators. The model seeks to move landscape management from one where independent management agencies each make land use decisions which affect other land users and results in an "ad hoc" and unhealthy future landscape, to one where there is an integrated approach by governments and industry, recognizing the primacy of natural capital in order to ensure ecological integrity and economic prosperity. ALCES also clearly shows the rapid escalation in gas, oil, pipeline and commercial timber development in the Eastern Slopes during the recent past.

A more vigorous and comprehensive research program relating to parks and other public lands was recommended by Nelson (1970). Since 1968, much research has been conducted in the Eastern Slopes, but more is required because the data collected to date have obviously not been sufficient, no matter how convincing, to help conservation and protection initiatives keep up with escalating timber, gas, oil and coal development. For example, most wildlife biologists argue that there are sufficient data available to warrant some changes to timber harvesting in the few areas within the Eastern Slopes that contain small threatened caribou herds, and the Alberta Caribou Committee and its predecessor, the Boreal Caribou Committee, agree. Continued attempts to protect these small herds have failed because the Alberta government and industry continue to support logging of specific areas of forest within existing Forest Management Agreement areas that are critical to caribou. On the other hand, scientific research on bull trout and grizzly bears in the Eastern Slopes has resulted in some sound management practices such as a catch-and-release program for bull trout and a continuing ban on the annual grizzly bear hunt.

Environmental Education and Interpretation:

Nelson (1970) recommended improving interpretive programs and educational potential in and about parks. Alberta Parks staff agree wholeheartedly because enhanced interpretive and educational programming helps build the support base for parks. Alberta Parks interpretive and educational programs in the Eastern Slopes and across the province have received additional financial and manpower support over the past seven years. There is nothing more entertaining or heart-warming than watching a well-prepared interpretive program early in the evening at a park campground, where interpreters hold an audience spell-bound for up to an hour with a mixture of conservation messages, song, sound, costumes and drama. The same interpretive programs have also been successfully brought to thousands of students in school classrooms. These are among the most effective ways of educating the public about the value of parks and the importance of conservation.

Many NGOs spend significant effort in educating the public about the importance of conservation and protected areas. At the international level and specific to the Eastern Slopes, they include the Crown of the Continent Ecosystem Education Consortium and Yellowstone to Yukon Conservation Initiative. At the provincial level they include the AWA, CPAWS and FAN. At the local level within the Eastern Slopes there are many

naturalist organizations and "Friends" associations for a number of provincial parks including William A. Switzer Provincial Park and parks in Kananaskis Country.

There are many other institutions and organizations that provide important environmental education messages about the Eastern Slopes including the Royal Alberta Museum in Edmonton and the University of Calgary Biogeoscience Institute in Kananaskis Country. The recently-established Alberta Council for Environmental Education will be playing a major role in working collaboratively with close to 200 stakeholder organizations in Alberta that deliver formal, non-formal or informal environmental education programming.

The Alberta Fish and Wildlife Historical Society and Federation of Alberta Naturalists (2005) provide many excellent examples of environmental education in Alberta over the past 100 years.

Conclusions and Recommendations:

Integrated Resource Management:

- Overall, from economic, environmental and social perspectives, the Eastern Slopes are most valuable to Albertans and other Canadians in a reasonably natural state.
- No natural resource is more valuable than water. To reiterate what almost every policy, land use plan or brochure on the subject has clearly stated since the early 1900s, the primary purpose of the Eastern Slopes is to produce reliable, clean water supplies for healthy aquatic ecosystems and downstream users in the three Prairie Provinces and the Northwest Territories.
- Integrated Resource Management (IRM) that focuses on protecting water supply and quality will ensure healthy aquatic and terrestrial ecosystems, which in turn will provide us with the natural resources that we so dearly depend on.
- The Alberta government has talked about IRM in the Eastern Slopes and the rest of Alberta for decades, but unfortunately has not "walked the talk", focusing instead on unprecedented economic development generated from gas and oil extraction. Although the dependence of Alberta's economy on the energy sector, and to a lesser extent the forest industry, has been of growing concern to Albertans over the past 40 years, they are now adamant that it is no longer possible to do everything, everywhere, all of the time. In fact, there is a sense of urgency in the air.
- Albertans are demanding that natural capital be valued to a far greater extent, and that conservation principles be applied more seriously when land use decisions are made.
- Alberta Environment should be the clear lead in any IRM planning processes to determine land use either on a regional or sub-regional basis within the Eastern Slopes. This department is already the lead on watershed management which ultimately involves the management of lands that provide the run off for creeks, streams, rivers and standing waterbodies in the Eastern Slopes. It is not appropriate that departments or divisions with mandates for the extraction of natural resources be in lead or co-lead positions in IRM.
- The new Land Use Framework, to be released soon, must adopt an ecosystem-based approach to land and resource management to be successful. Land use decision

- makers must also realize that rapid and unchecked natural resource extraction seriously challenges a number of ecological thresholds.
- A comprehensive Alberta Biodiversity Conservation Strategy should be an integral part of a new Land Use Framework.
- Once a new Alberta Plan for Parks has been approved, the land base-related elements of the plan need to become integrated with the new Land Use Framework.
- To avoid mistakes made in the past, wherein important conservation principles within IRM processes have not been followed because they were only guidelines or policy, legislation should be developed to strengthen conservation principles anticipated within the new Land Use Framework.

Parks and Protected Areas:

- Legislatively protect the remaining areas identified in the Eastern Slopes Policy as Prime Protection Zone, since there is limited commercial timber, gas or oil potential in this zone.
- Legislatively protect the areas identified in the Eastern Slopes Policy as Critical Wildlife Zone. The majority of these areas lie in valleys close to rivers and streams where commercial timber, gas and oil extraction are already not permitted.
- Add additional provincial parks and wildland parks within the Foothills Natural Region to fill the gap left by the Special Places program, and to fill the gap in natural history theme targets.
- Recognizing existing gas and oil commitments within some sensitive parts of the
 Eastern Slopes is a poor excuse for bad decisions made in the past. This policy needs
 to be reviewed, or else some areas in the Eastern Slopes that should be protected,
 cannot and will not.
- Adequate financial resources are absolutely necessary for successful conservation programming, including in the water protection, parks, fish and wildlife, and cultural resources programs.
- As quality of life issues become more important to Albertans, who already enjoy a relatively high standard of living, they have put significant pressure on the Alberta government to increase funding to parks, recreation and culture.
- Recent major budget increases to the Alberta Parks program are a good indication that the Alberta government is aware of how important these programs are to Albertans.
- Parks programs succeed and fail, in large part, based on which departments they are a part of, and the extent to which program mandates fit. The Alberta Parks program has succeeded as part of the departments of Community Development; Tourism, Parks, Recreation and Culture; and Tourism, Parks and Recreation.
- Alberta provincial parks and protected areas that lie within the Rocky Mountains should join the Rocky Mountains World Heritage Site that already includes four national parks and three British Columbia provincial parks.
- Alberta should seek to add several rivers within the Eastern Slopes to the Canadian Heritage Rivers System.

Economic Value of Natural Environment:

- The Eastern Slopes are a world-class tourist attracter for people who want to visit and experience natural landscapes and ecosystems that are relatively undeveloped.
- Conduct a thorough economic assessment of the natural resources within the Eastern Slopes, where economic values are calculated for ecosystem services and for the benefits of the natural environment to the recreation and tourist industries. These values need to be projected over the long term, and compared to the shorter-term economic benefits of natural resource extraction.
- The Alberta government, Travel Alberta and the tourist industry should continue working together to develop the tourist industry along the Eastern Slopes, where nature-friendly recreation and viewing opportunities abound.
- Major commercial tourism development, other than that already developed, should generally be developed outside legislatively protected areas. Small parcels of public land outside protected areas could be sold for these purposes. Exceptions could be made to this principle when any commercial developments are particularly naturefriendly.

Partnerships:

- There are many positive examples of joint working relationships among provincial and state conservation and park agencies in Alberta, British Columbia and Montana, as well as among these and Parks Canada and the U.S. National Parks Service. These relationships must continue and grow, since ecological integrity "knows no boundaries".
- The Canadian Parks Council has played an important role in advancing parks management and protection in Canada. The Council should receive additional funding to enhance the benefits it can bring to member agencies.
- Environmental NGOs in Alberta have provided excellent information to the public about the value of the natural environment in the Eastern Slopes. Rather than viewing these NGOs as adversaries, the Alberta government should work more closely with them, in the same way that provincial departments work closely with industrial and other economic development advocacy organizations.

Research:

- Science- and social-based research is particularly important in the Eastern Slopes and must be enhanced. Without this research, it is difficult to make the case that changes to land use are required where impacts of natural resource extraction are significant.
- Recommendations made by fisheries and wildlife biologists and ecologists, supported by appropriate research, must be considered to a greater extent than in the past, if the Eastern Slopes are to continue to provide a healthy mix of economic, social and environmental opportunities.
- Some excellent decisions have been made about species at risk in the Eastern Slopes, based on research. A catch-and-release program exists for bull trout, and the ban on grizzly bear hunting has recently been extended until 2009.
- Research indicates that timber harvesting plans should be altered to ensure the survival of threatened caribou herds in the Eastern Slopes.

Environmental Education and Interpretation:

- The Alberta and Canadian publics are demanding to know more about their natural environment in the Rocky Mountains and the rest of the Eastern Slopes, and how it is being managed on their behalf. Environmental education is, and will continue to be, key in satisfying this demand.
- Although several Alberta government departments provide some very innovative environmental programming, more support is required to meet the public demand.
- The Alberta government should support the recently established not-for-profit Alberta Council for Environmental Education and support the primary goal of the Council, which is to advance environmental education in Alberta by connecting all of the institutions and agencies that provide environmental education programming.

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