

**Socio-Economic
Indicator Report
For the
Alberta-Pacific
Forest Management Agreement Area**

2018 Vignette

Alberta-Pacific Forest Industries Inc.



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Socio-Economic Indicator Vignette

Alberta-Pacific Forest Management Agreement Area

This report is a brief examination of social and economic indicators for the Alberta-Pacific Forest Management Agreement (FMA) area in northeastern Alberta. This report updates selected indicators that relate specifically to forest management. These indicators were initially selected in 2008 and continue to be relevant.

A formal analysis of social and economic indicators was undertaken as a condition of Al-Pac's Forest Stewardship Council certification in 2005. However, social and economic factors have been integral to Al-Pac's planning and operations since the project was first proposed in the late 1980s. Various social and economic indicators have in the past been reported publicly in Al-Pac's Sustainability, Community, and Social Responsibility reports, which can be obtained by contacting the company. Al-Pac discontinued these reports in 2009. Some aspects were included in the Forest Stewardship Report, 2006-2010, released in September 2012, and in the new Forest Management Plan (FMP) approved in 2018.* The Al-Pac website also provides general information Al-Pac's history, operations, and initiatives.

Economic, social, and environmental values form the basis for sustainable management of any enterprise or activity. Indicators are objective, measurable, reportable variables that can be tracked to assess the effectiveness of management and to identify deficiencies and opportunities for adaptation.

In northeastern Alberta, Alberta-Pacific is not the dominant presence on the FMA area or the surrounding areas. The energy sector is the largest employer and source of most economic activity in the region and in the province as a whole. In the Athabasca-Lac La Biche area near the Al-Pac mill, the economic milieu includes agriculture, transportation, energy, education, and government services, as well as forestry. Trapping is a traditional economic activity that continues throughout the region, along with recreational and subsistence activities such as hunting, fishing, and gathering foods and medicines.

The region's social setting includes Indigenous[†] communities (First Nations, non-status, and Métis), other distinct populations such as White Russians, newcomers drawn by the energy sector, the city of Fort McMurray, and smaller communities in or near the FMA area.

Despite the many overlapping influences, Al-Pac has identified a small number of social and economic indicators that appear to relate directly to the company and its forest management.

* Approved FMPs are posted on the Government of Alberta website:

<http://www.agric.gov.ab.ca/app21/forestry?page?cat1=Forest%20Management&cat2=Forest%20Management%20Plans>

[†] The term "Indigenous" has replaced "Aboriginal" in much Canadian usage since adoption of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). Although the UN issued the declaration in 2007, Canada was one of four countries that initially objected to it—along with the United States, Australia, and New Zealand—and there was little change in usage here. The usage began to change after July 2015 when the Government of Alberta announced plans to potentially incorporate UNDRIP provisions into law and policy. The federal government followed suit and withdrew Canada's objector status in May 2016. Since then, governments across Canada have been implementing UNDRIP in accordance with the Canadian Constitution. The term "Aboriginal" is retained in some instances because it is embedded in legislation, program names, and quoted documents.

Energy and Forest Management

Northeastern Alberta is dominated economically by the oil and gas industry. Oil sands development is primarily concentrated on the east side of the Athabasca River, and conventional oil and gas on the west side of the river. In addition, steam-assisted gravity drainage (SAGD) in-situ oil sands development occurs near Wabasca, west of the Athabasca River.

Generally, the forest sector in northeastern Alberta has an economic impact of about 3 per cent of that of the energy sector, based on revenues. In the Wood Buffalo-Cold Lake area, which includes a substantial part of the FMA area, the 2016 Census recorded only 230 persons employed in agriculture, forestry, fishing, and hunting, while mineral extraction employed 13,335. In the adjacent Athabasca-Grande Prairie-Peace River district,* which includes significant agricultural activity and forest operations in addition to Al-Pac, mineral extraction was still ahead, with 14,305 jobs compared to 12,105 for the renewables.¹ Provincially, agriculture and forestry together accounted for only 1.6 percent of gross domestic product (GDP) in 2016, compared to 17 percent for oil and gas and mining.²

The energy sector includes oil sands mining, in-situ oil sands, conventional oil and gas, related facilities, camps, pipelines, power plants, power lines, waste disposal, residential development, and infrastructure such as roads and highways. The sector's regional presence has grown at an accelerating rate since 1996, possibly reaching a peak at a very high level in 2008. Energy sector growth has necessitated significant changes in Al-Pac's operations and forest management. On the one hand, salvage from land cleared for the energy sector has provided a large supply of wood to the mill at relatively low cost. However, loss of forest land to the energy sector reduces the amount that can be managed ecologically to provide sustainable, renewable wood supply for the mill over the long term. Al-Pac has reduced these impacts to some extent by working co-operatively with energy companies in a process known as Integrated Landscape Management (ILM).

The FMA area's landscape is part of the pan-northern boreal forest that is the largest forest in the world and comprises the majority of Canada's and Alberta's forest land base. Wildfire has been and continues to be the primary agent of disturbance and renewal. This ecosystem dynamic was exemplified by the 2016 Horse River fire that affected upwards of 600,000 hectares within the FMA area. The boreal forest in the FMA area is complex, dynamic, and diverse -- spatially, compositionally, temporally, and structurally. It comprises a broad range of ecosystems with various forest successional stages represented by pure deciduous (aspen, balsam poplar, and white birch) stands, variably mixed deciduous-conifer or conifer-deciduous stands, and nearly pure coniferous (white spruce, black spruce, and jack pine) stands.

* See map of Alberta census divisions: <http://www.finance.alberta.ca/aboutalberta/osi/geographic-statistics/Map-Overview-Alberta-Census-Subdivisions-Census-Divisions-Economic-Regions.pdf>

The FMA area's boreal forest must be managed as a dynamic, functioning ecosystem. The dominant commercial species (aspen, white spruce, jack pine, black spruce, and balsam poplar) are the sources of fibre and timber for the forest products industry and thus are important to the economic sustainability of the region's communities and mills. These species also play important roles in the region's biological diversity and ecological health. The non-harvestable landscape is a critical habitat for a multitude of waterfowl, reptiles, amphibians, furbearers, migratory songbirds, woodland caribou, and numerous other species.

The human footprint on this landscape has grown enormously over the past three decades due to the direct and indirect impacts of energy and forestry development. For example, three of the biggest "clear-cuts" in Alberta are the Highway 63 right-of-way and the two utility corridors connecting the Fort McMurray oil sands region to southern Alberta—each of which disturbs hundreds of thousands of hectares, areas comparable to the largest wildfires.

The cumulative effects of human activities have also made the FMA area a complex and dynamic socio-economic milieu. Forest management here must encompass the overlapping tenures of energy and forestry companies as well as the multiple government mandates such as Indigenous consultation, public engagement, integrated land management, and protection of species at risk. The Government of Alberta (GoA) intends to address many of these issues through regional plans under the Land-Use Framework (LUF), but these plans are still in early stages of development and implementation.

Indicators

Eight indicators have some influence on forest management options.

- Community Meetings
- Community Investment
- Research Dollars
- Research Organizations
- Integrated Land Services Planning Team
- Availability of Forest Inventory Information to the Public
- Indigenous Employee program
- Corporate Awards related to Indigenous Affairs

Research dollars and research organizations have been combined into a single indicator for the purposes of this report.

Al-Pac's economic and social performance is also heavily influenced by other factors that are difficult to measure or anticipate. The company maintains close liaison with government bodies, the softwood forest industry, the energy sector, Indigenous groups, and environmental organizations that could affect or be affected by Al-Pac's decisions and activities.

These indicators are a result of all forest and land management decisions in northeastern Alberta by most entities operating in the FMA area. Not all indicators result from a direct change in the activities or landscape outcomes of a single entity. In this respect, any activity or socio-economic decision that affects forest management is a viable indicator for forest planning. As a result of the changing economics of Alberta and the Athabasca-Fort McMurray region since Al-Pac's inception, forest management planning has changed for a majority of the FMA area.

Landscape Advisory Group (LAG)

Alberta-Pacific has organized a *Forest Landscape Advisory Group (LAG)*, which includes representatives from Indigenous communities, municipalities, government agencies, and hunting, trapping, forest industry, and conservation groups from within and around the Al-Pac FMA area. The group meets three or four times annually.

Members of the group have taken field tours of harvest and silviculture areas, forest industry mill sites, energy sector infrastructure sites, and research program plots on the FMA area and selected ecologically significant areas. The group also gets timely briefings from key team members about initiatives and updates about the direction our company is going.

This open dialogue is not only necessary to meet regulatory and environmental guidelines, but it is also part being a good neighbour to the communities and people close to forest company operations. The LAG meets many of the criteria established in a 1999 Canadian Forest Service study³ by researcher Tom Beckley. He reviewed the mechanisms used by natural resource companies to solicit input from the public. These methods included advisory groups, public hearings, and open houses. He also considered alternatives such as surveys, focus groups, and workshops. Beckley said an effective process:

- Facilitates two-way information flow
- Is flexible in scope
- Is representative of the target population
- Is open to new input and new participants
- Provides guidance to managers
- Allows for frank and open discussion
- Is cost-effective in relation to the information received
- Gives something back to participants



Indicators that Affect Forest Planning Activities

The indicators that have impacts on forest management decisions are discussed below.

Community Meetings – Meeting Outputs

Al-Pac's community engagement program creates opportunities for the exchange of information and perspectives with the public on Al-Pac's forest management planning and harvest operations activities. The program is designed to help facilitate comprehensive and meaningful public awareness and involvement so that Al-Pac may address concerns. Shared insights are used to create forest management plans that are sensitive to the cultural, social, environmental, and economic concerns of those who reside in or are otherwise concerned about the FMA area.

This program continuously seeks new ways to improve opportunities for public participation and information sharing. To that end, Al-Pac looks to stakeholders for suggestions with respect to how the company may better meet the needs of concerned groups and individuals.

The community engagement program encompasses the following activities:

- Development and distribution of forest planning summary documents;
- Forest planning meetings held in Indigenous and non-Indigenous communities within the FMA area;
- Advertising the availability of forest management planning information;
- Community event displays that contain information on Al-Pac forest management plans and harvest operations activities;
- Interpretive videos to allow for better understanding of information;
- Topical presentations delivered by in-house experts when requested;
- Woodland and mill tours;
- Publication of corporate performance reports, including *Technical and Overview Forest Stewardship Reports* (covering from 2006 to 2010) and other reports and information available on the Al-Pac website;
- Dedicated public affairs and Indigenous relations staff to facilitate an open-door policy should concerned individuals or groups want to talk directly to Al-Pac staff;
- Participation in trade shows and career days;
- Toll-free phone access to Al-Pac staff; and
- Corporate website providing detailed information on company practices, plans and activities.

To meet emerging challenges and assist in forest management planning, Al-Pac continually visits FMA area communities. Forest management planning involves a hierarchy of plans that meets all regulatory and most stakeholder requirements.

The FMA area is bounded on the south by agricultural settlement and the major towns of Athabasca, Boyle, and Lac La Biche. The city of Fort McMurray falls within the FMA area (in FMU A15). Other communities and First Nations reserves in the FMA area include Janvier, Wabasca, Heart Lake, Gregoire Lake, Fort McKay, Peerless Lake, Trout Lake, Calling Lake, and Chipewyan Lake. Just outside the FMA area are the Beaver Lake, Saddle Lake, Cold Lake, and Namur Lake reserves and the settlements of Red Earth, Plamondon, Wandering River, Smith, Atmore, Grassland, Buffalo Lake, and Kikino Métis Settlements. (See Figure 1)

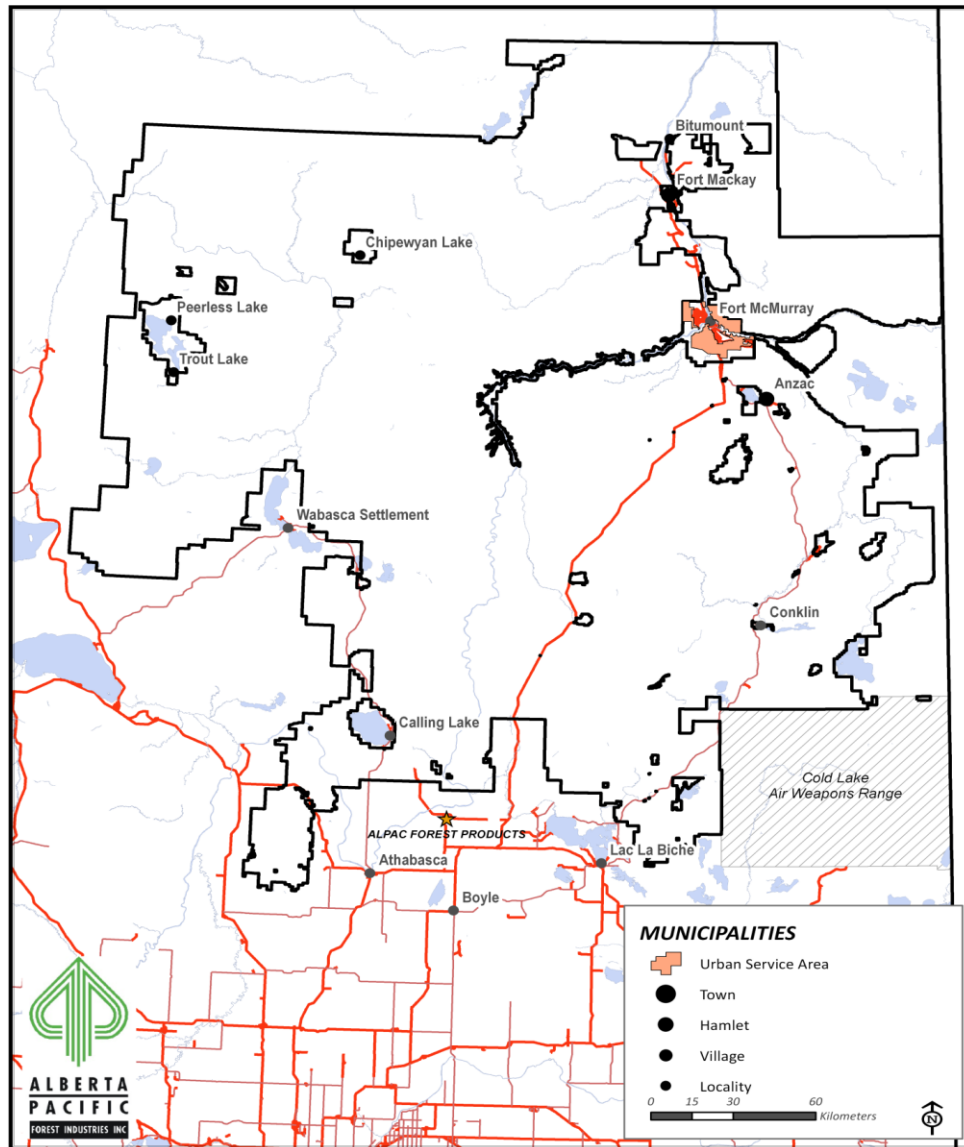


Figure 1- FMA Area Communities

From 2012-2017 (5 years) the following Alberta communities have been visited and had formal and informal meetings to discuss various topics:

| | |
|------------------------------------------------------------|----------------------------------------|
| Calling Lake | Wabasca |
| Heart Lake | Trout / Peerless Lake |
| Chipewyan Lakes | Janvier |
| Fort McMurray | Anzac |
| Fort McKay | Metis Settlements adjacent to FMA area |
| First Nation's communities within and adjacent to FMA area | |

From these communities, the identified issues and challenges have included (not an inclusive list):

- Too much truck traffic / Hazardous conditions due to dusty roads
- Lack of accessible moose for hunting
- Lack of hunting success
- Closure of non-permanent roads, thus closing access
- Keeping too many roads open and creating access
- Loss of wildlife habitat
- Cumulative impacts (footprint) from all resource industries and utilities

In most cases, the issue has been localized and Al-Pac has proposed a solution to meet the stakeholders' needs. However, most issues pertaining to roads are due to other companies and industries' truck traffic--primarily a GoA challenge to manage.



Community Investment

Alberta-Pacific understands the value of being a good neighbor and has a strong tradition of supporting communities near our mill site and within our FMA area. We care about how we interact with our neighbors, surrounding communities and the environment.

Al-Pac invests in non-profit initiatives that focus on education, culture, environment, health, and wellness. These funding priorities reflect our commitment to be actively engaged in the development of sustainable communities where we live and operate.

Funding

Al-Pac has a strong tradition of supporting communities near the mill site and the communities where our team members and their families call home. From providing student scholarships to supporting environmental education programs, we are happy to help out where we can.

Our community investment strategy focuses on four key investment areas. These areas guide our decisions about the projects we choose to take part in and support:

- 1. Educational programs** - efforts are focused on community-based programs and awards that address educational initiatives, given our dependency on the skilled work force required to meet business objectives in the years ahead.
- 2. Environmental programs** - we are happy to support programs that encourage sustainability, habitat conservation, environmental education and community environmental responsibility.
- 3. Health & wellness programs** - communities thrive when they have access to health and wellness programs. We support initiatives that promote healthy lifestyles through education and prevention.
- 4. Cultural programs** - we are proud supporters of non-exclusive activities that promote effective relationship building through cultural awareness activities. This includes Indigenous and non-Indigenous activities.

Requests for funding that meet any of our four key investment areas will be considered based on level of impact, benefits and needs of the community. Non-profit organizations within our sphere of influence and Forest Management Agreement area are eligible for funding.

Community Enhancement Program

In 2011, Al-Pac introduced its Community Enhancement Program. The program supports projects that include; but are not limited to: small-scale, non-profit facility upgrades, expansion, and developments within a 100 km radius of our mill site.

Qualified organizations can apply to the program for a maximum of \$25,000. Applications will be accepted throughout the year with funds being disbursed in May and October.

Group and Project Eligibility

- Non-profit organizations within a 100 km radius of the Al-Pac mill site
- Small scale facility upgrades, expansion and development projects
- The organization must be open to all community members
- The project must enhance the overall quality of life for community members

Group and Project Ineligibility

- Programming, staffing and operational costs
- Purchase of land
- Private or for-profit enterprises
- Religious, sacramental or exclusive (fraternal) organizations

The following groups and projects have received Al-Pac assistance in the past eight years:

A total of almost \$500,000.00 has been awarded to the 20 projects listed in table 1.



| TABLE 1 YEAR | ORGANIZATION | PROJECT NAME |
|-------------------------|-----------------------------------------------------|--------------------------------------------------------------|
| 2011 | Lac La Biche County Library | Donation towards library-building, supplies, and programs |
| | Boyle School Parents Advisory Association | Donation towards extracurricular bus |
| 2012 | Whispering Hills School playground committee | Funding for new school playground |
| | Grassland Fire Department | Funding for fire trucks, hall, and SCBA equipment |
| | Plamondon District Community Development Society | Funding for mini theatre in Plamondon Festival Centre |
| | Athabasca Good Samaritan Ministries Association | Funding towards Athabasca food bank-food storage building |
| 2013 | Boyle & District Seniors Association | Funding for construction of new building |
| | Richmond Park Community Fundraiser | Funding for playground |
| | Lac La Biche Active Kids Society | Funding for Vera M Welsh playground |
| 2014 | The Hope Haven Society | Funding for Snoezelen room in Women's shelter |
| | Prosvita Community Association | Funding for Prosvita Hall playground, bleachers, and fencing |
| | Pine Creek Community Hall Association | Funding for playground |
| 2015 | Wandering River Volunteer Fire Department | SCBA Upgrading Project |
| | Newbrook Range Riders Association | Funding for sand replenishment in riding arena |
| | 2016 – Athabasca Fire Department | Purchase of new Zodiac |
| 2016 | Lac La Biche Native Friendship Centre | Donation towards Kitchen renovations |
| 2017 | Greater Athabasca Community Foundation | Funding for new spray deck |
| | Aurora Middle School | Funding for new Geodesic Dome Greenhouse |
| 2018 | Dragonfly Counselling & Support Centre | Facility upgrade for Outreach Office in Lac La Biche |
| | Russian Kafolicheskaya Culture Preservation Society | Facility upgrade |

Monitoring / Research Dollars and Organizations

Since its inception, Al-Pac has supported scientific research in various areas of forest ecology, and the effects of logging and other industrial activities on the forest. These efforts to support research have a number of influences that cover a wide range of people and researchers, with one of the effects being potential changes to forest management plans and activities. The indicator identified in the previous SEIA report tracked research dollars and the organizations supported. These are input indicators; the outcomes of the research are much more difficult to track and measure. The outcomes of the research are the aspect of the indicator that affect forest management options.

The amount of dollars expended annually (over the past five years) by Al-Pac to forest ecology research and monitoring is indicated in Figure 2.

Alberta-Pacific continues to invest company resources in the development and implementation of research projects to enhance our understanding of the boreal forest system and how it works. Although research is a primary means to address knowledge gaps, Al-Pac strives to “learn while doing” in an adaptive management (AM) approach.

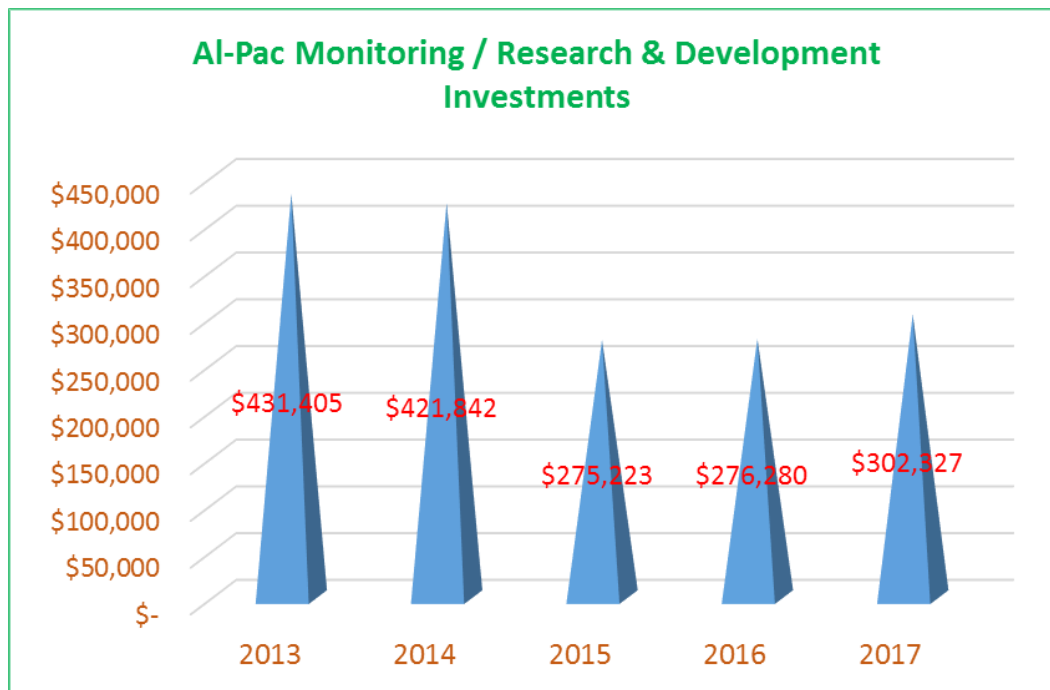
Adaptive management is a way of testing our assumptions based on forecasting anticipated outcomes relative to objectives and then measuring actual responses. Responses are then interpreted in terms of the effectiveness of a given practice to reach the desired outcome. If the desired outcome is not attained, then we adjust our planning and/or practices, and repeat the implementation and monitoring stages again, or learn while doing.

While several research initiatives are funded directly and solely by Al-Pac, most current initiatives are undertaken in collaboration or partnership with other agencies and other forest companies. These agencies include federal and provincial governments, other forest industry companies, Indigenous people, conservation agencies and other resource sectors. In particular, collaboration with energy and pipeline companies has become very important. In addition to valuable funding contributions, the energy and utility sector must be included in the development of land management solutions due to the extensive nature of the energy and utility footprint on the Al-Pac FMA area.

Collaboration on research projects and the application of research results to the development of integrated land management (ILM) practices is needed to maintain or restore biodiversity and forest health. The potential for implementation of new practices is much higher if they are developed collaboratively between academia, government and industry. In addition, transfer of knowledge across resource sectors promotes ILM implementation by enhancing each sector’s understanding of the other industry’s planning and operational practices and regulatory frameworks. Collaborations are also useful within and across academic institutions and government agencies as well.

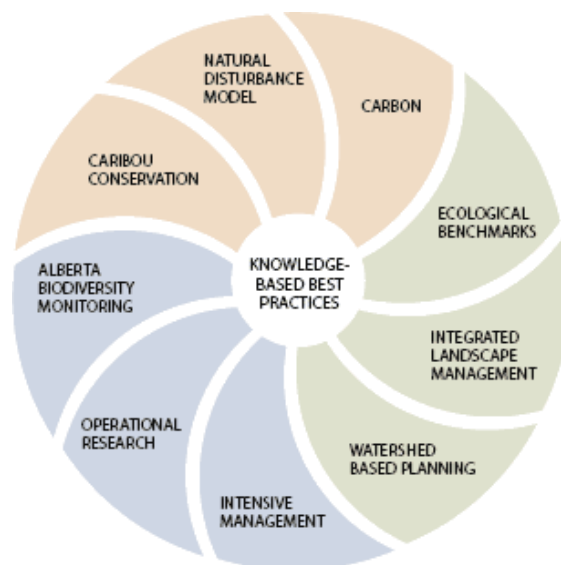
The knowledge-based best practices wheel (See Figure 3) was presented as a framework for Al-Pac’s research and monitoring programs in the 2006 Forest Management Plan and the 2011 Stewardship Report. In 2018, Al-Pac continues to be active in most research areas depicted in the wheel. However, the scope or relative importance of the research area may have changed somewhat since 2006. Since 2013 Al-Pac has invested almost \$1.8 million in monitoring and collaborative R&D programs to benefit forest management in the FMA area.

Figure 2 – Al-Pac Monitoring and Research & Development Investments



The Al-Pac research and development initiatives presented in this document provide an overview of Al-Pac's current research initiatives including research topic and project collaborators. Additional information is provided in the 2015 Al-Pac FMA area Forest Management Plan.

Figure 3 – Knowledge-Based Best Practices Wheel



Active collaborations are underway relative to caribou conservation, integrated land management, natural disturbance patterns, operational research (and effectiveness), and biodiversity. Central to these collaborations, and underlying many of these research areas, is the focus on restoration of industrial footprint and caribou habitat through coordinated ILM activities such as seismic line restoration, reclamation of well-sites, and access management. Integrated planning and practices to avoid or minimize footprint, especially within caribou habitat, are also a focus.

Changes in focus have occurred in several of the research areas, namely:

- Carbon - looking at the role of forests, especially wetlands, in carbon sequestration (in association with the Canadian Forest Service and Ducks Unlimited Canada),
- Ecological benchmarks has shifted to a focus on additional protected areas that may be determined through the GoA Land Use Framework (LUF) regional planning process underway in the province and an analysis being conducted through a collaboration with Mistik Management Ltd. (Saskatchewan), Ducks Unlimited Canada and Canadian Parks and Wilderness Society.
- Watershed-based planning is being addressed at several scales; under the LUF regional planning process and through the Ducks Unlimited Canada Forest Management and Wetland Stewardship Initiative.
- Intensive management is now considered in terms of zonation strategies relative to caribou recovery planning (for example, the Canadian Boreal Forest Agreement caribou action planning process) and regional plans and potential zonation strategies under ILM concepts

The following projects and associated research collaborators are currently supported by Al-Pac.

- *Science solutions for protecting and restoring ecological integrity of fragmented In-Situ Oil Sands landscapes*
Canadian Forest Service, Northern Forestry Centre; Cenovus Energy, Imperial, Conoco-Philips, Alberta-Pacific Forest Industries Inc., Canadian Oil Sands Innovation Alliance (COSIA), University of Alberta, Government of Alberta, Alberta Innovates.
- *Healthy Landscapes Program*
Foothills Research Institute, Bandiloop Consulting (Dr. Dave Andison), Weyerhaeuser Canada, Canadian Forest Products, West Fraser, Alberta Newsprint Company, Daishowa-Marubeni International Inc., LP Building Products, Government of NWT, Government of Alberta, Government of Saskatchewan, Ainsworth, Mistik Management Ltd.

- *Regional Industry Caribou Collaboration (RICC)*
Devon Canada, Cenovus Energy, Imperial, Meg Energy, Canadian Natural Resources Ltd., Canadian Oil Sands Innovation Alliance (COSIA), Athabasca Oil Sands, Al-Pac.
- *Alberta Biodiversity Conservation Chairs Program (2013-18) (Dr. Stan Boutin, Dr. Scott Nielsen, Dr. Erin Bayne)*
Partners include GoA Environment and Parks, Alberta Innovates, Canadian Oil Sands Innovation Alliance (COSIA), University of Alberta, National Science Engineering Research Council (NSERC).
- *Boreal Ecosystem Recovery and Assessment project (BERA)*
Partners include University of Calgary, Greg McDermid and others. Canadian Forest Service, Cenovus Energy, Conoco-Philips Canada, Al-Pac.
- *Avian Research*
Al-Pac and University of Alberta, Dr. Erin Bayne and Canadian Wildlife Service, Dr. Fiona Schmiegelow.
- *Forest Management & Wetland Stewardship Initiative*
Partners include Ducks Unlimited Canada, Weyerhaeuser Canada, Canadian Forest Products Ltd, Daishowa-Marubini International, West Fraser Timber.
- *Protected Areas Gap Analysis*
Mistik Management Ltd. (Saskatchewan), Ducks Unlimited Canada and Canadian Parks and Wilderness Society.
- *Biodiversity Monitoring*
Alberta Biodiversity Monitoring Institute (ABMI)
- *Integrated Landscape Management*
Partners include Cenovus, JACO, Devon, Meg, Husky, Imperial, CNRL, Nexon, Statoil, Suncor, University of Alberta, Wilfrid Laurier University
- *Superior Tree / Hybrid Poplar Program*
University of Alberta



Al-Pac Internal Socio-economic Indicators

Integrated Land Services (ILS) Team

Al-Pac's Integrated Land Services (ILS) team and its Integrated Landscape Management (ILM) approach attempt to minimize the industrial footprint on the landscape of the FMA area and enhance utilization of merchantable timber harvested by the energy and utilities sectors. The ILS team is involved the following areas:

1. Efficient fibre delivery from energy and utility companies' industrial salvage
2. Integration of forestry and energy development plans – ILM planning
3. Road construction, maintenance, and ownership synergies
4. Reclamation research and development
5. Reclamation practices
6. Data sharing (See page 21)

The ILS team's activities have significantly influenced Al-Pac's forest management and road construction options. Examples include the increased productivity and shared costs of roads by having multiple operators and enhanced design options to prevent silt and dirt from entering waterways.

ILS and Industrial Fibre Salvage Volume

One of the key roles of the ILS team is to enhance the yearly amount of industrial salvage fibre delivered to the mill through ILM planning and the purchase of industrial fibre from energy and utility companies. Industrial fibre is purchased from energy and utility companies as a result of their exploration and infrastructure development activities that clear forested lands throughout the FMA area.

The following two figures (Figures 4 and 5) illustrate these two methods of acquiring fibre from the FMA area. Both charts illustrate the past 5 years of activity; 2013 to 2017. This fibre flow results in less fibre being accessed through regular FMA area planning through the General Development Plan (GDP) and forest harvest plans (FHPs). The downward trend of both charts mirrors the decline in energy and utility sector activity over the last several years.

Figure 4 – ILS – ILM Volumes

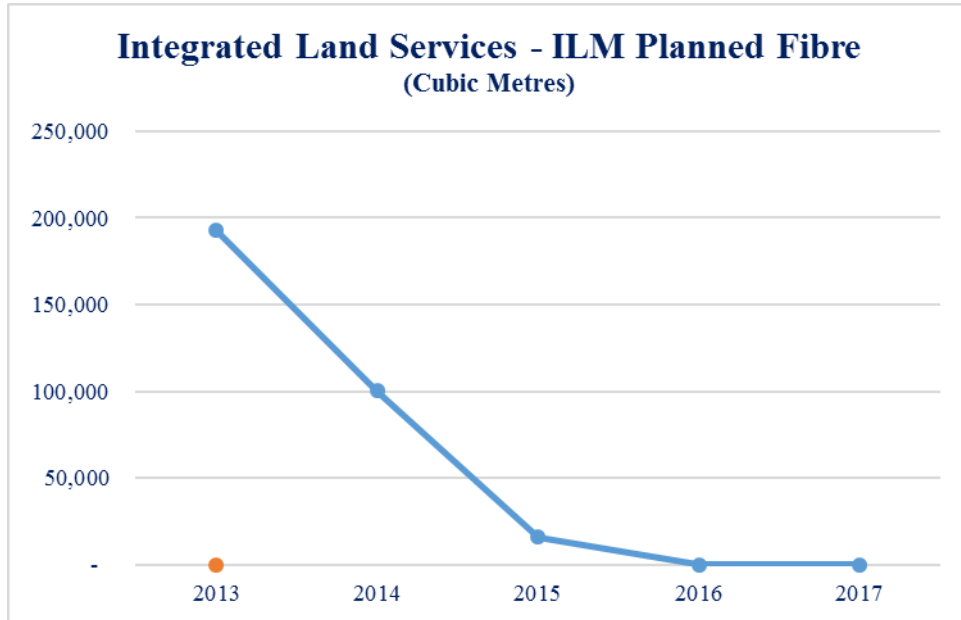
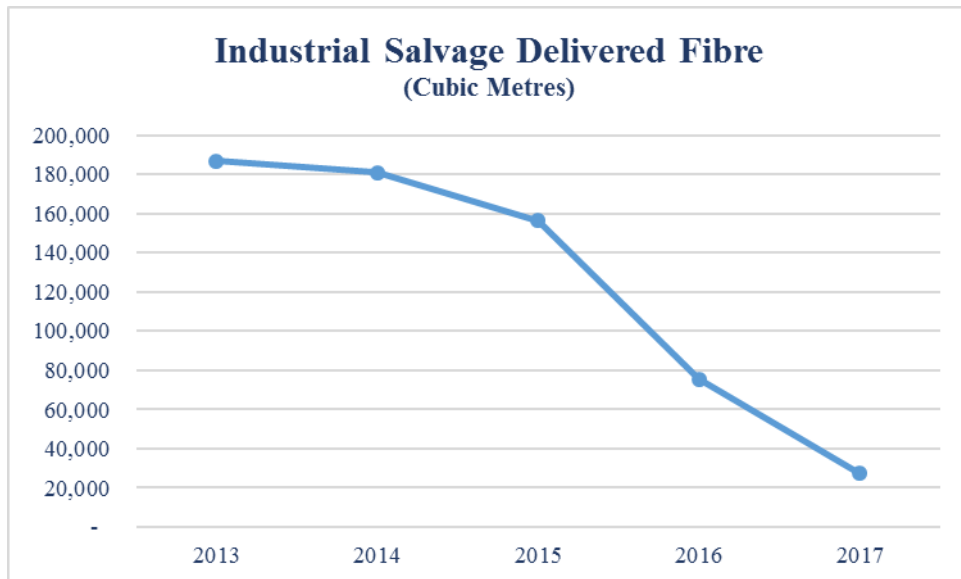


Figure 5 – Industrial Salvage Volumes



Figures 4 and 5 - Source: Al-Pac Woodlands

Reclamation / Restoration Practices

Al-Pac and utility companies have participated in collaborative projects in Alberta to restore areas of existing industrial disturbance within the FMA area to a functioning forest ecosystem. Existing industrial disturbance includes primarily linear features (seismic lines) associated with energy sector exploration activities as well as other features including well-pads.

For seismic line restoration a combination of treatments were implemented to re-establish vegetation, provide microsites for seedling establishment and minimize human access. This was done through planting of trees on linear features to re-establish vegetation similar to a natural forest trajectory, and the placement of coarse woody debris (CWD) (downed live trees) as physical barriers to minimize human access while the vegetation is established, or provide microsites to enhance natural recovery. Most of the areas treated had limited all-weather access, thus activities were completed using a helicopter to access treatment sites for both the planting and coarse woody debris phases.



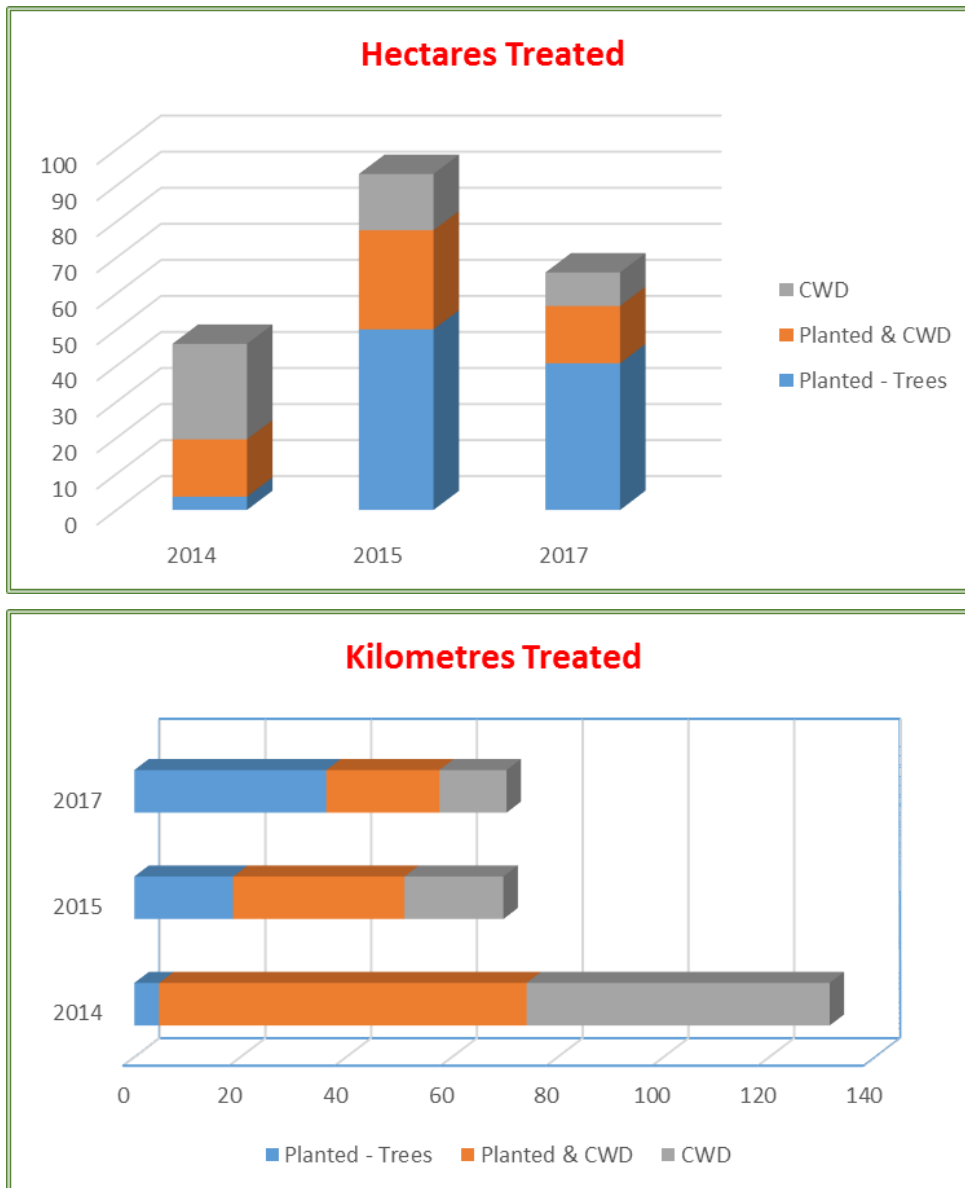
Seismic Line planting and CWD placement – Dillon Wildland Park – Al-Pac FMA Area

Tree planting focused on supplementing forest tree regeneration using jack pine, black spruce, or white spruce species on linear disturbances. The coarse woody debris treatment was the restoration treatment applied over plantable sites to reduce human access to these features while the vegetation is regenerating.

In the three years that Al-Pac has been active in this program, about 205 hectares have been treated and nearly 273 kilometers have been treated. Figure 6 illustrates the years 2014, 2015 and 2017 when the reclamation / restoration practices were implemented.

Figure 6 - Reclamation / Restoration Practices

Source: Al-Pac Woodlands

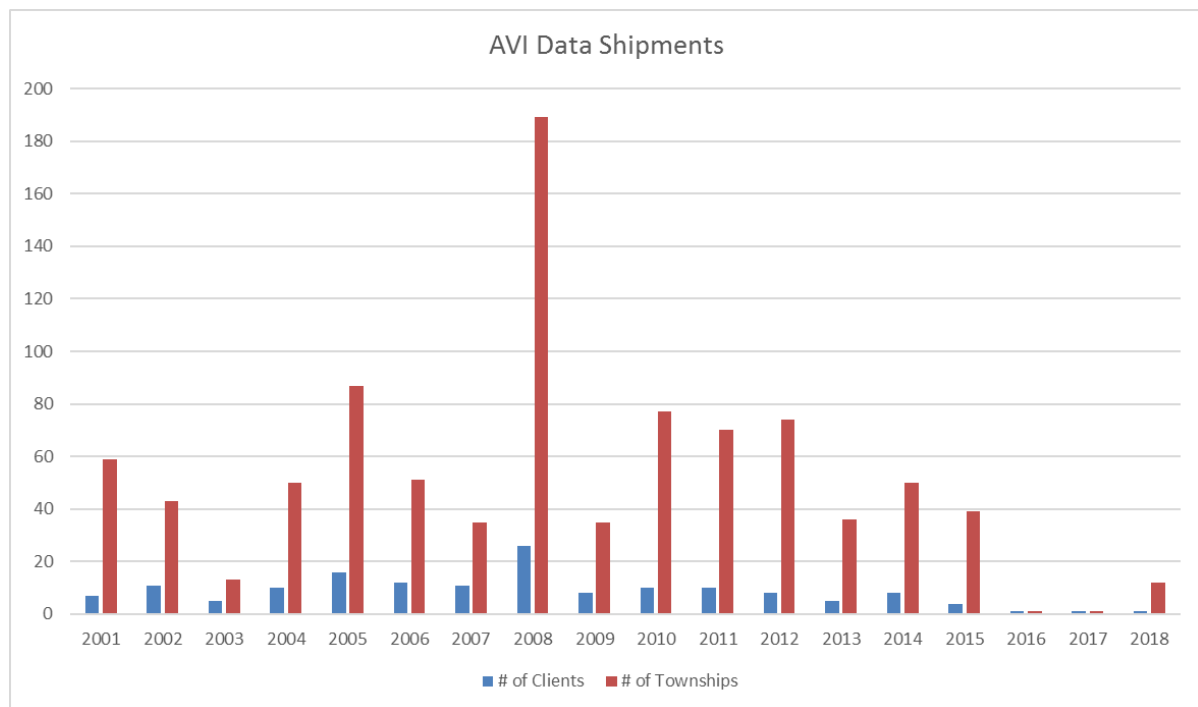


Availability of Forest Inventory Information to the Public

Al-Pac has made its complete “up-to-date” Alberta Vegetation Inventory (AVI) data and associated imagery available to the public, academic institutions, government research organizations, the Alberta Biodiversity Monitoring Institute (ABMI), Indigenous communities, and industry (in particular the energy and utilities industry). The data are available at a fee on a township* basis or as in-kind donations to academia and other projects. Since 2001, Al-Pac has distributed over 900 townships of data to industry on fee basis in addition to complete data sets for the entire FMA area to other stakeholders. The fee-based distribution of AVI inventory data is illustrated in figure 6 below. Data sales and distribution are based on external market demand. Al-Pac does not create the market nor promote the distribution of the data and imagery.

Figure 6: Number of Clients and Number of Townships Distributed 2001 to 2018

Source: Al-Pac Woodlands



The trend-line for the past 10 years is downwards – paralleling the decline in the energy and utility sector activity in Alberta over the last several years.

* A township is a survey grid area approximately 6 miles by 6 miles, equivalent to about 36 square miles or 9,324 hectares.

Indigenous Employee Program

Alberta-Pacific respects the connection between Indigenous communities and the forest land base. We value the knowledge they have to share with us, and we are committed to providing opportunities for meaningful partnerships with the Indigenous communities located within or near our FMA area.

This commitment is realized by our efforts to build new working relationships and maintain existing collaborations in the areas of consultation, education, training, employment, and economic development. It is our hope that our Indigenous Affairs program will contribute to not only a sustainable forest, but also sustainable communities.

Economic and Business Development – Alberta-Pacific supports economic and business development opportunities within Indigenous communities. For example, Bigstone Forestry Inc. (BFI) is an independent logging company established via a partnership between the Bigstone Cree Nation and Alberta-Pacific. Since it began operations in 2000, BFI has remained one of our primary logging contractors. The company is also committed to maximizing opportunities with Indigenous-owned businesses through woodlands and pulp contracts.

Support for Education and Employment Related Training – we support education and employment related training programs by utilizing partnerships with Indigenous community organizations, government and post-secondary institutions. In particular, Alberta-Pacific participates in the Registered Apprenticeship Program and we offer our own Indigenous Apprentice Program. We also provide scholarships and donations to Indigenous community schools and community based education programs.

Indigenous Recruitment and Retention – Alberta-Pacific is committed to hiring from local Indigenous communities, and developing partnerships with community human resource organizations is critical to ensuring our recruitment activities are meaningful and effective. We also provide opportunities within our organization to enable the continued success of our team members.

Partnerships - Maximizing mutually beneficial partnerships that build economic capacity is a cornerstone of Alberta-Pacific's commitment to Indigenous communities. This includes working with Indigenous community organizations to identify where the company may support economic and business development initiatives, as well as providing woodlands and pulp contract opportunities to local, Indigenous-owned businesses.

Bigstone Forestry Inc. and JHL Forestry Inc.

Bigstone Forestry Inc. (BFI) was established via a joint venture between the Bigstone Cree Nation and Alberta-Pacific, and began logging operations near the community of Wabasca in 2000. In 2003, a similar partnership was formalized between the Chipewyan Prairie Dene First Nation, Heart Lake First Nation and Alberta-Pacific, resulting in the start-up of JHL Forestry Inc. (JHL). From the beginning, each company has maintained a focus on local ownership and community employment.

As independent enterprises, BFI and JHL combined account for approximately one quarter of Alberta-Pacific's annual timber harvest volume, harvesting upwards of 535,000m³ of timber annually.

Today, each company maintains a strong commitment to their respective communities and continue to provide community investment opportunities, including income, employment and training, and support for local businesses.



JHL General Manager
David Lloyd and JHL
equipment operator

Contracting Opportunities

Alberta-Pacific provides contract opportunities for local, Indigenous-owned businesses, both at our mill-site and in woodlands operations. This includes logging, reclamation, road construction and maintenance, silviculture and wood yard services.

Indigenous Education Partnership Program

Our Indigenous Education Partnership Program provides full tuition for up to five years of post-secondary studies to an Indigenous student living within or near the Forest Management Agreement area.

Alberta-Pacific is committed to supporting local education initiatives in neighbouring Indigenous communities.

In addition to providing awards and donations to local Indigenous schools and educational organizations, Alberta-Pacific facilitates our own Indigenous Education Partnership Program. This program awards a bursary annually to an Indigenous student from the FMA area entering a recognized post-secondary program in any discipline. The bursary provides full tuition for up to five years of the student's studies, and a mentor is available to provide guidance if requested.

Indigenous students are also eligible for one of the many other scholarships our company offers.

Corporate Award related to Indigenous Affairs

Progressive Aboriginal Relations (PAR)

PAR is a certification program that confirms corporate performance in Indigenous relations at the Bronze, Silver or Gold level. Certified companies promote their level with a PAR logo signaling to communities that they are

- good business partners;
- great places to work and;
- committed to prosperity in Aboriginal communities

PAR certification provides a high level of assurance to communities because the designation is supported by an independent, third party verification of company reports. The final company level is determined by a jury comprised of Indigenous business people.

Since the program's introduction in 2001, PAR remains the premier corporate social responsibility program with an emphasis on Indigenous relations. PAR companies are large corporations, small and medium-sized enterprises as well as Indigenous businesses, and range from industries in oil and gas to food and facilities management to financial services, IT and more.

Companies promote their level with a PAR logo signaling to communities that they are good business partners, great places to work and are committed to prosperity in Indigenous communities. Al-Pac is a GOLD member, since 2005 we have been getting the award. Redone every 3 years.

website: <https://par.ccab.com/>

¹ Statistics Canada, Census Profiles, 2016: <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CMACA&Code1=860&Geo2=PR&Code2=47&Data=Count&SearchText=Wood%20Buffalo&SearchType=Begins&SearchPR=01&B1=All&TABID=1> and <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=ER&Code1=4870&Geo2=PR&Code2=48&Data=Count&SearchText=Athabasca--Grande%20Prairie--Peace%20River&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR&GeoCode=4870&TABID=1>

² http://www.albertacanada.com/files/albertacanada/SP-EH_highlightsABEconomyPresentation.pdf

³ Beckley, T.M. 1999. *Public involvement in natural resource management in the Foothills Model Forest*. Unpublished manuscript. Hinton, AB: Foothills Model Forest.