

BACKGROUND TO THE ALBERTA FOREST USAGE SURVEY

The Alberta Forest Products Association (AFPA) commissioned a research project related to understanding societal values Albertans hold towards their forestlands. This initiative was part of an integrated response and action planning process to identify issues around industrial activities generally, and forest industry activities specifically, on the province's public forest lands.

The central issue underlining this project is to determine what the forest industry needs to do to maintain and enhance the public trust placed in Alberta's forestry firms as stewards of the forest – one of Alberta's prime, natural, sustainable and wealth-creating renewable resources.

Forestry operations rely on continued access to the forested land or the Green Area, yet trees are not the only resource that exists on this land. Forest lands support local communities provide habitat for wildlife and a rich biodiversity of flora and fauna. The forest also serves spiritual, social and recreational needs of many Albertans. Besides cleaning the air above the surface, below the forest's surface lie the various forms of energy resources that have come to define much of Alberta's identity and prosperity. The forest land is a complex interrelated network of humanity, vegetation, animals, water, soil, air and minerals, although we humans have not generally taken an integrated approach relating to the inter-related reality of the forest land. Instead, historical forest land use and related public policy has, for the most part, evolved incrementally, in ways that have been fragmenting and largely uncoordinated.

Multiple industrial use, increasing access intensity, and business practices of different sectors often result in a damaging fragmentation of the forest. The growth of local communities and the emerging importance of the forest in terms of climate change dynamics "fragment" the perceptions of the importance of the forest as well.

The AFPA commissioned Cambridge Strategies Inc., a public policy consultancy based in Edmonton, Alberta to assist in this work. Their first order of business was the completion of a report that examined the environment in which the forest industry was operating in within the Alberta context. Following this work, the Alberta Forest Usage Survey was designed and placed online at www.yourforest.org. A total of 5599 unique visits were made to the *Your Forest* website. Of that, 2881 visitors completed the survey (a 52% completion rate).

The Alberta Forest Products Association, and its member companies, will be using the results of this survey to:

- assist them in better understanding society needs and wants related to its public forest lands,
- measure how forest industry current and proposed operations and management plans meet and can be improved in light of the public's expectations and
- develop better communications, information and awareness tools that help the forest industry communicate with Albertans about forestry activities and management.

Alberta's forests – a sustainable, renewable, natural resource.

For more information, please contact the Alberta Forest Products Association at (780) 452-2841, info@albertaforestproducts.ca, or via post at 500, 10709 Jasper Avenue, Edmonton, Alberta T5J 3N3

DISCRETE CHOICE MODELING

Discrete Choice Modeling (DCM) is a Nobel Prize winning public opinion / market research technique. DMC indicates the priority and comparative degree of concern of participants on a series of values. This technique is used extensively in main-stream marketing, with applications in virtually every industry, including financial services, telecommunications, airline/transportation, utility, consumer and package goods to name a few.

DCM is a mathematical representation of citizen preferences. It indicates the value that citizen's place on the different features of a set of policy options, including, in this case, a consideration of what is important to citizens in granting a social licence to operate in the public forests.

There are always trade-off decisions that one needs to make amongst various attributes in a real life situation. DCM, in a sense, forces one to make such trade-offs by requiring a preferential selection between two competing scenarios. The scenarios are almost always less than completely satisfying, just like in real life. But by making the choice of one scenario over the other and doing so through a series of alternative choices, the **relative importance** of certain values emerge. The trade-offs people are prepared to make between or amongst various values also becomes apparent.

The results will give an indication of what the public believes is important, both positively and negatively, and how strongly those beliefs are held. This is all done by professional analysis through a series of proven statistical algorithms.

What is Different from Traditional Opinion Polls?

Traditional opinion surveys simply ask respondents what is important to them. This approach has some obvious limitations. Firstly, most people simply do not know what drives a product, service or policy choice for them, so the survey sponsor gains no insight. Secondly, when we ask survey respondents such a question, we inevitably find they respond that "everything" is important. This too is not helpful.

Alternatively, by placing respondents in a DCM context, and requiring them to make trade-offs between the competing choices, we are able to uncover what is important to them in making such a decision. With all the values that were put forward for consideration in the *Alberta Forest Usage Survey*, and the range of options within each value, the DCM method creates a vast array of scenario alternatives. These were generated randomly and provided a unique survey instrument for each participant's input. The inputs were then aggregated for analytical and reporting purposes.

The results of the *Alberta Forest Usage Survey* are the property of the Alberta Forest Products Association.

TOP FOUR VALUES IDENTIFIED IN ALBERTA FOREST USAGE SURVEY

1. Replanting/Reforestation
2. Protection of Wildlife and Habitat
3. Harvesting Practices That Manage Ecological Impacts
4. Regulations or Restrictions on Industrial Land Use

TOP 10 ATTRIBUTES IDENTIFIED IN ALBERTA FOREST USAGE SURVEY

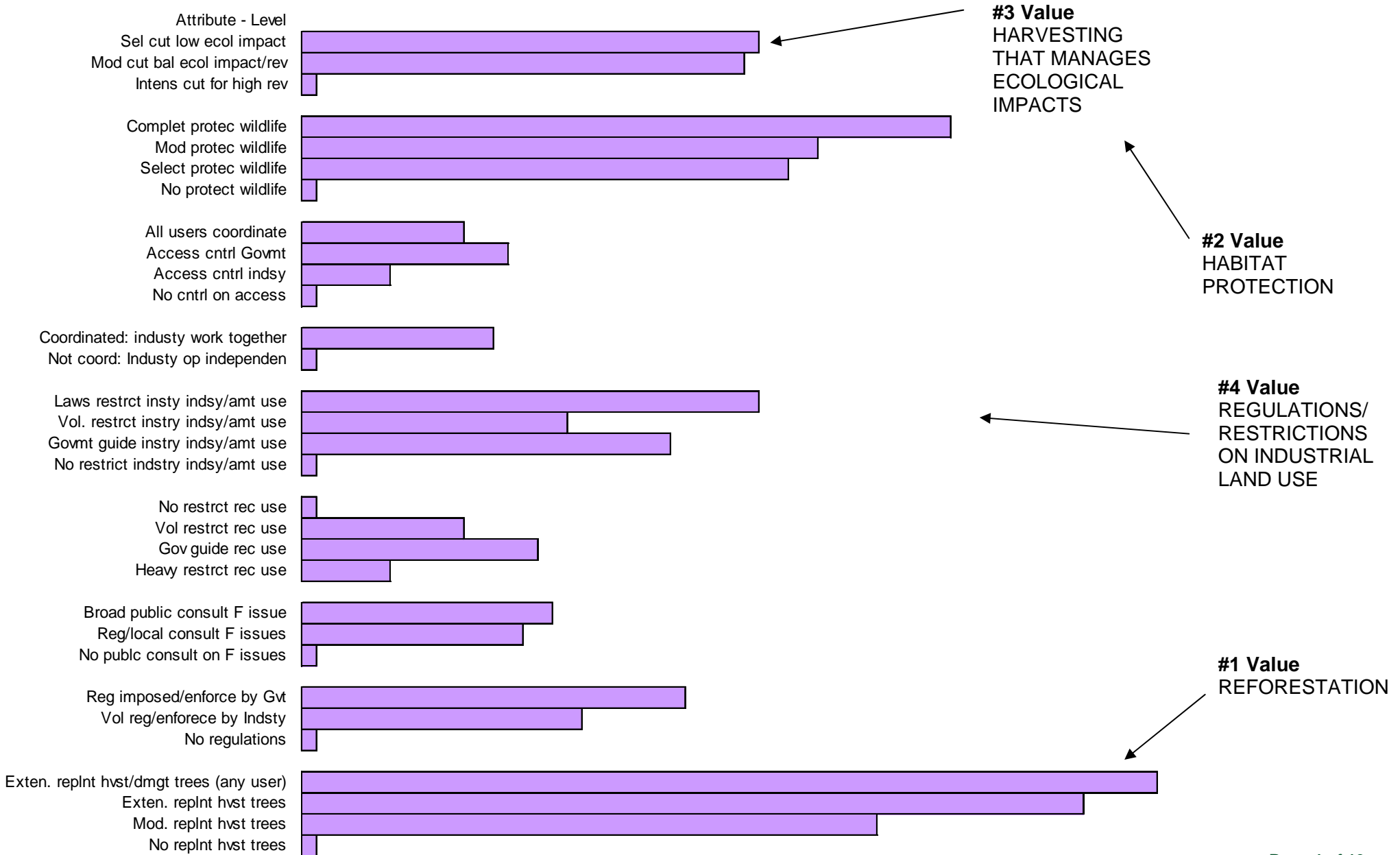
1. Extensive replanting for harvested and damaged trees (from any user)
2. Extensive replanting of harvested trees
3. Complete protection of wildlife habitat
4. Moderate replanting of harvested trees
5. Modest protection of wildlife habitat
6. Selective protection of some wildlife habitat
- 7T. Selective cutting with low ecological impact
- 7T. Laws and regulations on intensity of industry use and amount of forest used by industry
9. Moderate cutting balancing ecological impact and revenue
10. Regulations imposed and enforced by Government

Discrete Choice Modeling Attribute Tornado Chart (page 4)

Within each attribute, various levels were tested. These levels are scaled in Tornado Charts that measure the relative importance of different attributes, as well as the importance of individual levels. There are two items to look for when analyzing this chart:

- 1) **Relative Importance of the attribute:** Looking at all the attributes, you can see which of the attributes were deemed “more important” (of greater utility) than others. The farther reaching to the right a cumulative bar is, the higher its importance in influencing the decisions made by *Alberta Forest Usage Survey* participants.
- 2) **Relative Importance of the levels within an attribute:** Looking at any given attribute, each of the levels within that attribute were given values. By examining the length of the bar (and the utility assigned to that particular level) we can infer which level within a particular attribute is of greater importance.

DCM ATTRIBUTE TORNADO CHART



To the best of your knowledge, who is responsible for managing Alberta's forests?

Government of Alberta	77.93%
Government of Canada	4.42%
Businesses that operate in the forest	15.3%
Environmentalists	0.64%
Individual citizens	1.68%

Thinking of all the issues facing Alberta's forests today, which one do you feel should receive the greatest attention from Alberta's leaders?

Sustainable forest management practices	41.07%
Protection of habitat	14.97%
Maintaining biodiversity	11.52%
Maximization of revenue and tax return	1.11%
Protection of forest related jobs and industry	1.99%
Support of rural communities	1.31%
Climate change concerns	2.67%
Protection of wetlands	1.58%
Protection of caribou and grizzly bears	1.04%
Intensity of use by all industries (forestry, oil and gas, other)	17%
Restrictions on recreational use	1.21%
Soft wood lumber trade issues	4.46%

In your opinion, which of these environment-related issues will have the greatest impact on Alberta's future economic prosperity?

Water quality	18.59%
Air quality	2.87%
Soil quality	1.18%
Intact forest	5.91%
Protection of wildlife habitat	5.94%
Maintaining biodiversity	14.33%
Responding to climate change	13.48%
Rivers and watershed management	21.43%
Soil erosion	1.45%
Agricultural lands	4.29%
Controlling urban sprawl	10.48%

In your opinion, how well do you think forest companies operating in Alberta's forests are performing?

Excellent	4.25%
Very good	18.22%
Good	34.44%
Fair	28.87%
Poor	14.19%

In your opinion, how well do you think oil and gas companies operating in Alberta's forests are performing?

Excellent	2.23%
Very good	7.84%
Good	24.3%
Fair	33.02%
Poor	32.58%

Thinking of all the issues facing the province of Alberta today, how concerned are you about the management of Alberta's forests?

Extremely concerned	47.76%
Somewhat concerned	42.79%
Not very concerned	8.18%
Not at all concerned	1.25%

There are differing views about forests as a resource. Which of these two statements do you agree with more?

Forests should be controlled and usage determined based on highest sustainable economic output and keeping forest related employment at a higher priority than environmental and wild life protection	16.41%
Access and use of forests should be based firstly on preserving and protecting the environment and sustaining wild life habitat at the expense of sustained economic benefits and jobs	83.58%

Alberta's forests are a vital part of our economy.

Completely agree	62.87%
Somewhat agree	28.22%
Neither agree nor disagree	5.38%
Somewhat disagree	2.57%
Completely disagree	0.94%

Alberta's forests are better managed than other regions of Canada.

Completely agree	10.05%
Somewhat agree	25.41%
Neither agree nor disagree	44.43%
Somewhat disagree	13.29%
Completely disagree	6.8%

Canada has some of the largest forests in the world.

Completely agree	62.16%
Somewhat agree	28.49%
Neither agree nor disagree	6.86%
Somewhat disagree	1.89%
Completely disagree	0.57%

The forest industry is doing a good job managing Alberta's forests.

Completely agree	9.88%
Somewhat agree	39.08%
Neither agree nor disagree	21.59%
Somewhat disagree	20.27%
Completely disagree	9.17%

The oil and gas industry is doing a good job minimizing impacts in the forest.

Completely agree	3.24%
Somewhat agree	19.59%
Neither agree nor disagree	18.13%
Somewhat disagree	32.18%
Completely disagree	26.83%

Industrial activity in the forest interferes with recreational uses.

Completely agree	9.06%
Somewhat agree	32.31%
Neither agree nor disagree	26.63%
Somewhat disagree	24.56%
Completely disagree	7.41%

Forest companies balance timber harvesting with recreational uses.

Completely agree	9.47%
Somewhat agree	35.29%
Neither agree nor disagree	17.12%
Somewhat disagree	26.36%
Completely disagree	11.74%

Environmental groups speak for my interests in the forest.

Completely agree	9.67%
Somewhat agree	27.34%
Neither agree nor disagree	22.19%
Somewhat disagree	19.69%
Completely disagree	21.08%

Alberta forests minimize greenhouse gas emissions.

Completely agree	33.5%
Somewhat agree	34.45%
Neither agree nor disagree	22.33%
Somewhat disagree	5.58%
Completely disagree	4.12%

In your opinion, how well do you think the forest industry is harmonizing economic, environmental and social/recreational concerns?

Harmonizing extremely well	4.46%
Harmonizing somewhat well	39.01%
Harmonizing neither well nor badly	27.14%
Harmonizing somewhat badly	21.86%
Harmonizing extremely badly	7.51%

I feel that Alberta's economy will suffer if forest companies are forced to cut back their operations due to environmental concerns.

Completely agree	11.03%
Somewhat agree	35.29%
Neither agree nor disagree	14.51%
Somewhat disagree	26.26%
Completely disagree	12.89%

I feel that residents of forest dependent communities should have a greater say in determining how the forest is used than people living in non-forest dependent communities.

Completely agree	16.34%
Somewhat agree	33.97%
Neither agree nor disagree	11.2%
Somewhat disagree	23.51%
Completely disagree	14.95%

I feel that no industrial activity should occur in areas which are habitat for endangered species, no matter how careful companies try to be.

Completely agree	34.34%
Somewhat agree	27.98%
Neither agree nor disagree	9.84%
Somewhat disagree	21.45%
Completely disagree	6.36%

I feel that Aboriginal Albertans have a greater right to use the forest than any other stakeholder.

Completely agree	5.1%
Somewhat agree	11.91%
Neither agree nor disagree	11.77%
Somewhat disagree	20.91%
Completely disagree	50.28%

I feel that the government needs to put limits and set priorities on who is able to use the forest, how, when and where.

Completely agree	30.45%
Somewhat agree	45.17%
Neither agree nor disagree	11.43%
Somewhat disagree	9.03%
Completely disagree	3.89%

The forest industry is concerned with the long-term sustainability of the natural resource base.

Completely agree	28.8%
Somewhat agree	52.53%
Somewhat disagree	13.23%
Completely disagree	5.41%

The forest industry demonstrates environmental planning and management in its operations.

Completely agree	20.04%
Somewhat agree	56.66%
Somewhat disagree	18.38%
Completely disagree	4.9%

The forest industry gets the attention and support of government.

Completely agree	24.33%
Somewhat agree	54.7%
Somewhat disagree	18.95%
Completely disagree	1.99%

The forest industry supports research and applies new technology.

Completely agree	21.12%
Somewhat agree	58.29%
Somewhat disagree	18.28%
Completely disagree	2.3%

The forest industry is accountable in how it uses forest lands.

Completely agree	18.82%
Somewhat agree	42.58%
Somewhat disagree	28.3%
Completely disagree	10.29%

The forest industry coordinates with other industry sectors, local communities, recreational users and Aboriginal people.

Completely agree	12.15%
Somewhat agree	50.57%
Somewhat disagree	29.45%
Completely disagree	7.81%

The forest industry is aware and respectful of the needs of the wildlife in the forest.

Completely agree	12.96%
Somewhat agree	45.02%
Somewhat disagree	29.04%
Completely disagree	12.96%

The oil and gas industry is concerned with the long-term sustainability of the natural resource base.

Completely agree	6.46%
Somewhat agree	26.57%
Somewhat disagree	33.54%
Completely disagree	33.41%

The oil and gas industry demonstrates environmental planning and management in its operations.

Completely agree	6.26%
Somewhat agree	37.1%
Somewhat disagree	35.78%
Completely disagree	20.85%

The oil and gas industry gets the attention and support of government.

Completely agree	69.62%
Somewhat agree	24.86%
Somewhat disagree	4.13%
Completely disagree	1.36%

The oil and gas industry supports research and applies new technology.

Completely agree	29.53%
Somewhat agree	52.5%
Somewhat disagree	13.35%
Completely disagree	4.6%

The oil and gas industry is accountable in how it uses forest lands.

Completely agree	6.9%
Somewhat agree	26%
Somewhat disagree	36.31%
Completely disagree	30.77%

The oil and gas industry coordinates with other industry sectors, local communities, recreational users and Aboriginal people.

Completely agree	6.37%
Somewhat agree	36.51%
Somewhat disagree	35.58%
Completely disagree	21.52%

The oil and gas industry is aware and respectful of the needs of the wildlife in the forest.

Completely agree	5.1%
Somewhat agree	25.63%
Somewhat disagree	34.97%
Completely disagree	34.27%

“Integrated Landscape Management is an approach to land management. It considers the effects of industrial development upon the land in light of environmental, social and economic sustainability. It is an approach to balancing the various needs on Alberta’s public lands.” *Please indicate whether you agree or disagree with such an approach to managing Alberta’s forests*

Completely agree	39.1%
Somewhat agree	43.42%
Neither agree nor disagree	11.91%
Somewhat disagree	3.91%
Completely disagree	1.64%