

Task Force Report

***“FOREST STEWARDSHIP IN AREAS WITH FORESTRY AND OIL & GAS
DEVELOPMENT IN NORTHEAST BC – THE FOREST PROFESSIONALS’
PERSPECTIVE”***

Prepared for the Association of BC Forest Professionals Council

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EXECUTIVE SUMMARY

This discussion paper has been prepared by the Forestry – Oil and Gas Task Force for consideration by the Association of BC Forest Professionals (ABC FP) Council. It was initiated at the request of Council, to examine the apparent issues surrounding impacts of the oil and gas industry on forestry (primarily in northeast BC).

The Task Force identified two areas of unique interest to the ABCFP:

1. That resource development occurs in a manner consistent with the principles of good stewardship; and
2. That management of the forest and forestry practices, regardless of the resource sector involved, is carried out by qualified, accountable professionals.

On the matter of good stewardship, the Task Force heard general perceptions and concerns about the impact of oil and gas industry seismic and drilling programs on forest management. On closer examination, however, these concerns tend to point out concerns about the risk to good forest stewardship, rather than definitive examples. Many of the issues arise because of systemic weaknesses in planning and communication when more than one industry (and sometimes several companies) are operating on the same land base. The Task Force found that the Province is aware of the issues, and is working on a number of initiatives to address planning, regulatory consistency and information sharing. It recommends that the ABCFP become proactive by advocating for better integration of operational level planning; providing input to policy reform; promoting improvements to information sharing, and encouraging its members to take an active and constructive role with the oil and gas sector at the field level.

In regard to management of forestry practices by qualified professionals, the Task Force found a number of misconceptions about the legal requirements, but was not made aware of any examples of non-compliance with the *Foresters Act*. It concludes that there is a need to better communicate with the oil and gas sector about where a forest professional is required, and to differentiate this from where it is discretionary but possibly good business. The recommendations focus on communication and consistency.

INTRODUCTION

In areas of resource development on forest lands, forest professionals in BC have a responsibility to actively promote good stewardship that meets the immediate social and economic needs of the public without compromising long-term forest sustainability and the flow of environmental goods and services. The purpose of this paper is to encourage an informed and constructive dialogue about how to ensure this happens in areas where expansion of forestry and oil and gas development are sharing, and sometimes competing for the same land base. The primary focus for discussion is northeastern British Columbia, however many of the issues and lessons from that area are expected to be relevant to other regions of the province and to other resource sectors – now or in the near future.

Forest Professionals in BC have a legal responsibility under the *Foresters Act*, independent from government, industry and others, to regulate the practice of professional forestry in the province, and to uphold the principles of good stewardship for forest lands and resources. The Association of BC Forest Professionals (ABCFP) has become aware of increasing concern by several of its members, as well as from local forest-dependent communities, First Nations and others, that the cumulative impacts of industrial development may compromise good forest stewardship in some areas where high timber and oil and gas values exist. Members in particular have expressed a desire to have a fuller understanding of the appropriate position and role of the ABCFP.

The concerns that have been raised about impacts and stewardship challenges are not new to the resource companies and government agencies involved, and several initiatives have been or are being undertaken in an attempt to better define and address the issues. In order to fulfill its unique responsibilities in this discussion, the ABCFP has established a small task force of knowledgeable members and retained an experienced consulting firm to look into and define the aspects that are relevant to the profession, and to recommend a course of action for the Association.

METHODOLOGY

The Association established a Forestry – Oil and Gas Task Force comprised partly of members from the standing Stewardship Advisory Committee, and augmented with ABCFP members with experience in forestry – oil and gas sector interaction in the field. The Task Force was led by a member of the ABCFP staff. The members selected provide a cross-section of employment experience in government agencies and the forest industry. A member who is presently employed in the oil and gas sector was invited but was unable to participate. The Association advertised a call for proposals and subsequently selected a consulting team to assist the Task Force by preparing draft documents and managing the report preparation process. The consulting team included one person who is a Professional Forester and another who is currently working in the oil and gas sector.

The Task Force started by reviewing the information that led to this matter coming to the Association’s attention, including a letter to the ABCFP General Counsel and Registrar on January 11, 2005. Through a series of conference calls and draft documents, the Task Force identified an initial list of issues. From the initial list a number of “perceptions” about the impact of oil and gas industry operations on forestry were identified, and the Task Force then proceeded to gather information about each perception. The results were organized according to the unique interests of the ABCFP.

In the process of identifying issues, perceptions and information the Task Force members consulted with peers, and the Association staff person and consultants talked to several people within the government regulatory agencies and both industries. The consulting team also reviewed a number of public and some unpublished documents to determine what activity has been, or is being taken relative to the issues and perceptions identified. Several attempts were made to access current quantitative information on the land-based impact of forestry and oil and gas activities in northeast BC however, as observed later in this report, there are some shortcomings with information management that prevented this. As an alternative, the Task Force found that the most recent Allowable Annual Cut

Rationales provided the most credible and readily available information on forest impacts.

The Task Force referred a draft of the paper to the Stewardship Advisory Committee and, on a confidential basis, to a small number of key stakeholders before finalizing it for Council.

SITUATION OVERVIEW

The forest industry and the oil and gas industry are both well established in northeastern BC, and their activities in the region contribute significantly to the economies of several communities, and the province as a whole.

Exploration and development of oil and gas resources has seen tremendous growth over the past several years. The industry has experienced a general move westward from the prairies and taiga plains into the forested foothills and east slopes of the Rocky Mountains. As technology advances and demand grows, the industry is expected to move into other parts of BC, (see map of known petroleum potential – Appendix 1). This process may be accelerated as a result of the province's Oil and Gas Strategy and a desire by the Province to encourage economic diversification in areas of central BC impacted by the Mountain Pine Beetle (MPB) epidemic. According to the Provincial Government¹ BC is one of the few North American jurisdictions where the amount of marketable gas is increasing and will continue increasing in the coming years.

The Oil and Gas Advisory Committee² reports that conventional natural gas production in BC, virtually all of which occurs in the northeast, has become a vital part of the provincial economy. It is now the largest contributor of direct natural resource revenues to the provincial treasury. In 2005 BC was Canada's second largest natural gas producer:

¹ Ministry of Energy and Mines, Fact Sheet - Oil and Gas Statistics (Feb.15, 2005) 2005EM0007-000150

² Oil and Gas Advisory Committee, Final Submission to BC Competition Council (April 2006)

- 2.9 billion cubic feet per day of marketable gas³
- 11,400 direct jobs
- \$3.9 billion annual capital investment (equating to \$10.3 billion in economic activity using an accepted multiplier of 2.66)

While the target resource for the oil and gas industry is underground, the industry must disturb forested areas in order to carry out seismic exploration programs, drilling, pipeline construction and service activities safely and efficiently.

The forest sector has also grown in northeast BC during the last two decades. Improved access, better technology and utilization of what were previously commercially undesirable tree species (e.g. aspen and small diameter pine) has led to significant investments in new and upgraded manufacturing plants and in timber harvesting activities. The region supports two pulp mills, three oriented strand board (OSB) mills, four large lumber mills, a plywood plant and several other smaller wood manufacturing facilities.

- Timber harvest (Annual Allowable Cut) is 6.18 million cubic meters⁴⁵
- Approximately 2,200 direct jobs⁶
- \$1.2 billion annual economic activity (based on a common multiplier of \$200/m³)

There is a possibility that an expansion of the MPB epidemic into northeast BC, if not contained, could lead to a further acceleration of timber harvesting if it becomes necessary in order to salvage dead timber.

While these two industries are the primary focus of our discussion, it is important to note that other sectors, such as agriculture, commercial tourism and guiding, mining, and fur trapping are also important factors on some parts of the forest landscape, as are the

³ BC Government web site

⁴ Total AAC for Fort Nelson, Fort St. John and Dawson Ck Timber Supply Areas and Tree Farm License 48 – Source: Ministry of Forests and Range

⁵ This amount does not include up to 1 million cubic meters of timber that is either harvested from private land or imported from Alberta to be manufactured in northeast BC

⁶ Extrapolated from socio-economic analysis reports in Land and Resource Management Plans.

traditional and cultural practices of First Nations and various non-commercial recreation activities.

The Province, through the Ministry of Agriculture and Lands, Integrated Land Management Bureau, Ministry of Environment, Ministry of Forests and Range, Ministry of Energy Mines and Petroleum Resources, and the Oil and Gas Commission is responsible for facilitating development while protecting the long-term attributes of the forest. Forest companies, oil and gas companies, and other resource users are licensed and regulated by these agencies, and may have some planning and management functions delegated to them through the licensing process (e.g., a Forest License holder is responsible for preparation of a Forest Stewardship Plan consistent with the *Forest and Range Practices Act*). The ABCFP is responsible for enforcement of the *Foresters Act* which defines the practice of professional forestry.

DISCUSSION OF PERCEPTIONS AND ISSUES

The primary purpose of this discussion paper is to describe the role and interests of the ABCFP in circumstances where concern is raised about the impacts of forest development on “good forest stewardship”, and to make recommendations where appropriate. The concern that has given rise to this paper involves the combined impact of oil and gas and timber operations on forests in northeast BC. From an ABCFP perspective the underlying issues are the cumulative effects of development on good forest stewardship, and the role of its members. The fact that the issue involves these two industries does not make it significantly different than if the concern involved other sectors, or perhaps only a single industry. What may be unique are some of the underlying causes and circumstances that arise from these two very different industries sharing a common land base.

ABCFP Public Interest:

That resource development occurs in a manner consistent with the principles of good forest stewardship.

The *Foresters Act* in Section 4 describes the objects of the association, in part, "...to advocate for and uphold principles of forest stewardship of forests, forest lands, forest resources and forest ecosystems..." Under the Act the Association may pass resolutions for the purposes named, including "the promotion of good forest stewardship".

The May 2002 ABCFP Paper Interpreting the Publics' Interest provides the following definition of stewardship "...the care of natural resources taking into consideration the values of landowners and society. Stewardship includes the application of ecological understanding at the stand, forest and landscape levels and is based upon an ethical responsibility to the land and the place of people in the natural world. Stewardship employs well-crafted solutions tailored specifically to each problem and embraces the diversity and complexity of the task at hand." Bylaw 12 (2003) addresses stewardship with the following statement: "*Members demonstrate stewardship by balancing present and future values against the capacity of the land to provide for those values.*"

Several ABCFP members who work in northeastern BC where the oil and gas companies and forest companies utilize the same landscapes have raised concerns or described perceptions about whether current practices constitute "good forest stewardship". In this regard, the key questions for the profession are:

- For the areas of concern, are the land and resource use objectives sufficiently defined by the landowner to guide development according to principles of good forest stewardship?
- Are there adequate plans and processes in place to guide development to occur in a manner consistent with the land and resource objectives?
- Are there adequate monitoring and measuring processes in place to enable reporting and adaptive management?

While it is difficult to answer these questions definitively, the following discussion provides some insight to how they are currently being addressed.

Discussion:

LAND AND RESOURCE PLANNING AND OBJECTIVES

Government approved Land and Resource Management Plans (LRMP's) were developed with extensive public involvement⁷ and established "protected areas" and other resource management zones for a large area (e.g. the Fort St. John LRMP covers approximately 4.6 million hectares). Resource management zones provide general guidance to industrial development according to designations of "special", "general" or "enhanced". In most cases these plans do not address specific resource development objectives at an operating or landscape level – another level of planning or process is needed for this to occur.

For example, the Dunlevy⁸ Creek area was designated a special management zone in the Dawson Creek LRMP, and a pre-tenure plan was recommended for the area prior to the issuance of oil and gas subsurface tenures. The resulting Dunlevy Creek Management Plan covers approximately 32,000 hectares and was approved in January 2002. This plan guides the development of the oil and gas industry and the sale of the petroleum and natural gas tenures. The plan also guides planning for forest development in the area. Several other areas that fall within the Muskwa-Kechika Management Area have pre-tenure plans for oil and gas development⁹. Plans at this level, both through the process of development and as a framework for development, can provide much greater assurance of coordination and good stewardship than exists in areas where they are absent.

Another recent example of planning at this level is the draft Sustainable Resource Management Plan developed jointly by the Province and the Sauleau and West Moberly

⁷ Note: Generally, First Nations did not fully participate in the LRMP process and their perspectives are not fully reflected.

⁸ <http://srmwww.gov.bc.ca/rmd/srdb/mog/docs/DunlevyPlan.pdf#search=%22dunlevy%20forest%20management%20plan%22>

⁹ <http://www.em.gov.bc.ca/Subwebs/oilandgas/ptp/ptp.htm>

First Nations covering approximately 109,000 hectares between the Peace River and Moberly Lake¹⁰. The plan's goals are to ensure healthy ecosystems and fish and wildlife populations, provide for the exercise of First Nations' treaty and cultural practices, and enable sustainable economic development, including forestry and oil and gas.

While these examples do not imply that landscape level planning is succeeding in every area where the forestry and oil and gas industries coexist, it does tell us that processes have been developed and may provide models for other areas. Plans, like those cited in the examples above, can begin to address issues related to the cumulative "footprint" of development on forest land, and therefore inform good stewardship.

There is currently no broadly applied mechanism for establishing and reconciling an integrated set of resource development targets or impact thresholds for a given geographic area. Allowable Annual Cuts (AAC's), formally provide a maximum timber harvest level based on principles of sustainability, and are a de-facto target, but are set for a very large area and are not specific to individual landscapes. There is no similar target or ceiling for oil and gas development. Some work has also been done to help understand the long-term ecological effects of development and suggest management thresholds for cumulative effects in Northeast BC – for example the May 2003 summary report: *Approaching Cumulative Impact Management in Northeastern British Columbia*,¹¹ but it is not in general use.

Objectives for an area may be set under the *Land Use Objectives Regulation* or under the *Forest Planning and Practices Regulation* respecting management of Crown land and resources (or private land in a Tree Farm License). The Forest Stewardship Plans that govern forest company operations must specify the intended results and strategies that will be carried out to be consistent with the objectives. Clearing for oil and gas development is not legally required to be governed by such plans.

¹⁰ http://ilmbwww.gov.bc.ca/ilmb/lup/srmp/northern/peace_moberly/final_draft_PMT_SRMP-July19.pdf

¹¹ Prepared for the BC Oil and Gas Commission and the Muskwa-Kechika Advisory Board by AXYS Environmental Consulting (Sidney BC) and Salmo Consulting (Calgary Alta.) May 2003.

IMPACTS ON THE PRODUCTIVE LAND BASE

One of the perceptions expressed to the task force relates to the impacts of oil and gas development on the productive timber harvesting land base. It is unclear whether this perception arises as a result of the actual physical disturbance, or tangentially as a result of the different planning and regulatory requirements imposed on the two industries by government. The task force was unable to find a current source of detailed information that quantifies area disturbed and productivity impacts of development. However, estimates of physical disturbance can be found in the provincial Chief Forester's Allowable Annual Cut (AAC) rationale documents. This information quantifies the cumulative area of past development, as well as future projections, and is used by the Chief Forester to determine the net productive land base for timber growing purposes. It includes activities by forest companies, oil and gas companies and others. Since the amount of disturbance is quite variable between management units, a brief extract is provided below for each of the major forest management units in northeast BC. It should be noted that the figures below do not necessarily imply a permanent loss of productive land base. Periodic reviews allow the Chief Forester to account for new information, site rehabilitation activities and improved practices in future determinations.

Fort Nelson¹²

"The total area in the TSA associated with disturbance for seismic lines, pipelines and transmission lines was identified as 111,957 hectares, for which a net reduction of 26,026 hectares was applied to the THLB [timber harvesting land base]." The Chief Forester further notes that areas disturbed for well sites and access roads were not accounted for in the timber supply analysis. Using a proportional estimate, his AAC decision accounts for "a total related unaccounted disturbance of 4000 hectares, or about 0.3 percent of the THLB throughout the forecast period". We interpret this to mean that just over 30,000 hectares of disturbance is attributed to oil and gas development.

In accounting for other roads, trails and landings (primarily forest industry) the rationale notes "...37,395 hectares was applied to the productive land base to account for existing

¹² Ministry of Forests and Range: AAC Rationale for Fort Nelson TSA, November 2006

roads, trails and landings” and that “*the resultant net exclusion of 29,825 for future roads was applied in deriving the THLB [estimated to be 3.9 percent of the currently undisturbed land base]*”.

Fort St. John¹³

“In the timber supply analysis, a deduction of 24,105 hectares was applied to the productive forest to account for existing utility features, such as seismic, pipe and power lines. This deduction was made based on information from the Oil and Gas Commission. The commission noted that future seismic lines would be minor, given that existing lines would be reused wherever possible, and that some lines will be reforested.” Based on this information and additional staff advice the Chief Forester determined that no further deductions were required as the future development of seismic lines “*would not be significant*”.

The AAC Rationale goes on to state: “*Since the last AAC determination, a 3D-program of seismic line development has become more common, ... this type of development pattern was not reviewed prior to the analysis to assess what impact it may have on the projected timber supply.*” After noting the analysis did not include future well sites, and using information from Canfor that they purchase between 30,000 and 50,000 cubic meters of salvaged timber annually, mainly from well sites and pipeline development, the Chief Forester factored into his decision a risk to the timber supply of between zero and 2.5 percent.

For other roads, trails and landings impacting the timber producing land base, the rationale removes an additional 6670 hectares for existing structures, and a further 5838 hectares for future structures. However, the Chief Forester goes on to note that both ministry and Canfor staff felt that these numbers do not adequately account for the actual loss. He says “*I accept that the timber harvesting land base has been overestimated by about 4 percent, and I have accounted for this...*”

¹³ Ministry of Forests and Range, AAC Rationale for Fort St. John TSA, March 2003

Dawson Creek¹⁴

Unlike the two previously mentioned reports, the AAC Rationale for the Dawson Creek TSA does not have a specific category for oil and gas developments, but includes them with other transportation and utility corridors (roads, trails and landings as well as oil and gas well sites, seismic lines, pipelines and power lines). *“After previous deductions, 11,260 hectares (approximately 0.8 percent of the productive forest) were excluded from the timber harvesting land base to account for existing transportation and utility corridors. To account for future transportation and utility development ...a further 34,005 hectares (2.4 percent of the total productive forest) were excluded from the current timber harvesting land base.”*

Tree Farm License (TFL) 48¹⁵

The reduction equaling *“approximately 2.4 percent of the current timber harvesting land base”* for existing roads, and *“Losses to future roads were modeled through a further reduction of 12,715 hectares, approximately 4.9 percent of the current timber harvesting land base”*. There is no specific differentiation between disturbances for forestry or oil and gas development. Note: The Ministry of Forests and Range website indicates that the analysis of this unit is presently being updated.

OPERATIONAL COORDINATION

Whereas the discussion to this point deals with planning, objective setting and impacts at a fairly broad geographic level, concerns have also been raised about risks to good forest stewardship because of a lack of coordinated access and development at the operational level. Examples provided to reinforce this perception include such things as seismic, pipeline or well sites constructed at locations that conflict with forest management plan objectives (e.g., old growth retention), and duplicate or poorly planned road networks leading to higher levels of site disturbance and greater environmental impact than necessary. In many cases better coordination could not only improve forest stewardship, but also save companies from unnecessary costs.

¹⁴ Ministry of Forests and Range, AAC Rationale for the Dawson Creek TSA, May 2003

¹⁵ Ministry of Forests and Range, AAC Rationale for TFL 48, December 31, 1996

One of the challenges often identified in relation to coordinated development is that responsibility for promoting economic use of resources, licensing (tenure sales), and regulation of industries is divided amongst several different government agencies (e.g., licenses for timber harvesting by the Ministry of Forests and Range, oil and gas tenures by the Ministry of Energy, Mines and Petroleum Resources, permits for oil and gas development activities by the Oil and Gas Commission, licenses for guiding by the Ministry of Environment, etc.). In other words, the legal, financial and institutional relationships between companies and the government are organized by sector, whereas good forest stewardship requires integration at the landscape level.

Another important challenge that is often identified, and makes coordination of forestry and oil and gas development challenging is the difference in industry planning timelines. Forest companies are generally required to have long term plans and are able to plot out and schedule where they will harvest for several years into the future with relative certainty. Oil and Gas companies, on the other hand, usually have a much shorter planning horizon and much less certainty about exactly where their operations will occur year to year. Further challenges arise from the difference in tenure rights and obligations between forest companies and oil and gas companies. For example, a forest company often holds a long-term replaceable Forest License (or sometimes a Tree Farm License) that requires them to have a Forest Stewardship Plan, not only for how timber will be harvested over time, but also how other forest values such as recreation, scenic features, wildlife habitat and biological diversity will be accommodated and protected. In other words, in addition to conveying timber rights the license delegates some of the public landowner's responsibility for good forest stewardship to the company. For many forest companies, what happens in these plan areas is linked to their products' market certification. An oil and gas company that has purchased tenure can have exploration and development rights over the same forest area as is covered by the forest company's plan without any formal linkage between the two. Not only are the tenures held by forest companies and oil and gas companies very different in nature, they are issued and overseen by different government departments. These circumstances create a need for

good inter-departmental and inter-industry coordination. While neither is unreasonable to expect, the inter-industry coordination challenge is compounded when, as is often the case, more than one forest company has a license over the same area. This creates a situation where an oil and gas company may have to seek out several forest companies as well as the Ministry of Forests and Range if it wishes to know what forest stewardship plans exist (complete or draft) for an area.

For some time the provincial government agencies in northeast BC have been seeking methods to improve informal coordination and reduce conflicts amongst holders of various resource tenures. In a 2004 publication¹⁶ the province notes that “the pattern of tenures existing over a particular area can become very complex due to a number of factors ...” The Province took several local measures to encourage better coordination amongst tenure holders, including providing information and hosting meetings and workshops.

REGULATORY IMPROVEMENT

The Province is presently undertaking the Oil and Gas Regulatory Improvement Initiative (OGRII) which is expected to conclude with new legislation in 2008. A Discussion Paper¹⁷ in December 2005 describes the objectives of the initiative, which include: “to harmonize the OGC [Oil and Gas Commission] regulatory framework for oil and gas with other results-based legislative initiatives within British Columbia, and with Alberta’s regulatory regime where appropriate.” The Discussion Paper goes on to acknowledge that “the proposed regulatory system must recognize the mandates and operational realities ...enable new and effective inter-ministry and interagency processes ... ensure regulatory outcomes are consistent across the land base.”

ACCESS COORDINATION

Access roads are often the first major physical disturbance on a landscape, and in some areas introduce significant environmental risk and disruption to non-industrial resource

¹⁶ A Practical Guide to Effective Coordination of Resource Tenures, Ministry of Sustainable Resource Management (August 2004)

¹⁷ See Discussion Paper at www.em.gov.bc.ca/Oil&gas/reg_improvement.htm

values (e.g. wilderness tourism, wildlife management). Conversely, roads built for industrial purposes often enhance opportunities for public recreation, access to remote communities and other land-based businesses. Across BC there are approximately 650,000 kilometers of resource roads - over 14 times the 45,000 km of public roads¹⁸ and this number is expected to increase by up to 30,000 km per year over the next 5-10 years.

There appears to be general agreement that better planning and coordination between industries and government regulators would lead to lower costs to industry, less environmental risk, and greater overall public benefits. However, the different planning timelines and regulatory regimes of the forest industry and oil and gas industry, combined with inter-industry capital cost issues often work against the principle of coordinated access.

For some time company and government officials have attempted to improve the coordination of access at both the planning operational levels. Some examples where this has been considered effective include the Sierra Yoyo Desa Highway project and the Sukunka Road Users Group. On the other hand, there have been examples (such as in the Lady Fern area) where this level of coordination has not occurred and the risk to good forest stewardship has increased as a result.

The province recently initiated the Resource Road Act Project to address the integration of multiple road authorities. The project is expected to simplify and streamline legislation; harmonize standards and administration; establish effective dispute settlement processes and improve the government's management of existing infrastructure and liabilities. The expected benefits from implementation of a new Act and regulations are administrative cost savings to industry, better safety, reduced environmental impact, and more efficient use of the access infrastructure.

¹⁸ Unpublished information from BC Ministry of Forests and Range (2006).

INFORMATION SHARING

One of the most frequently cited risks to good forest stewardship where forestry and oil and gas developments overlap is related to information. Oil and gas companies give examples of having to hire consultants and collect information about wildlife only to later learn that a forest company already had the information and could have made it available. Forest companies describe how they could have designed a cut block to better accommodate a well site if they had known about it a few weeks sooner. Oil and gas companies talk about building a road only to discover that a forest company was planning to build in a similar location in the future and had already done much of the engineering work. Forest companies describe months of consultations and planning to identify and protect key wildlife habitat areas only to have them bisected by seismic lines. These are not cases where companies are intentionally at odds, or where they couldn't have cooperated in a manner that met both their needs. These are examples where companies didn't have important information.

Our information suggests that the severity of this issue is variable, and that there are examples where forestry and oil and gas companies have developed a good working relationship and methods of exchanging timely information. Companies can access a substantial amount of information through various government sources, however it is probably fair to say that most oil and gas companies don't see themselves as being in the forest planning business, and are not inclined to search a number of sources for possible conflicts with their project. When it comes to surface activities, they are permit holders, not forest managers. Also, much of the resource data held by oil and gas companies is proprietary and is important to company competitiveness, unlike the public timber inventory information. This adds an additional challenge to information sharing.

The Task Force found that government departments collect the information they need to carry out their own mandates, but there is no readily available, common, up-to-date data base for managers and practitioners. Some measures have been taken by government to improve the availability of information. One example is the Integrated Land and Resource Registry (ILRR) which provides a single source of reliable information on 262

different legal interests on Crown land (tenures, regulated uses, land and resource use restrictions, and reservations) that is visually represented on a map and is available to the public using a standard web browser. The ILRR also contains information on Crown land parcels, private land parcels (where available), administrative boundaries (e.g. forest districts, electoral boundaries), and base map information (topography, grids, etc). Other specific tools are available to find information about such things as timber harvesting history, approved plans and species at risk. PlanMapper is an internet-based mapping and database query tool currently being tested by the University of Northern BC, the McGregor Model Forest Association, the Province and the Omineca Beetle Action Committee. Its purpose is to assist stakeholder access to land use planning information.

Another project more specific to issues in northeast BC has recently been initiated by the Integrated Land Management Bureau, Base Mapping and Geomatic Services Branch. A recent report done for the branch “*determined that maintaining up-to-date and accurate base maps is critical to the operational requirements of resource and environmental management*”¹⁹. A steering committee is being established to include all interested parties to work in a collaborative manner toward solutions. The Dawson Creek area will be used as a test or pilot to capture backlog information and develop automated methods to maintain data currency.

Even with improvements to the formal documentation, storage and accessibility of information, not everything will be on record. For example, a forest company may have several years of analysis and preliminary planning work done that is not reflected in the formal plans it submits to the government. This information can be valuable for preventing conflicts and increasing efficiency through cooperation.

PRACTICE IMPROVEMENTS

In the past, concerns have often arisen based on the perception that oil and gas exploration and development was impacting the landscape and forest stewardship to a greater degree than was really necessary. For example, extensive seismic programs have been a concern for forest stewardship because of the impact of cut lines made by heavy

¹⁹ Integrated Land Management Bureau, Draft Project Charter, July 2006

equipment. Intensive “3D” seismic programs in some areas increased these concerns. Similarly issues arise when several kilometers of road are constructed into a remote area to drill a well; drilling occurs in an area with special forest values; or pipelines disturb key forest values. The industry has made significant practice advances in the last few years to introduce low-impact seismic programs, heli-portable drill rigs, directional drilling and other innovations that reduce the impacts on forest stewardship. While not all these techniques are fully utilized or cost effective in all circumstances, they represent a positive trend. The forest industry made similar changes to improve road building, harvesting and silviculture techniques in part to meet the requirements of the previous *Forest Practices Code of BC Act* (the Code), and the new *Forest and Range Practices Act*.

IMPACT MONITORING

Forests, and the ecological, social and economic pressures on them are constantly changing. An important aspect of good forest stewardship is monitoring changes in the forest over time, and having an understanding of what changes are significant and may signal a trend toward or away from good forest stewardship. This is key information to be used by planners and decision makers.

Many of the plans cited above include general or specific indicators of success, however few comprehensive monitoring processes are in place. Various initiatives have been undertaken to address this, including for example the Fort St. John “Code Pilot” which was developed as a sustainable forest management plan by local forest companies and the Ministry of Forests and Range. Also, on approximately a 5 year cycle the Ministry of Forests and Range conducts a Timber Supply Analysis for each management unit. This process takes into account inventory depletions and site productivity impacts from all sources and factors them into future Allowable Annual Cut determinations.

Criteria and indicators for sustainability exist at the national level, as well as for the provincial and local scale, and are beginning to be used to monitor long-term trends, however they are generally not yet used as an active tool for forest management.

General Conclusions

- Based on the information available to the Task Force, the issues identified do not suggest that the industries are operating outside the regulatory requirements established by government. They do, however, point to systemic risks to good forest stewardship that need to be addressed.
- The landowner (the Province) has recognized the forest stewardship issue in areas where forestry and oil and gas companies operate on the same landscapes and has led or supported planning processes to coordinate development for some key areas. There is a need for more integrated landscape level planning of this kind as well as for more analysis of resource opportunities and reconciled objectives, targets or thresholds at the landscape level. Examples of plans that are beginning to address these needs are cited above (e.g., Dunlevy Creek).
- The impact of oil and gas development on the timber supply and the timber harvesting land base is measured and accounted for in the province's process for determining AAC. While the AAC rationale documents examined by the task force expressed some uncertainty as to actual impacts, they consider risk, and allow for existing and projected future disturbance, including buffer areas.
- The Province has recognized issues of inconsistency between the regulatory regime for oil and gas and forestry, and is working on at least two significant initiatives (OGR II and Resource Roads Act Project) to improve the legislative framework. It is not yet clear whether these initiatives will succeed in adequately addressing forest stewardship concerns.
- Establishment of a single, credible data source, or a more effective information sharing mechanism between government agencies, along with better communications and sharing of relevant, timely information between industries (inter-industry) could decrease the risks to good forest stewardship. Work is underway to address this concern.
- Monitoring the cumulative impacts of development and assessing them against pre-established stewardship objectives is in its infancy, and needs to be better developed and implemented, particularly on landscapes where the intensity of development is, or

is expected to be significant. This need exists regardless of the specific industry (ies) or region of the province.

Recommendations

1. That the ABCFP encourage the Province to ensure that landscapes that will be subject to a significant level of industrial development, regardless of the business sector(s) involved, have a single guiding, government approved plan for forest stewardship within which all industries will operate. Such plans would be consistent with existing land and resource management plans, but would apply to a much smaller area. They would specify clear objectives, responsibilities, monitoring and reporting standards, and provisions for adaptation to changing circumstances at a level sufficient to guide operational activities. Wherever possible, these plans should be in place before forestry, oil and gas or other tenures are awarded or replaced.
2. That the ABCFP closely monitor and where possible, participate in the Province's development of all new or amended legislation affecting forest stewardship.
3. That the ABCFP communicate support for initiatives to address the need for more effective information sharing between the Ministry of Forests and Range, the Oil and Gas Commission and others.
4. That the ABCFP encourage the Province, industries and its members to be innovative and proactive at the operational level to improve communications between sectors.
5. That the ABCFP recognize and encourage improvements to industry practices that enhance good forest stewardship.

ABCFP Public Interest:

That management of the forest and forestry practices, regardless of the resource sector involved, is carried out by qualified, accountable professionals.

The ABCFP recognizes that resource development on forest lands may involve a variety of skilled practitioners, including engineers and geoscientists, biologists, agrologists,

planners, archeologists, forest professionals and others, including many individuals who perform technical functions designed or supervised by professionals. The paramount interest of the profession in this matter is that work impacting the well-being of the public and the forest is done by competent, accountable individuals.

The mandate and authority of the ABCFP in this regard, is derived from the *Foresters Act*. It is noteworthy that the Act is not specific to the “forest industry” or to any other particular forest resource user group. Rather, the Act defines and regulates the “practice of professional forestry”. The definition provided by the Act is:

"practice of professional forestry" means, for fees or other remuneration, advising on, performing or directing works, services or undertakings which, because of their scope and implications respecting forests, forest lands, forest resources and forest ecosystems, require the specialized education, knowledge, training and experience of a registered member, an enrolled member or a special permit holder, and includes the following:

(a) planning, advising on, directing, approving methods for, supervising, engaging in and reporting on the inventory, classification, valuation, appraisal, conservation, protection, management, enhancement, harvesting, silviculture and rehabilitation of forests, forest lands, forest resources and forest ecosystems;

(b) the preparation, review, amendment and approval of professional documents;

(c) assessing the impact of professional forestry activities to

(i) verify that those activities have been carried out as planned, directed or advised,

(ii) confirm that the goals, objectives or commitments that relate to those activities have been met, or

(iii) advise or direct corrective action as required to conserve, protect, manage, rehabilitate or enhance the forests, forest lands, forest resources or forest ecosystems;

(d) auditing, examining and verifying the results of activities involving the practice of professional forestry, and the attainment of goals and objectives identified in or under professional documents;

(e) planning, locating and approving forest transportation systems including forest roads;

(f) assessing, estimating and analyzing the capability of forest lands to yield a flow of timber while recognizing public values related to forests, forest lands, forest resources and forest ecosystems.

The application section of the Act clarifies that it (or any bylaw or resolution made pursuant to it) does not prohibit a person from practicing in accordance with another professional enactment. For example, a Professional Engineer is not prohibited from activities related to forest roads where they are covered by the *Engineers and Geoscientists Act*. It goes on to note that it does not restrict a person from engaging in the practice of professional forestry provided they are supervised by a registered member, or from appraising, valuing or quantity surveying on forest land, provided the survey has been designed by a registered member.

A third aspect of the Act that is noteworthy here is found under the section on duty and objects of the association: “It is the duty of the association ...to enforce this Act.”

Discussion:

As has been mentioned previously in this paper, surface activities undertaken by oil and gas companies are not as core to their business as for forest companies who manage an area for a sustainable supply of timber – the businesses are very different. Many of the individuals working in the oil and gas sector may not have a historical connection to the forest, and may not be familiar with the expectations and requirements for good forest stewardship. Much of the operational planning and field work for the oil and gas industry is overseen by individuals who reside outside the province and are not forest professionals. This does not necessarily reflect on the quality of work, however it may contribute to the communications challenges discussed previously.

The ABCFP has the Foresters Act Enforcement Policy²⁰ which explains the statutory authority and procedure to be followed if non-members are engaged in the practice of professional forestry. The policy places considerable responsibility on members to identify and attempt to remedy violations of the *Foresters Act* before referring them to the Association. The Task Force has been given no specific examples of non-compliance with the *Foresters Act*, and it has not been suggested that this is at issue.

There does appear to be a lack of clarity or consistent understanding about where and when work must be done by a forest professional (Registered Professional Forester or Registered Forest Technologist). Recent changes in forestry legislation and a shift to “professional reliance” as part of the non-statutory regulatory regime in the forest sector, combined with discussions about streamlining approvals through “professional sign-off” in the OGR II context may have added to the uncertainty. For example:

- It is perceived by some individuals that the *Foresters Act* applies only to the forest industry, or to activities that are regulated by the *Forest and Range Practices Act*. This is incorrect – the *Foresters Act* is not sector specific.
- Others are apparently under the impression that the *Foresters Act* requires the use of a forest professional for a myriad of activities undertaken by the oil and gas sector, almost to the point of every operation involving tree cutting. This is also incorrect – The requirement is limited to the practice of professional forestry as defined in the Act.

The Task Force believes there are situations, such as timber appraisals, some aspects of roads and stream crossings, and perhaps certain site rehabilitation plans, where an oil and gas company might legally require a forest professional, but these are limited. Beyond the legal requirement, however, there may be situations where companies can benefit from the services of a professional for practical business reasons – efficiency and quality assurance for example. Forest professionals are often very experienced in planning, public and Aboriginal consultation and integrated resource management, and can offer value-added services to the resource sector.

²⁰ http://www.abcfp.ca/regulating_the_profession/documents/policy-act-enforcement.pdf

The ABCFP has a number of avenues available to it for proactive communication about this interest, and to correct misperceptions about where and when a forest professional is legally required. For example, since having advocacy for good forest stewardship added to its legal mandate, and becoming aware of the possible concerns in areas of high oil and gas industry activity, the ABCFP has started to establish its presence and develop institutional knowledge and relationships within the oil and gas sector, including through the Canadian Association of Petroleum Producers (CAPP). Also, one of the tools now being used by the ABCFP to guide members and communicate expectations for sound practice are the recently produced guidance papers that provide operational advice and situational scenarios to demonstrate how to apply the principles of professional reliance under the *Forest and Range Practices Act*. A similar approach may be appropriate for certain circumstances involving inter-industry activities, or for activities covered by any new legislation arising from the OGR11 or Resource Roads Act Project.

General Conclusions

- It is a legal requirement that plans, designs and other work falling within the definition of the “practice of professional forestry” is done by qualified professionals – the ABCFP monitors this on an on-going basis as part of its legislated duty. The Task Force is not aware of any alleged breach of the Act involving industries in northeast BC.
- A number of surface activities (e.g., seismic, road, well site and pipeline clearing) carried out by the oil and gas industry impact on forest management and should be carried out in a manner consistent with forestry plans prepared by a forest professional, and in accordance with sound forest practices. However most of these activities, when conducted according to established standards do not require the site-specific involvement of a forest professional.
- There is a need to better communicate with the oil and gas sector, both at senior levels and by ABCFP members in the field, about circumstances where a forest professional is legally required according to the *Foresters Act*, and where the use of

professional reliance or professional sign-off is a discretionary aspect of quality assurance (due diligence) or business process streamlining.

- There may be opportunities, for good business reasons, over and above any legal requirement, for individual forest professionals to work more closely with the oil and gas sector.

Recommendations

1. That the ABCFP continue to proactively develop a rapport with, monitor and provide information to the Oil and Gas Commission, the Canadian Association of Petroleum Producers (CAPP) and the oil and gas sector in general to ensure there is a good understanding of the role of the *Foresters Act* and forest professionals in BC's regulatory framework. As one aspect of implementing this recommendation, the ABCFP should give consideration to requesting the opportunity to make presentations to the CAPP annual general meeting and the annual BC Oil and Gas Conference.
2. That the ABCFP continue to work proactively with the Province to help ensure compatibility between OGRII and the *Foresters Act*.
3. That the ABCFP, preferably in cooperation with the industry and the Oil and Gas Commission, examine the activities required for oil and gas development and provide advice on what aspects, if any, fall within the definition of the practice of professional forestry and must be conducted or supervised by a Registered Professional Forester or Registered Forest Technologist.
4. That the ABCFP consider whether additional communication about the *Foresters Act* Enforcement Policy, or a "guidance paper" approach would be valuable for informing members how to deal with inter-industry concerns about forestry – oil and gas interaction.

SUMMARY

The ABCFP has a legal responsibility to advocate for good forest stewardship, and to enforce the *Foresters Act* in regard to the practice of professional forestry. This responsibility is not limited to the activities of the forest industry. In areas of northeastern BC where high timber and oil and gas values exist on the same landscapes,

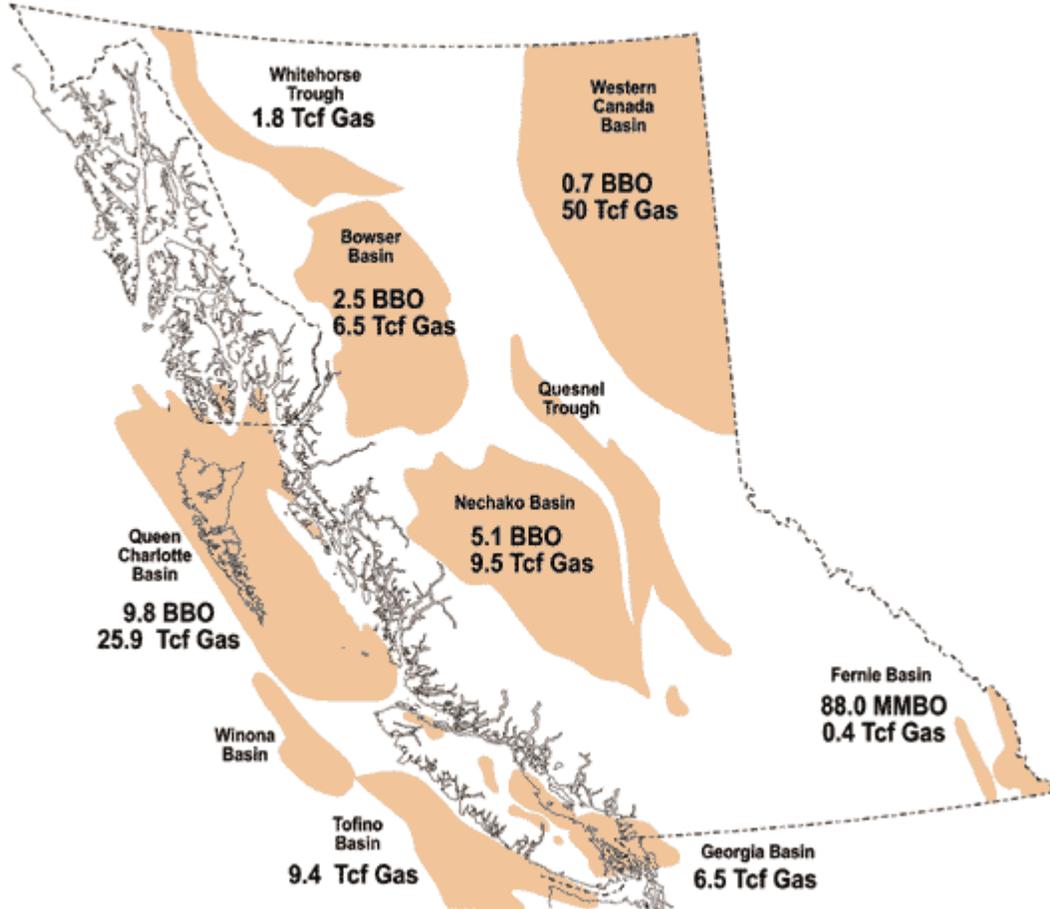
ABCFP members and others have raised concerns that lack of coordination between industries could compromise good forest stewardship. There has also been some question or uncertainty about the role of ABCFP members relative to oil and gas development.

The Association's Forestry-Oil & Gas Task Force has reviewed the overall situation and concluded that several opportunities exist for the ABCFP to take constructive action. In regard to the matter of good forest stewardship, the Task Force identified a number of factors related to planning, objective setting, communications and monitoring that could reduce the risks to good stewardship. A number of existing initiatives aimed at addressing these risks were also identified. The ABCFP should encourage the current initiatives and advocate for continued efforts at integration of resource management at the landscape level.

Regarding the role of professionals, the Task Force found a significant level of uncertainty about what is legally required. While the Association must enforce the Act in regard to the practice of professional forestry, there is no suggestion that the industries in northeast BC are not currently in compliance. The opportunity is for the ABCFP to bring clarity to the situation, with the aim of protecting the public interest.

Appendix 1

Conventional Natural Gas and Petroleum Potential in British Columbia



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²¹ source: BC Government
http://www.bcbudget.gov.bc.ca/2004/bfp/bgt2004_part1-tb_oil-gas.htm